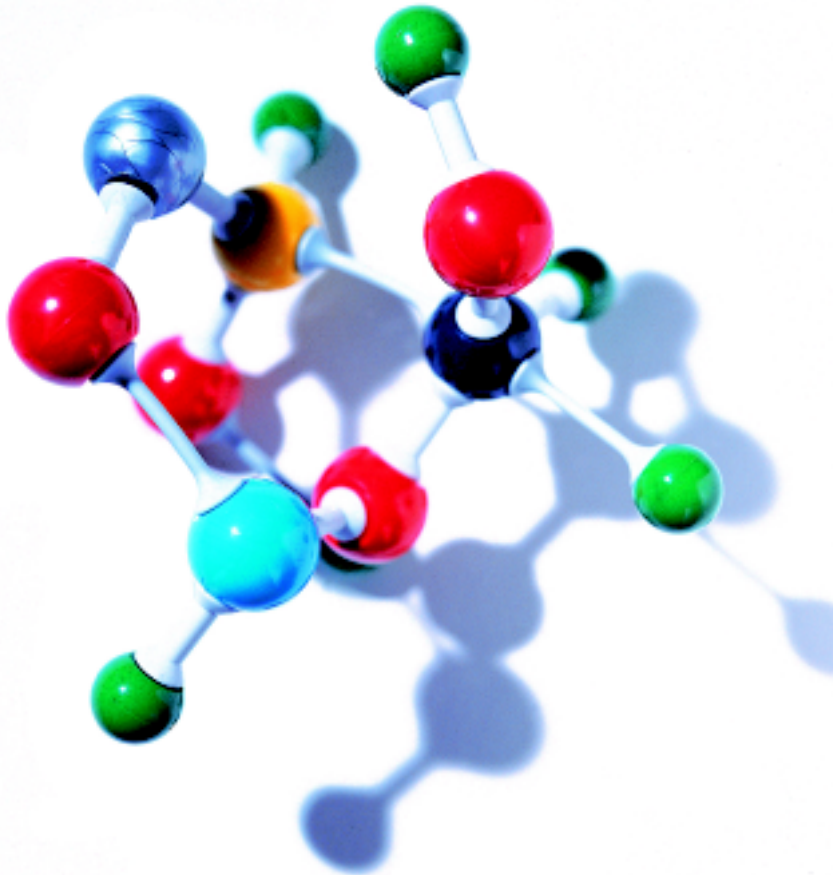


PURSEY P.M.A.R. HEUGENS

Strategic Issues Management:

**Implications for
Corporate Performance**



Strategic Issues Management: Implications for Corporate Performance

Strategic Issues Management: Implications for Corporate Performance

Strategisch issues management: Implicaties voor de prestaties van ondernemingen

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Voor Lydia

Ooit mijn kracht, nu mijn gids

To Lydia

Once my strength, now my guide

Contents

1. INTRODUCTION	1
1.1 AIMS AND SCOPE.....	1
1.2 EMPIRICAL BASIS.....	3
1.3 OVERVIEW OF THE BOOK.....	6
2. CASE STUDY METHODS AND DESCRIPTION	9
2.1 INTRODUCTION	9
2.2 CASE STUDY DESIGN	9
2.2.1 <i>An embedded case study</i>	11
2.3 DATA COLLECTION	12
2.3.1 <i>Focused interviews</i>	14
2.3.2 <i>Archival data and audio and videotapes</i>	16
2.3.3 <i>Roundtable discussions</i>	17
2.3.4 <i>Public sources</i>	18
2.4 DATA ANALYSIS.....	18
2.5 ESTABLISHING RELIABILITY AND VALIDITY	20
2.5.1 <i>Communicative validity</i>	20
2.5.2 <i>Construct validity</i>	20
2.5.3 <i>External validity</i>	21
2.5.4 <i>Reliability</i>	22
2.6 CASE STUDY DESCRIPTION	22
2.6.1 <i>History of genetic modification</i>	23
2.6.2 <i>Regulatory responses</i>	29
2.6.3 <i>Public protests</i>	30
2.6.4 <i>Corporate responses</i>	32
2.6.5 <i>The situation in the Netherlands</i>	33
2.7 CONCLUSION.....	39

3. TOWARDS AN INTEGRATIVE FRAMEWORK OF STRATEGIC ISSUES MANAGEMENT	41
3.1 INTRODUCTION	41
3.2 CORPORATE COMMUNICATION AND PUBLIC AFFAIRS.....	42
3.2.1 <i>The CC/PA conception of strategic issues</i>	43
3.2.2 <i>The CC/PA conception of strategic issues management</i>	46
3.3 ORGANIZATIONAL BEHAVIOR	48
3.3.1 <i>The organizational behavior conception of strategic issues</i>	49
3.3.2 <i>The organizational behavior conception of issues management</i>	52
3.4 TOWARDS AN INTEGRATED FRAMEWORK OF STRATEGIC ISSUES MANAGEMENT	55
3.4.1 <i>Explaining the constructs (I): Strategic issues management</i>	57
3.4.2 <i>Explaining the constructs (II): Performance indicators</i>	59
3.4.3 <i>Explaining the relationships (I): Tangible performance implications of stakeholder integration</i>	65
3.4.4 <i>Explaining the relationships (II): Intangible performance implications of stakeholder integration</i>	68
3.4.5 <i>Explaining the relationships (III): Tangible performance implications of capability development</i>	71
3.4.6 <i>Explaining the relationships (IV): Intangible performance implications of capability development</i>	74
3.5 CONCLUSION	77
4. STRATEGIC ISSUES MANAGEMENT (I): AN OUTSIDE-IN PERSPECTIVE.....	79
4.1 INTRODUCTION	79
4.2 STAKEHOLDER INTEGRATION MECHANISMS.....	80
4.2.1 <i>Locus of stakeholder integration</i>	81
4.2.2 <i>Modus of stakeholder integration</i>	82
4.2.3 <i>Four types of stakeholder integration</i>	83
4.3 STAKEHOLDER INTEGRATION IN THE NETHERLANDS	85
4.3.1 <i>Informal Consultations on Biotechnology</i>	85
4.3.2 <i>Task Force</i>	86
4.3.3 <i>Project Team</i>	87
4.4 COMPETITIVE BENEFITS	88
4.4.1 <i>Cognitive legitimacy</i>	88
4.4.2 <i>Sociopolitical legitimacy</i>	89
4.4.3 <i>Symbiotic learning effects</i>	90
4.4.4 <i>Collective learning effects</i>	91
4.5 CONCLUSION	92

5. STRATEGIC ISSUES MANAGEMENT (II): AN INSIDE-OUT PERSPECTIVE	95
5.1 INTRODUCTION	95
5.2 ORGANIZATIONAL ISSUES MANAGEMENT CAPABILITIES	96
5.2.1 <i>Allowed response time</i>	98
5.2.2 <i>Public activism</i>	99
5.2.3 <i>Four broad functional issues management capabilities</i>	101
5.3 ORGANIZATIONAL CAPABILITIES OF DUTCH FIRMS	104
5.3.1 <i>Corporate silence</i>	105
5.3.2 <i>Advocacy</i>	106
5.3.3 <i>Dialogue</i>	107
5.3.4 <i>Crisis communication</i>	109
5.4 CAPABILITY BUILDING PROCESSES	110
5.4.1 <i>Absorbing external knowledge</i>	112
5.4.2 <i>Generating new knowledge internally</i>	113
5.4.3 <i>Knowledge integration</i>	114
5.4.4 <i>Application of integrated knowledge</i>	115
5.4.5 <i>Storing knowledge in organizational memory</i>	117
5.5 CONCLUSION	118
6. TESTING THE FRAMEWORK (I): SURVEY METHODS	121
6.1 INTRODUCTION	121
6.2 SAMPLE	122
6.2.1 <i>Comparing the two response groups</i>	130
6.3 MEASUREMENT	131
6.3.1 <i>Four desirable measurement properties</i>	131
6.3.2 <i>Six scale purification procedures</i>	134
6.4 CONCLUSION	142
7. TESTING THE FRAMEWORK (II): SURVEY RESULTS	143
7.1 INTRODUCTION	143
7.2 RECAPITULATING THE FRAMEWORK	143
7.3 REGRESSION PROCEDURE	145
7.4 RESULTS	147
7.5 A NOTE ON CONTROL VARIABLES	158
7.6 A NOTE ON CONSTRUCT VALIDITY	160
7.7 CONCLUSION	162

- 8. CONCLUDING REMARKS 163**
- 8.1 INTRODUCTION 163
- 8.2 CONCLUSIONS..... 163
 - 8.2.1 *Conclusions of the case study* 164
 - 8.2.2 *Conclusions of the survey study*..... 168
 - 8.2.3 *Discussion of the findings* 171
- 8.3 LIMITATIONS 174
 - 8.3.1 *Methodological limitations* 174
 - 8.3.2 *Contextual limitations*..... 175
- 8.4 AGENDA FOR FUTURE RESEARCH..... 177
- 8.5 CONCLUSION 179

- REFERENCES..... 181**

- APPENDIX A: MEASUREMENT INSTRUMENT 219**

- APPENDIX B: A DIRECT TEST OF PROPOSITION 1 237**

List of Figures

FIGURE 1.1: THE DUTCH FATS AND OILS INDUSTRY.....	4
FIGURE 1.2: THE OUTLINE OF THIS BOOK.....	6
FIGURE 2.1: WHAT IS GENETIC MODIFICATION?	23
FIGURE 2.2: EVENT HISTORY OF THE GLOBAL GENFOODS ISSUE	24
FIGURE 2.3: RISKS OF MODERN BIOTECHNOLOGY	30
FIGURE 2.4: THE SITUATION IN THE NETHERLANDS.....	33
FIGURE 3.1: TOWARDS A SYNTHESIS OF PERSPECTIVES	57
FIGURE 4.1: TYPOLOGY OF STAKEHOLDER INTEGRATION MECHANISMS	83
FIGURE 4.2: BENEFITS OF STAKEHOLDER INTEGRATION	92
FIGURE 5.1: THE ORGANIZATIONAL CAPABILITIES HIERARCHY	97
FIGURE 5.2: TYPOLOGY OF ORGANIZATIONAL ISSUES MANAGEMENT CAPABILITIES.....	101
FIGURE 5.3: THE CAPABILITY BUILDING PROCESS	111
FIGURE 7.1: A RECAPITULATION OF THE FRAMEWORK	144
FIGURE 7.2: THE RETAINED RESEARCH FRAMEWORK	161

List of Tables

TABLE 2.1: CASE STUDY BOUNDARIES	12
TABLE 2.2: SOURCES OF CASE STUDY DATA	13
TABLE 2.3: LISTING OF RESEARCH PARTICIPANTS	14
TABLE 2.4: INTERVIEW PROTOCOL	16
TABLE 2.5: SYNOPSIS OF THE DATA ANALYSIS STRATEGY	20
TABLE 2.6: LISTING OF CASE STUDY REPORT REVIEWERS	21
TABLE 5.1: NICKNAMES FOR GENETICALLY MODIFIED FOODS	104
TABLE 6.1: SAMPLE PURIFICATION	122
TABLE 6.2: RESPONSE CHARACTERISTICS	123
TABLE 6.3: NET RESPONSE BY ROUND OF DATA COLLECTION	123
TABLE 6.4: MAIN INDUSTRY OF THE PARTICIPATING ORGANIZATIONS	124
TABLE 6.5: NUMBER OF EMPLOYEES OF THE PARTICIPATING ORGANIZATIONS	125
TABLE 6.6: ANNUAL TURNOVER OF THE PARTICIPATING ORGANIZATIONS	126
TABLE 6.7: HIERARCHICAL JOB LEVEL OF THE RESPONDENTS	126
TABLE 6.8: JOB TITLE OF THE RESPONDENTS	127
TABLE 6.9: TENURE TIME OF THE RESPONDENTS	128
TABLE 6.10: AGE OF THE RESPONDENTS	128
TABLE 6.11: GENDER OF THE RESPONDENTS	129
TABLE 6.12: IMPORTANCE OF GENETICALLY MODIFIED FOODCROPS	129
TABLE 6.13: RELEVANCE OF THE GENETIC MODIFICATION ISSUE	129
TABLE 6.14: A COMPARISON OF TWO RESPONSE GROUPS	130
TABLE 6.15: THE 6-ITEM STAKEHOLDER INTEGRATION SCALE	134
TABLE 6.16: STAKEHOLDER INTEGRATION INTERNAL CONSISTENCY ASSESSMENT	135
TABLE 6.17: STAKEHOLDER INTEGRATION UNIDIMENSIONALITY ASSESSMENT	135
TABLE 6.18: THE 7-ITEM CAPABILITY DEVELOPMENT SCALE	136
TABLE 6.19: CAPABILITY DEVELOPMENT INTERNAL CONSISTENCY ASSESSMENT	136
TABLE 6.20: CAPABILITY DEVELOPMENT UNIDIMENSIONALITY ASSESSMENT	136
TABLE 6.21: THE 4-ITEM ECONOMIC BENEFITS SCALE	137

viii List of Tables

TABLE 6.22: ECONOMIC BENEFITS INTERNAL CONSISTENCY ASSESSMENT 138

TABLE 6.23: ECONOMIC BENEFITS UNIDIMENSIONALITY ASSESSMENT 138

TABLE 6.24: THE 4-ITEM STRATEGIC BENEFITS SCALE 139

TABLE 6.25: STRATEGIC BENEFITS INTERNAL CONSISTENCY ASSESSMENT 139

TABLE 6.26: STRATEGIC BENEFITS UNIDIMENSIONALITY ASSESSMENT 139

TABLE 6.27: THE 6-ITEM CORPORATE REPUTATION SCALE 140

TABLE 6.28: CORPORATE REPUTATION INTERNAL CONSISTENCY ASSESSMENT 140

TABLE 6.29: CORPORATE REPUTATION UNIDIMENSIONALITY ASSESSMENT 140

TABLE 6.30: THE 4-ITEM BIOTECHNOLOGY REPUTATION SCALE 141

TABLE 6.31: BIOTECHNOLOGY REPUTATION INTERNAL CONSISTENCY ASSESSMENT 141

TABLE 6.32: BIOTECHNOLOGY REPUTATION UNIDIMENSIONALITY ASSESSMENT 142

TABLE 7.1: A RECAPITULATION OF THE RESEARCH HYPOTHESES 145

TABLE 7.2: DESCRIPTIVE STATISTICS AND CORRELATIONS 147

TABLE 7.3: REGRESSION RESULTS FOR ECONOMIC BENEFITS 149

TABLE 7.4: CHANGE STATISTICS FOR ECONOMIC BENEFITS 150

TABLE 7.5: REGRESSION RESULTS FOR STRATEGIC BENEFITS 151

TABLE 7.6: CHANGE STATISTICS FOR STRATEGIC BENEFITS 152

TABLE 7.7: REGRESSION RESULTS FOR CORPORATE REPUTATION 154

TABLE 7.8: CHANGE STATISTICS FOR CORPORATE REPUTATION 155

TABLE 7.9: REGRESSION RESULTS FOR BIOTECHNOLOGY REPUTATION 156

TABLE 7.10: CHANGE STATISTICS FOR BIOTECHNOLOGY REPUTATION 157

TABLE 7.11: EXPLANATORY POWER OF THE CONTROL VARIABLES 158

TABLE 7.12: OVERALL RESULTS OF THE REGRESSION ANALYSES 161

TABLE B1: REGRESSION RESULTS FOR PROPOSITION 1 238

Chapter 1

Introduction

1.1 AIMS AND SCOPE

Organizations are continuously being confronted with critical events that, if left unattended, could threaten their societal legitimacy. When business firms become publicly associated with activities like, for example, pollution, maltreatment of employees, bribery, misuse of monopoly power, and endangerment of consumer safety, they are at risk of losing their societal license to operate. Fortunately, organizations need not undergo these kinds of threats passively. Managers may develop communicative and strategic responses to public accusations, in order to preserve the organization's autonomy and safeguard its public image. When managers transform their isolated and ad-hoc responses to outside pressures into a coherent and pro-active corporate policy, we may speak of the adoption of an issues management strategy. The research presented in this book explains that such issues management activities should not be mistaken for spin doctoring or plain sophistry. Instead, I will show that the adoption of professional issues management policies is positively associated with the attainment of such desirable corporate-level outcomes as higher economic rewards and increased external prestige.

Since its conception as a managerial activity in the 1960s, the issues management field has expanded considerably, in terms of both the number of companies using issues management techniques to gain some form of control over their external environments and the amount of time and attention academics have devoted to the topic. For analytical purposes, the academic contributions to the issues management field can be divided into several streams of thought, two of which will feature prominently in this book. The first signs of academic interest in issues management were reported in the fields of public affairs and corporate

communication in the 1970s and early 1980s (Brown, 1979; Fahey & Narayanan, 1986; Jacoby, 1971; Johnson, 1983; Ryberg, 1982; Steckmest, 1982). These original contributions mostly used an outside-in approach for describing and explaining the interactions between commercial organizations on the one hand and governments and what would now be called corporate stakeholders on the other. Typical research questions that have been addressed by public affairs and corporate communication scholars are, for example: What are the objectives of a firm's political activity (Baysinger, 1984; Weidenbaum, 1980)? What types of firms are likely to become politically active (Pittman, 1976; Zardkoohi, 1985)? What are the strategic implications of public policies for firms and industries (Mahon & Murray, 1981; Baysinger & Woodman, 1982; Dickie, 1984)?

In the late 1980s and 1990s, a second stream of issues management research emerged from work in the field of organizational behavior. This line of issues management work is much more than its predecessor oriented towards the internal environment of the firm, and uses an inside-out approach to assess intra-organizational interpretation and sense-making processes. Typical research questions that have been addressed from this internally oriented organizational behavior perspective are, for example: How do decision-makers in organizational settings diagnose forthcoming events that are likely to have an impact on the organization (Elsbach & Kramer, 1996; Schwenk, 1984)? How do decision-makers distinguish between crisis and non-crisis issues (Dutton, 1986; Milliken, 1990)? How do organizational members draw others' attention to key trends and developments that have implications for organizational performance (Ashford, Rothbard, Piderit, & Dutton, 1998; Dutton & Ashford, 1993)?

Although these two separate streams of research have, each in their own right, made valuable contributions to the proliferation and development of the field, only very few attempts have been made to integrate or synthesize the outside-in and inside-out perspectives on issues management. As a consequence, the ultimate strategic management question as to *whether strategic issues management contributes positively to corporate performance* remains one of the field's most pressing legacies. Theory development in this area remains sparse, and very few empirical studies that assess the contribution of issues management activities to corporate performance exist to this date.¹ In the present book, I attempt to restore the balance by reporting a theory-building case study and an associated theory-testing survey study, which were jointly designed to assess the contribution of strategic issues management activities to performance differentials across firms. In combination, these two studies integrate the inside-out and outside-in issues management perspectives by seeking to explain the organizational consequences of environmental pressures, as well as the environmental consequences of organizational adaptations to these pressures. Two distinct but interrelated research questions guided the design of these

1 Wartick (1988) provides a notable exception.

empirical investigations. The first of these is mainly a theory-driven question, notably: *How can we conceptualize the issues management activities that organizations use to manage those forthcoming developments that threaten to affect their ability to meet their objectives?* The second question is of a more empirical nature: *Do these issues management activities contribute positively to corporate performance?*

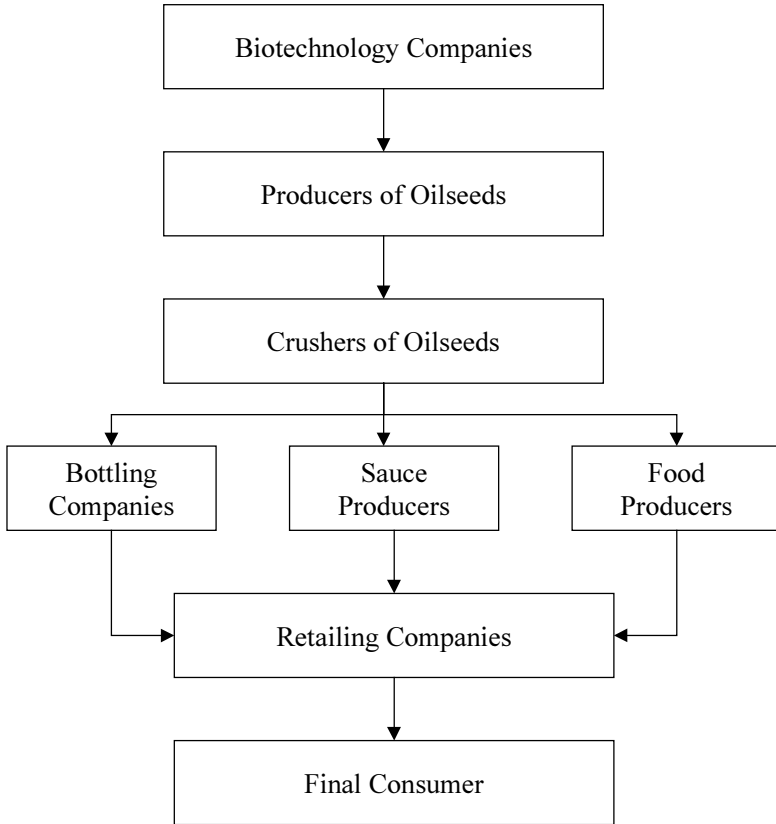
1.2 EMPIRICAL BASIS

In order to assess the contribution of strategic issues management activities to corporate performance, it is necessary to restrict the number of issues under consideration and to hold these issues constant during the period of the investigations. By doing so, one (a) makes it possible to compare the different issues management activities that companies use to manage critical outside events directly, and (b) avoids issue-specific biases to interfere with the analyses. The focal issue I chose for this study is the introduction on the Dutch market of genetically modified foods.² Three reasons may be forwarded to substantiate this decision. First of all, the issue of genetic modification is likely to have a large potential impact on the ability of the companies it affects to meet their objectives. This is because the issue has proven to be extremely controversial ever since its initiation, especially in Europe (Winter & Steger, 1998). Secondly, the issue has a large societal impact. Every member of the Dutch society is confronted with genetic modification on a day to day basis, because some 70% of all pre-processed supermarket foods currently contain genetically modified ingredients (Powell & Leiss, 1997). Thirdly, it may be assumed that the salience of the issue of genetic modification will increase over a number of decades to come. The technique has often been heralded as one of the most important developments that are likely to have an impact in the 21st century, and more and more companies are switching from traditional production techniques to production based on genetic modification.

After selecting genetic modification as my focal issue, I designed two empirical studies to assess the impact of issues management activities on the performance of firms that are publicly associated with this new and controversial technology. Both of these studies were conducted on the so-called Dutch fats and oils industry, a subset of the Dutch foods industry. Figure 1.1 (on page 4) provides a graphical representation of the constituting elements of the industry.

² More detailed background information on the issue of genetic modification will be provided in the second chapter of the present volume.

Figure 1.1: The Dutch fats and oils industry



Over the course of my empirical investigations, this industry has proven to be a fertile and interesting source of research data, mainly because the companies in this industry are forced to operate under conditions of high interorganizational interdependence. The fats and oils industry represents a complete chain of production, ranging from biotechnology companies to retailing organizations. This high degree of connectedness makes that salient issues trickle down the production chain relatively fast, and that the represented organizations need to coordinate their efforts meticulously and monitor their agreements carefully in order to preserve the effectiveness of their joint issues management efforts.

Over and above the aforementioned reasons, I selected the fats and oils industry because the companies in this sector were the first commercial organizations in the food industry to become involved with the issue of genetic modification. This is because the first genetically modified food crop to be commercialized was an oilseed, notably Monsanto’s Roundup Ready soybeans. This crop is the world’s premier oilseed, both in terms of its commercial value and

trade volume. To further substantiate my decision to focus on the fats and oils industry, I will proceed with a brief description of its constituting elements (as depicted in the above figure). *Biotechnology companies* are the organizations that modify the food crops. They alter the genetic structure of these plants to provide them with certain desired properties (such as a tolerance to herbicides or fungicides). *Producers of oilseeds* are family farms or corporate farms. They currently obtain their genetically modified seeds directly from the biotechnology companies, because the latter have been buying up traditional seed companies rapidly over the last decade in an attempt to secure the demand for their products (a typical case of forward integration). *Crushers of oilseeds* are a class of companies that literally crush oilseeds like soy and canola in order to extract the vegetable oil from them. The crushers sell these oils as intermediate products to *bottling companies*, *sauce producers*, and *food producers*, who use them as ingredients for consumer products. *Retailing organizations*, finally, are the ones that market these finished products to *final consumers*.

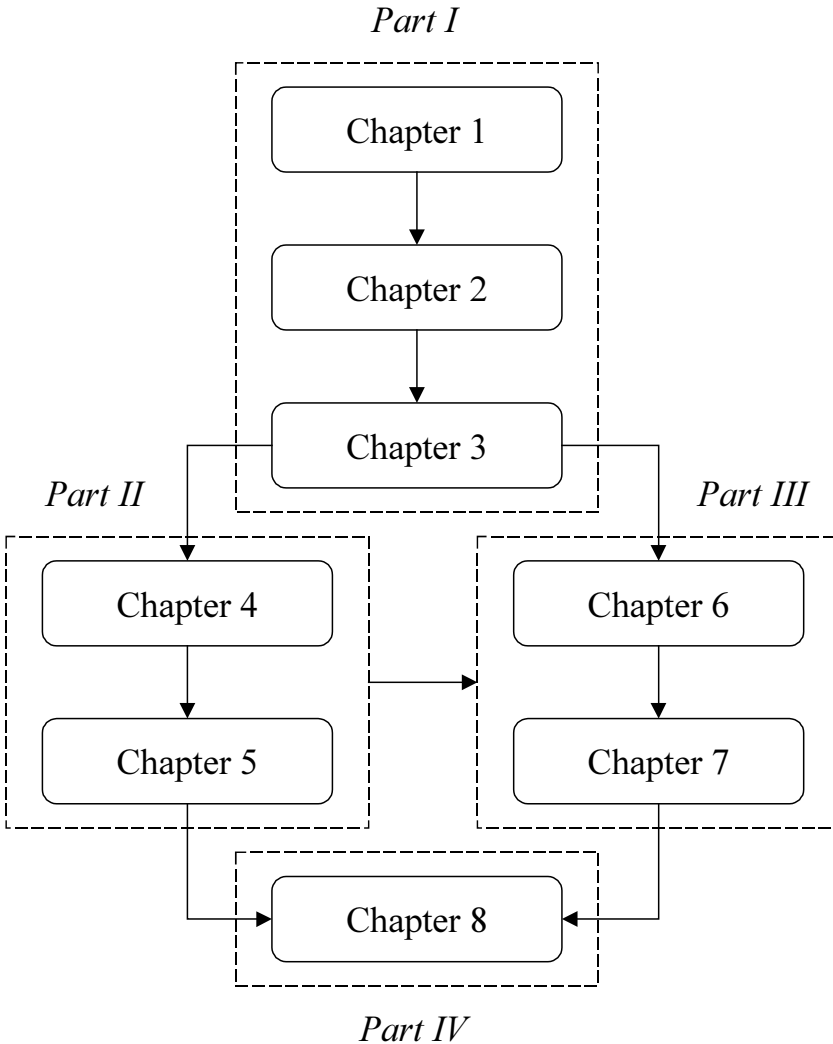
To find an answer to my first research question, I have conducted a detailed case study of the issues management practices of the Dutch fats and oils sector. The purpose of this first study was theory building, not theory testing. I investigated which issues management techniques the companies in the Dutch fats and oils industry were using to manage the issue of genetic modification by means of collecting and analyzing qualitative data such as interview reports, notes made after roundtable discussions, audio and video tapes, and archival records. This first study enabled me to identify two distinct but interrelated issues management techniques – which I labeled stakeholder integration and capability development – that the companies in my sample seemed to use to avert the biotechnology issue.

To subsequently answer my second research question, I conducted a large-scale mail survey among 551 managers working in the Dutch fats and oils industry on the adoption and performance effects of these two issues management techniques. I included four distinct performance indicators in my measurement instrument, notably economic benefits, strategic benefits, corporate reputation, and issue-specific reputation (in this case: biotechnology reputation). The results that I derived from the 212 usable responses I received (representing an effective response rate of 38%), suggested that issues management indeed contributes positively to corporate performance, albeit capability development was more strongly associated with the more tangible aspects of corporate performance (economic and strategic benefits), whereas stakeholder integration was more strongly associated with the more intangible aspects of corporate performance (corporate and issue-specific [biotechnology] reputation).

1.3 OVERVIEW OF THE BOOK

To provide the reader with a firm *a priori* grasp on the subject matter covered in this book, I provide a brief overview of the remaining chapters in this paragraph. This book consists of eight chapters, including this introduction. The relationships between the chapters are depicted graphically in Figure 1.2.

Figure 1.2: The outline of this book



As follows from the above illustration, this book consists of four interrelated parts. Part I consists of three chapters (one, two, and three), and

constitutes the empirical and theoretical introduction of this thesis. The purpose of the first (current) chapter is to introduce the two research questions that guided the design and execution of this project. The second chapter, which consists of two parts, sketches the empirical context of the research by introducing the genetic modification case study. In the first part I introduce the methodology I have used to conduct this case study. I head off with a discussion on the design of the study, which is followed by a treatment of the data collection and analysis procedures, and by an explanation of the procedures followed for establishing reliability and validity. In the second part I provide a brief general description of the case study, using both an event history (a chronological representation of the facts of the case) and a narrative account of the major occurrences characterizing the introduction of genetically modified ingredients on the Dutch market.

The third chapter of this text provides an integrative theoretical framework of strategic issues management. The chapter starts with a review of two important streams of issues management research. I begin by introducing the externally oriented public affairs/corporate communication approach, and subsequently proceed with the more internally oriented organizational behavior approach to issues management. For both of these approaches it will be explained (a) how they see the strategic issue construct, and (b) how they view the strategic issues management process. I continue by introducing an integrative theoretical framework of strategic issues management, which draws upon and attempts to integrate both of the aforementioned research streams. The framework results in a number of theoretical hypotheses explaining (a) what types of issues management activities commercial organizations may use to manage those forthcoming developments that threaten to impinge upon their ability to meet their objectives, and (b) how the adoption of such activities can be linked to the attainment of a more favorable competitive position. In effect, this framework has guided and supported all further theory-building efforts that are reported in this book.

Part II of this book consists of chapters four and five. This second part reports the findings of the first empirical study of this volume, the in-depth case study of the issues management practices of the firms in the Dutch fats and oils industry with respect to the highly salient issue of genetic modification. More precisely, this part addresses the first research question of this project by providing an elaborate explanation of the two issues management strategies that were uncovered with the help of the qualitative study. Chapter four discusses the issues management strategy of *stakeholder integration* (the development of trust-based, cooperative relationships with a broad range of external stakeholders [Hart, 1995; Sharma & Vredenburg, 1998]). Two conceptual dimensions (*locus* and *modus* of stakeholder integration) are used to develop a typology of four different integration types. Subsequently, these four types are illustrated with case study evidence, and linked to four corresponding competitive benefits. Chapter five is devoted to a discussion on capability development (the integration of individuals' specialist knowledge into higher-order organizational knowledge resources

[Grant, 1996]), the second issues management strategy that was revealed with the help of the case study of the Dutch fats and oils sector. Again, two conceptual dimensions (*allowed response time* and *public activism*) are used to develop a straightforward two-by-two typology of issues management capabilities, which are also illustrated with evidence from the case study. A subsequent discussion of the capability building process explains how the organizations in the case study sample went about building such competitively valuable resources.

Part III of this book consists of chapters six and seven. It reports the findings of the survey study that was performed to provide an answer to the second research question raised in the present chapter. In chapter six I discuss the methods I followed while conducting the survey research. I will start by presenting a brief overview of the properties of the research sample, and proceed by reporting the procedures for purification of the six psychometric scales that were used to measure the central constructs of the study. Chapter seven discusses the results of the survey study. The chapter heads off with a recapitulation of the research model as it was presented in the third chapter of this text. It proceeds by presenting the results of four hierarchical regression analyses that were used for testing the research hypotheses developed in chapter three (using the four previously selected performance indicators [economic benefits, strategic benefits, corporate reputation, and biotechnology reputation] as the respective dependent variables). The regression procedure consists of two steps. In the first step, it is determined whether the amount of additional variance that is being explained by adding the two explanatory variables (stakeholder integration and capability development) to a regression model that only contains the control variables (i.e., corporate size and industry) differs significantly from zero. As a second step, the individual coefficients of the explanatory variables in the full model (which includes both the predictor and the control variables) are inspected to see whether the individual issues management activities add to a firm's competitive advantage or not. Effectively, this latter step represents the actual testing of the integrated framework of issues management.

Part IV finally, consists of chapter eight only. This chapter presents the overall conclusions of this book, drawing upon both the case study and the survey research. First, the findings of these two studies are discussed in terms of the research questions that were introduced in the first paragraph of this introduction. Secondly, I discuss the limitations of the chosen approach; particularly those pertaining to the measures in use and the research setting I have selected. Before finishing this book with some brief concluding remarks, I will present a concise agenda for future research.

Chapter 2

Case study methods and description

2.1 INTRODUCTION

In the present chapter the theory-building case study of the issues management practices of the firms in the Dutch fats and oils industry with respect to the highly salient strategic issue of genetic modification will be introduced. The chapter serves a twofold purpose. Firstly, it explains the methods I have used in conducting the case study research. More in particular, I will focus on the design of the study, on the methods that have been used to collect and analyze the case study data, and on the procedures followed to establish reliability and validity. Secondly, the chapter provides a brief introduction to the empirical field of study that is being addressed by the current research. This introduction (a) sketches an historical overview of the most important facts of the genetic modification case, and (b) provides a narrative account of the most important events in the US and Europe (with a special emphasis on the Netherlands). This chapter finishes with some brief conclusions.

2.2 CASE STUDY DESIGN

I feel obliged to start this methods chapter with a definition of the case study phenomenon, but I found it hard to find a satisfactory definition that is at the same time extensive enough to cover all possible sorts of case studies and sufficiently restrictive to exclude other qualitative research techniques.³ I therefore

³ Many other qualitative research techniques exist that are often mistakenly described as "case studies." Creswell (1998), for example, draws clear distinctions between case studies

choose to present three complementary definitions. Each of them is arguably biased, but also stresses a distinct and important aspect of the case study phenomenon.

The first definition is one by Eisenhardt. She defines the case study as “a research strategy which focuses on *understanding* the dynamics present within *single settings*” (1989: 534, emphasis added). The contribution of this definition is that it draws attention to the fact that case studies are always based on an inherently and deliberately limited number of “observations,” each of which is considered to be *unique*. The collection of “objects of study” (Stake, 1995) of a case analysis thus never represents a “sample” in the statistical sense of the word, no matter how extensive it is. The consequence of this first attribute is that case studies are only generalizable to theoretical propositions, not to populations or universes.⁴

The second definition is used by Yin. He defines the case study as “*an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident*” (1994: 13, second emphasis added). In other words, case studies differ from other research strategies in that they deliberately take contextual conditions into account. Case studies are thus especially appropriate when understanding contextual factors is essential to comprehending the phenomenon embedded in them.

Creswell has introduced the third definition I chose to include in this text. He describes the case study as “an exploration of a ‘bounded system’ or a case (or multiple cases) over time through detailed, in-depth data collection involving *multiple sources of information rich in context*” (1998: 61, emphasis added). This definition stresses the need for data triangulation – the thoughtful combination of several corroborative sources of evidence (Jick, 1979). As Yin (1994) explains, the convergent use of multiple sources of evidence is critical to case studies, because case study researchers typically have to cope with the technically distinctive situation in which there are more variables of interest than data points.

In combination, these three elements (uniqueness of the observations, contextuality of the object of study, and the necessity of using multiple converging sources of evidence) characterize the research method I have chosen for the first

and other types of qualitative research like biographies, phenomenologies, grounded theory studies, and ethnographies.

4 As Yin (1994: 10) puts it: “[C]ase studies, like experiments, are generalizable to theoretical propositions and not to populations or universes. In this sense, the case study, like the experiment, does not represent a ‘sample,’ and the investigator’s role is to expand and generalize theories (analytic generalization) and not to enumerate frequencies (statistical generalization).”

empirical study of this book.⁵ At the same time, these elements distinguish the case study approach from other qualitative methods of inquiry.

2.2.1 An embedded case study

A case study research design necessarily begins with a research question, and then spells out how this is going to be researched (Mason, 1996). Once I had decided that the introduction of genetically modified foods in the Netherlands was going to be my focal issue, I realized that I would have to conduct analyses at two distinct levels of analysis to answer my first research question (“How can we conceptualize the issues management activities that organizations use to manage forthcoming developments that threaten to affect their ability to meet their objectives?”). I started out by analyzing the interorganizational dynamics at the level of the Dutch fats and oils industry. At the same time, however, I had to make parallel observations at the organizational level of analysis in order to understand the fitnesses of firm-level issues management strategy.

Consequently, I decided to use two distinct levels of analysis in my case study, notably: (1) the interorganizational dynamics within the Dutch fats and oils industry, and (2) the issues management strategies of a set of exemplary firms working in this very same industry, also operative within the Netherlands. This type of research is what Yin (1994) calls an embedded case study design. It allows researchers to examine specific phenomena in full operational detail and keep track of the larger picture at the same time. More specifically, the embedded design allowed me to understand the interorganizational dynamics within the Dutch fats and oils industry and the consequences of these dynamics for individual firms simultaneously.

For both of these levels of analysis, I used four cumulative demarcation criteria to draw the boundary between what to study and what not to study (Miles & Huberman, 1994). A listing of these demarcation criteria is provided in Table 2.1 on page 12.

⁵ These definitions are only meant to characterize case studies against the background of all other qualitative methods of inquiry, not to describe their purpose. In research terms, case studies have two broad purposes: theory building and theory testing. Case studies are most often used to build theory - to induce new theoretical propositions from various convergent sources of qualitative data (Eisenhardt, 1989). Dutton & Dukerich (1991) provide a noteworthy example of a case study that serves this first purpose. Case studies can also be used to test theories, however, provided that they are designed as critical experiments (Popper, 1934/1972). See Sorge (1997) for an interesting illustration of this second purpose.

Table 2.1: Case study boundaries

	UNIT	SUBUNIT
Level of analysis	Dutch fats & oils industry and its stakeholders	Individual firms in the Dutch fats & oils industry
Research focus	Industry-level stakeholder management and integration processes	Firm-level learning and capability development processes
Spatial boundaries	Dutch context	Dutch context
Temporal boundaries	1992 - 2000	1992 - 2000

The first level of analysis I selected for this study was the Dutch fats and oils industry, including its primary stakeholders. Within this context, I principally focused on the various collaborative and adversarial relationships between the key players in this industry on the one hand, and on their relationships with their most important external constituencies on the other. For the purposes of clarity and focus, I have not taken other aspects of this industry into account. Furthermore, the spatial limitations applied were the national boundaries of the Netherlands, leaving the foreign operations of local companies out of the analysis. Finally, I also adopted some stringent temporal boundaries, the lower of which was set at 1992, the year in which a number of collaborating Dutch food companies founded the so-called Informal Consultations on Biotechnology (cf. chapter four). The upper temporal boundary was set at 2000, the year in which I finished collecting the data.

I selected the individual company as my second level of analysis for the present study. The companies I selected were all exemplary and dominant firms in the Dutch fats and oils industry. I specifically focused on the issues management strategies of these firms. In order to limit the current research to manageable proportions, I did not focus on any other aspects of their competitive strategies. Furthermore, I again confined my analyses to the Dutch context. In other words, I did not focus on the international operations of the companies in my case study sample, even though they are all multinationals. With respect to the temporal demarcation of the research, the lower boundary I applied was 1992, the year in which most of the companies in my sample joined the aforementioned Informal Consultations on Biotechnology. I used the year in which I stopped collecting data, 2000, as the upper temporal boundary for this study.

2.3 DATA COLLECTION

Theory-building researchers typically combine multiple data collection methods (Eisenhardt, 1989). As Yin (1994) points out, the use of multiple sources of evidence in case studies provides researchers with a very important advantage, notably the development of converging lines of inquiry. As he explains, “any

finding or conclusion in a case study is likely to be much more convincing and accurate if it is based on several different sources of information, following a corroboratory method" (1994: 92). The act of combining various sources of research data to support the same conjectures and social facts is commonly known in the literature as data triangulation (Jick, 1979; Patton, 1987; Denzin, 1989). In my study I have "triangulated" five different types of data - personal interviews, archival data, roundtable discussions, audio and videotapes of radio and television broadcasts on the issue of genetic modification, and articles from local and international magazines and newspapers. Table 2.2 provides an overview of these five data sources.

Table 2.2: Sources of case study data

DATA TYPE	DATA SCOPE	EXAMPLES
Focused interviews	23 interviewees	<ul style="list-style-type: none"> • Company officials • Government officials • NGO representatives • Journalists
Archival data	21 files (A4 standard)	<ul style="list-style-type: none"> • Faxes • Letters • Minutes • Brochures
Roundtable discussions	3 roundtables	<ul style="list-style-type: none"> • Voorburg • Rotterdam • Rijswijk
Audio & video tapes	7 videotapes, 21 audio tapes	<ul style="list-style-type: none"> • National television and radio broadcasts
Public sources	Considerable	<ul style="list-style-type: none"> • ABI-Inform • Internet • Dutch newspapers

Each of these data sources was used in a different way. I used the *interviews* primarily to identify the types of activities that the Dutch fats and oils companies used to manage the genetic modification issue (that is, to provide a direct answer to the first research question). Furthermore, I used the *archival data* and the *audio and videotapes* to corroborate my interview findings. I primarily used the *roundtable discussions* to improve the validity and reliability of my findings. Finally, I used various *publicly available sources* to provide a general background and an interpretative scheme for the case study findings.

2.3.1 Focused interviews

To gather first-hand knowledge of the issues management practices of the Dutch fats and oils sector, I conducted so-called focused interviews (Merton, Fiske, & Kendall, 1956) with a broad range of active participants in the genfoods issue. I selected my interviewees by means of a method known as “snowball-sampling” (Mason, 1996). The first interviews were held with people of the Product Board for Margarine, Fats, and Oils (or Productschap Margarine, Vetten en Oliën [in Dutch]). I asked these respondents to put me in touch with other key players in the issue. The members of the Product Board proved to be a valuable resource, due to their intimate contacts with government and industry officials, and NGO representatives. I continued to ask for new potential interview candidates at the end of each interview.

The snowball-sampling method was highly successful in the sense that I was introduced to more people than I could possibly speak to. To obtain data that captured the greatest possible variation in issues management experiences, I selected a group of 23 key players in the issue, following Glaser & Strauss’s (1967) notion of theoretical sampling in terms of theoretical relevance. More specifically, I sought variation with respect to the roles the various participants played in the issue, as indicated by both the nature of the organizations that employed them and their job titles. Indicative of the success of this strategy is that I was able to interview government and industry officials, representatives of NGO’s, journalists, and members of all the Product Boards with a stake in the issue. The selection of 23 respondents was based on the observation that the variation of a phenomenon usually reaches saturation at around 20 research participants, after which no new concepts emerge (Sandberg, 2000). In this study, the themes that I distilled from the interview reports began to repeat themselves after about 17 respondents. A full listing of my interviewees is presented in Table 2.3.

Table 2.3: Listing of research participants

NUMBER	ORGANIZATION	JOB TITLE
1.	Productschap Margarine, Vetten en Oliën	Secretary
2.	Productschap Margarine, Vetten en Oliën	Policy director
3.	Productschap Margarine, Vetten en Oliën	Head of Communications
4.	Productschap Margarine, Vetten en Oliën	Editor Biotechnology Newsletter
5.	Productschap Granen, Zaden en Peulvruchten	Policy director
6.	Productschap Diervoeder	Policy director

Table 2.3: Listing of research participants (continued)

7.	Ministerie van Economische Zaken	Coordinator Biotechnology
8.	Ministerie van Landbouw, Natuurbeheer en Visserij	Coordinator Biotechnology
9.	Nederlands Normalisatie-instituut	Standardization Consultant Food & Agriculture
10.	Consument & Biotechnologie	Policy director
11.	Consumentenbond	Policy director
12.	Unilever	Issues Management
13.	Unilever	Purchasing
14.	Unilever	Public Affairs
15.	Numico	Director Corporate Affairs
16.	Shell	Public Affairs
17.	Gist-brocades	Director of Public Affairs
18.	Gist-brocades	Senior External Communications
19.	Ahold	Public Affairs
20.	Het Financieele Dagblad	Editor
21.	De Volkskrant	Science Editor
22.	Schuttelaar & Partners	Communication Advisor
23.	Landbouw Universiteit Wageningen	Professor of Mass Communications

The focused interviews I conducted with these respondents were typically open-ended and they assumed a conversational manner, but after Dutton & Dukerich (1991) I did follow a protocol with a minimal set of theoretically relevant questions. A standardized list of questions of this kind both helps to structure the conversations and increases the comparability of the various interviews. A short version of this interview protocol is presented in Table 2.4 on page 16.

The average interview lasted about an hour and a half, while I asked questions and took notes simultaneously. Most of my informants preferred me not to tape-record the conversations, so I decided not to transcribe the interviews. Instead, I made detailed interview reports, usually within two days after the data collection. In all, the interview reports amounted to some 150 pages of double-spaced text.

Table 2.4: Interview protocol

VARIABLE CLUSTERS	ILLUSTRATIVE QUESTIONS
Position on biotechnology	<ul style="list-style-type: none"> • What is your company’s position on the use of biotechnology? • Under what conditions do you approve of the use of modern biotechnology?
Involvement with biotechnology	<ul style="list-style-type: none"> • What is the nature of your involvement with modern biotechnology? • At what particular point in time did you get involved with modern biotechnology?
Corporate communication	<ul style="list-style-type: none"> • How did you communicate with your stakeholders about the issue? • What are the key drivers behind the success or failure of your communication program?
Stakeholder relations	<ul style="list-style-type: none"> • In what formal or informal collaborative platforms did you participate? • What other ways did you use to get in touch with your most critical stakeholders?
Stakeholder attitudes	<ul style="list-style-type: none"> • Can you describe the nature of your relationship with your stakeholders? • Can you discuss “hot” topics with stakeholders without politicizing the discussion?
International dimensions	<ul style="list-style-type: none"> • What factors drive the biotechnology discussion in the Netherlands? • In what respects does the Dutch situation differ from that in other European countries?

2.3.2 Archival data and audio and videotapes

Documents, both historical and contemporary, are a rich source of data for research in the social sciences (Punch, 1998). In line with the advice of many well-known qualitative researchers, I decided to use the analysis of documents to corroborate evidence from interviews and observations (e.g., Yin, 1994; Mason, 1996; Punch, 1998). For this study I had access to the archives of *Productschap Margarine, Vetten en Oliën*, which contained a very interesting array of documented materials. According to the dual criteria of access and authorship (Scott, 1990), these archives contained very valuable data because access to them was heavily restricted (only a few members of the Product Board were entitled to use them) and many of the documents they contained were of private or official-private authorship.

In all, I was able to use 21 files (A4 standard) of collected documents. The files contained personal correspondence (letters, faxes) between members of the Product Board and industry representatives, brochures, annual reports, press releases, minutes of meetings, and scientific reports on the safety of the new technology and on the acceptance among consumers thereof. I was allowed to work with these documents for six weeks. During this period I read all the materials and wrote a 130 page synopsis (double-spaced) of the most important highlights and details. I also made photocopies of the most salient documents,⁶ so that they were available to me for later re-analysis. The Product Board also supplied me with a collection of audio and videotapes, which contained recordings of all the recent broadcasts on national radio and television concerning the issue of genetic modification. Like the printed archival data, I used these audiovisual data to further substantiate my interview findings.

2.3.3 Roundtable discussions

One of the attractions of the current case study is that I have been able to collect some very special data by means of participation in three roundtable discussions involving high-placed representatives from the Dutch fats and oils industry. In contrast to the data that I gathered from the Product Board archives, I did not use these data to corroborate my interview findings. Instead, I used the roundtable discussions to improve upon the validity and reliability of my combined case study findings. The actual process of establishing reliability and validity in this particular study will be described in paragraph 2.5.

The first group discussion was in held in Voorburg, The Netherlands, in the fall of 1997. The occasion was a reunion of a study trip of Dutch fats and oils industry representatives to the United States, which was organized by the Product Board in 1995. The Product Board was also the organizer of this group discussion (also see paragraph 2.6.5). In all, twelve people participated in the discussion, representing the key players in the Dutch fats and oils industry. The second group discussion, organized by Erasmus University and held in Rotterdam, The Netherlands, in the spring of 1998, was used to communicate some preliminary findings to the field. Nineteen people attended this meeting, which allowed me to discuss some of my preliminary research conclusions with high-placed officials. The Product Board organized the third meeting in the fall of 1999, which involved seventeen industry representatives. The goal of this meeting, held in Rijswijk, The Netherlands, was to discuss my final research findings with industry representatives. After this date I stopped collecting primary data in the form of interviews, archival records, audio and videotapes, and group discussions. I

6 With permission of the Product Board for Margarine, Fats, and Oils.

continued collecting secondary data, however, in the form of clippings from publicly available sources.

2.3.4 Public sources

As a final source of data I used various publicly available sources. I did not use these data sources to corroborate my interview and archival data, nor to improve upon the validity and reliability parameters of this research. Instead, I used these public sources to provide something of an interpretation scheme for my primary data. At the most general level, I used the Internet to gain access to background information on the genfoods issue. Apart from the homepages of the various multinational companies involved, two sites stood out as particularly helpful. First, I often consulted a Swiss site, ran by anti-biotechnology activists, that provided very useful (albeit critical) information on biotechnology (www.gene.ch). Second, I often visited a site operated cooperatively by the U.S. biotech industry (www.whybiotech.com). This site proved to be a valuable source of information, in spite of heavy censoring by the industry in order to maintain a positive bias. Secondly, still on a somewhat global level, I was able to use the Proquest database of ABI-Inform. The database proved to be a valuable resource for retrieving many articles that were published on the genfoods issue in the popular and business press (also see paragraph 2.6.1). Finally, for background information on the Dutch situation I kept close track of the major Dutch newspapers reporting on the issue (e.g., *Het Financieele Dagblad*, *NRC Handelsblad*, *De Volkskrant*).

2.4 DATA ANALYSIS

Data analysis consists of “examining, categorizing, tabulating, or otherwise recombining the evidence to address the initial propositions of a study” (Yin, 1994: 102). However, as Eisenhardt observes, data analysis “is both the most difficult and the least codified part of the process [of building theory from case studies]” (1989: 539). She argues that many published studies tend to describe research sites and data collection methods fairly well but allow little space for a discussion of the analytical procedures used. The consequence of this negligence is that “a huge chasm often separates data from conclusions” (Eisenhardt, 1989: 539). To overcome this chasm in my research I have developed a three-stage analytical strategy, the aim of which is to treat the evidence I collected fairly, to produce a set of compelling analytical conclusions, and to offer as little room as possible for alternative interpretations.

First, I read and reread my interview reports and the relevant documents I had selected from the archival research to get a good feel for their format and

content. Next, I divided the information I had collected over two more or less homogeneous categories. The evidence on issues management strategies in one of the resultant clusters was characterized by a strong *outside-in* focus. It essentially involved many pieces of evidence on how companies tried to forge and maintain strong favorable ties with external stakeholders. The issues management data in the other cluster, on the other hand, had a strong *inside-out* focus. It involved many interview quotes and much archival evidence on how companies tried to document what they had actually done with respect to issues management in the past and what they had in fact learned from those activities.

As a second step, I juxtaposed these two clusters of evidence with received theories from the field of management. As Eisenhardt explains, “an essential feature of theory building [from case studies] is comparison of the emergent concepts, theory, or hypotheses with the extant literature” (1989: 544). With respect to the cluster of outside-oriented evidence, I found a concept in the literature known as *stakeholder integration* (Hart, 1995; Sharma & Vredenburg, 1998). Hart sees this concept as an essential element of a product stewardship strategy, which he describes as “integrating the ‘voice of the environment,’ that is, external (stakeholder) perspectives, into design and development processes” (1995: 993). Sharma and Vredenburg have used this concept to explain the strategies of proactive environmentalist companies in the Canadian utilities industry. They defined stakeholder integration as a corporation’s “ability to establish trust-based collaborative relationships with a wide variety of stakeholders, especially those with noneconomic goals” (1998: 735). Furthermore, to root the inside-oriented cluster of observations firmly in the received literature on strategic management, I chose the theoretical concept of *capability development* to juxtapose my empirical observations with (Eisenhardt & Martin, 2000; Grant, 1996; Kogut & Zander, 1992; Teece, Pisano & Shuen, 1997). This concept may be defined as the accumulative process leading to coordinating mechanisms that enable the most efficient and competitive use of the firm’s assets – whether tangible or intangible (Day, 1994). Grant (1996) depicts capability development as an organizational process whereby the specialized knowledge of individual experts is integrated (through direction and routinization) into higher-order skills and competences. In combination, these two concepts quite accurately summarize what I have found in the case study.

Finally, as a third step in my data analysis strategy I decided to report the two concepts that I had identified by juxtaposing received literature with case study evidence back to my key informants for a critical review. According to Yin (1994), such review procedures are more than a matter of professional courtesy. Organizing a structured feedback process should instead be seen as an important opportunity to validate and corroborate the essential facts and evidence presented in the case study report (Schatzman & Strauss, 1973; see the next paragraph for a more elaborate discussion on the topic of validation). A synopsis of the data analysis strategy I used for this study is presented in Table 2.5 on page 20.

Table 2.5: Synopsis of the data analysis strategy

STEP	DESCRIPTION	STAGE
1.	Clustering remaining data in new categories	Data coding
2.	Juxtaposing new categories with received theory	Concept development
3.	Reporting vignettes & constructs back to the field	Concept validation

2.5 ESTABLISHING RELIABILITY AND VALIDITY

As a final step in this discussion on case study design and methods I will address the procedures I followed for establishing the validity and reliability of my findings. As Yin explains, because a research design consists of a logical set of statements, one is able to judge the quality of any given design by means of logical tests (1994). For the purpose of this study, I have used four different tests to assess the overall quality of my research design, notably: (1) communicative validity, (2) construct validity, (3) external validity, and (4) reliability.

2.5.1 Communicative validity

Communicative validity may be defined as the degree of correspondence between a respondent’s lived experience of the world and a researcher’s interpretation of that experience (Sandberg, 2000). Establishing communicative validity involves an ongoing dialogue in which alternative knowledge claims are debated throughout the research process (Kvale, 1989). In my study I have tried to establish communicative validity by creating what Apel (1972) calls a community of interpretation. Apel’s views are that the production of valid knowledge presupposes an understanding between the researcher and his or her respondents about what the latter are actually doing. I have sought to establish a community of interpretation by means of the roundtable discussions, the third source of data collection I outlined above. These occasions allowed me to repeatedly enter into a discussion with a panel of industry experts about the meaning, in terms of resonance with the daily practice of issues management, of my most central constructs.

2.5.2 Construct validity

Establishing construct validity requires the establishment of correct operational measures for the concepts being studied (Kidder & Judd, 1986). I have

used two tactics for securing the validity of the constructs I used in this study. First, I used multiple sources of evidence to encourage convergent lines of inquiry (Yin, 1994). I will not touch upon this matter here, because I have already discussed these various data sources and their respective uses in an earlier paragraph of this chapter (cf. paragraph 2.3). As a second tactic I had the case study report reviewed by several key informants ($N = 5$) before finalizing the last version. The general idea behind this tactic is that informants and participants may disagree with the researcher's conclusions and interpretations, but they may as a rule not disagree over the actual facts of the case. Having the case study report reviewed and revising its contents according to the comments of the reviewers thus stimulates the attainment of a higher degree of agreement between researcher and research participants about the objective facts of the case study. Some details on these reviewers are presented in Table 2.6.

Table 2.6: Listing of case study report reviewers

NUMBER	ORGANIZATION	JOB TITLE
1.	Productschap Margarine, Vetten en Oliën	Secretary
2.	Productschap Margarine, Vetten en Oliën	Policy director
3.	Productschap Granen, Zaden en Peulvruchten	Policy director
4.	Unilever	Purchasing
5.	Schuttelaar & Partners	Communication Advisor

2.5.3 External validity

External validity may be defined as the extent to which a study's findings are generalizable beyond the immediate case study (Kidder & Judd, 1986). My case study sample consisted of a relatively limited number of companies from the Dutch fats and oils industry. To assess whether my case study findings had relevance in a larger domain, I conducted a second empirical study. This second study entails a survey among a much larger sample of companies involved with modern biotechnology, ranging from the biotechnology organizations themselves to retailers selling the finalized products. This study also entailed a greater variance with respect to the size of the participating organizations, in the sense that a considerable number of small and medium sized companies participated. This is a valuable addition, because the present case study has something of an "elite bias" in the sense that I only spoke with representatives of key players in the industry. This second empirical study, and its consequences for the external

validity of the present project, will be discussed extensively in chapters six and seven of this book.⁷

2.5.4 Reliability

Reliability can be established by demonstrating that the operations of a study, such as data collection and analysis, can be repeated with the same results (Kidder & Judd, 1986). In case study research, the reliability problem can be addressed by making as many steps as operational as possible, and to conduct research “as if someone were always looking over your shoulder” (Yin, 1994: 37). In the present study I have attempted to establish reliability by means of a careful documentation of my research design efforts (cf. paragraph 2.2.1), and data collection and analysis procedures (cf. paragraphs 2.2.2 and 2.2.3). I have included these paragraphs as a deliberate reliability check, and they should allow external auditors to judge the quality of the decisions I had to make to get from my initial research question to the case study findings and conclusions, which will be presented in the subsequent two chapters.

2.6 CASE STUDY DESCRIPTION

Up to here, the present chapter has provided a *methodological* introduction to the case study. I found it important to discuss the mechanics of the research process, because this provides interested readers with some grasp on the relative reliability of the present endeavor and, more generally, with some insights into the design and execution of the case study. It is equally important, however, to provide an *empirical* introduction to the present study of the issues management practices of the Dutch fats and oils industry in the form of a brief overview of the historical development of the genetic modification case and a narrative description of the most important events. The present paragraph provides this empirical introduction. First, I will provide an *event history*, “a matrix that arranges a series of concrete events by chronological time periods” (Miles & Huberman, 1994: 111). This listing provides an idea of the total time frame of the issue and of the historical sequencing of events. Secondly, I will provide a narrative account of the main events that have played a role in the evolution of this issue. This account consists of an overview of (1) the *regulatory responses* to the introduction of genfoods, (3) the *public protests* against the new technology, (4) *corporate responses*

⁷ Furthermore, a number of students from Leiden University, the Netherlands, have tried to assess the external validity of the findings that will be discussed in chapters four and five of this book. Their study reports dealt with the reception of modern biotechnology and corporate responses to that reception in developing economies. These results will briefly be summarized in the final chapter of the present volume.

to the public protests, and (5) a brief evaluation of *the situation in the Netherlands*. This introduction should make it easier to understand and interpret the findings of the case that will be reported in chapters four and five.

2.6.1 History of genetic modification

The history of genetic modification starts with the elucidation of the structure and nature of deoxyribonucleic acid (DNA) between 1940 and 1960. The discoveries in this period made it theoretically possible to intervene in the hereditary characteristics of living organisms. Cohen and Boyer, two American geneticists, were the first to put theory into practice by creating the first genetically modified organism in 1975 (Powell & Leiss, 1997; see Figure 2.1).

Figure 2.1: What is genetic modification?

Genetic modification involves the creation of genetically modified organisms (GMOs) by means of making deliberate changes in the genetic code of existing organisms. The technique allows scientists to directly add, alter, or delete those properties of an organism that they deem important, in a much faster and more precise way than with the help of conventional breeding techniques. The commercial history of genetic modification is still very short. In 1984, researchers working with Monsanto were the first to use a bacterium as a vehicle for inserting a new gene into a relative of the tobacco plant. The bacterium contained a mobile piece of DNA known as a plasmid that can be easily transferred from one organism to another. Scientists insert a piece of DNA with a desired trait – insect resistance, say – into the plasmid, and then allow the bacterium to infect a plant. The plasmid transfers the foreign DNA to the plant cell. The altered plant then replicates itself, and a new transgenic species is born.

This breakthrough innovation caused the development of a vibrant commercial biotechnology sector in the United States. Genentech of San Francisco was the first of a series of new biotech startups to actually sell its shares to the public. It raised \$35 million upon its initial public offering in 1980. Another major breakthrough occurred in 1984, when researchers working for Monsanto identified a procedure for inserting a new gene into a relative of the tobacco plant with the help of a bacterium. This technological innovation allowed biotechnology companies to start working on concrete commercial applications of modern biotechnology. The event history of the genetic modification issue, a detailed chronological representation of all the significant events that jointly comprise the global genfoods issue, is on display in Figure 2.2 on page 24.

Figure 2.2: Event history of the global genfoods issue

- 1975, December: Cohen and Boyer create the first genetically modified organism.
- 1980, August: Genentech of San Francisco becomes the first biotechnology company to sell shares to the public in the US, raising \$35 million.
- 1984, December: Researchers working with Monsanto are able to use a bacterium as a vehicle for inserting a new gene into a relative of the tobacco plant. This innovation opens up a range of possibilities for future agricultural innovations.
- 1990, June: The European Union adopts two major directives concerning biotechnology. One on its use in contained environments such as laboratories and factories, and one on the deliberate release of GMOs into the environment.
- 1990, August: The US Food and Drug Administration (FDA) approves of a genetically engineered form of rennet, used to curdle milk for making cheese.
- 1991, March: Mycogen becomes the first biotechnology company to receive Environmental Protection Agency approval for a genetically engineered product - a trio of pesticides fabricated with the help of bioengineered bacteria.
- 1991, April: The European Commission publishes a document setting out its position on biotechnology. This calls for the promotion of the 'beneficial application of biotechnology'. It states that it does not intend to place undue burdens on the industry.
- 1992, May: The US Food and Drug Administration decides that genetically modified products have to meet the same standards as all other foods, but no new ones. This implies that the FDA does not require manufacturers of GM foods to label their products as such.
- 1992, July: In response to the May 1992 FDA decision, over 1,100 American chefs, along with activists of the Pure Food Campaign led by Jeremy Rifkin, press the US federal government to test and label foodstuffs that have been altered with genetic material from an outside donor.
- 1992, February: The UN organizes the 'Earth Summit' in Rio de Janeiro. At this conference, 170 countries become a party of the Convention on Biological Diversity. However, the US is not a party, so it cannot sign up to any protocols developed under the convention.
- 1993, January: Campbell's Soup, which had planned to market the Flav'r Savr tomato for Calgene, announces it is pulling out. The presumable reason is the announcement of a worldwide boycott of all Campbell's products by food activists.
- 1994, May: The US Food and Drug Administration endorses as safe the first genetically altered food to be sold to consumers: Calgene's Flav'r Savr tomato.

Figure 2.2: Event history of the global genfoods issue (continued)

- 1994, March: Monsanto's Roundup Ready soybeans receive USDA and FDA nonregulatory status, implying that they can be grown and sold like all other beans, without further restrictions.
- 1995, February: AgrEvo Canada becomes the first company that gets permission to market a genetically altered plant in Canada, a herbicide-tolerant canola variety.
- 1995, April: The Food and Drug Administration reports that of the 10,000 to 20,000 new food products introduced each year, only 100 to 150 are genetically engineered.
- 1996, February: Zeneca, a British biotech firm, puts a genetically engineered tomato paste on the British market. This first-ever GM food product does remarkably well, eventually capturing 60% of the British tomato paste market.
- 1996, July: Sixty thousand bags of transgenic canola sold in the Canadian areas Manitoba, Saskatchewan and Alberta had to be recalled and the fields planted with the seeds had to be plowed up because a routine quality check at Monsanto Canada revealed that the seeds contained a non-approved modified gene.
- 1996, August: The introduction of GM soybeans seems to split the British food industry. On one side the British Retail Consortium supports a ban on the US crop; on the other side, the Food and Drink Federation, which represents the manufacturers, says it is unworkable and unnecessary.
- 1996, September: UK retailers admit that they cannot guarantee that GM soy will not show up in their own-label products. UK supermarket chain Tesco responds by issuing lists of products not containing genetically modified soy.
- 1996, October: Activists in the US asked consumers to boycott certain food products that contain soy or corn, since no labeling requirement exists for foodstuffs using Monsanto's herbicide-tolerant soybeans or Ciba's insect-resistant corn.
- 1996, December: The European Commission approves of Novartis' Bt corn. This averts the threat of a major trade dispute, since Europe imports about \$500 million worth of corn from the US each year.
- 1997, January: The European Commission issues the novel foods regulation, essentially targeting genfoods, mentioning that products containing novel ingredients should be labeled if characteristics of the product are "no longer equivalent" to an existing food.
- 1997, May: The European Commission's novel foods regulation comes into force, effectively demanding the labeling of genetically altered soy and corn.
- 1997, December: The German subsidiaries of both Nestlé and Unilever state that they will not use GM soy in their main products.
- 1997, September: Monsanto hires Bartle Bogle Hegarty, a British advertising agency, and Euro RSCG, a French one, to advise on a campaigning strategy.

Figure 2.2: Event history of the global genfoods issue (continued)

- 1997, October: Julie Sheppard, public affairs officer at the British Consumers' Association, comments on Unilever's decision to introduce a product containing GM soy: "It is not a dangerous product, it is a dangerous precedent."
- 1997, October: Ian Taylor, scientific advisor to Greenpeace, states that it is not impossible to find sources of noncontaminated crops – just a bit costlier.
- 1997, December: Greenpeace, a food safety group, and a coalition of organic farmers send a petition to the US Environmental Protection Agency to withdraw the pesticide registrations for crops that have been bio-engineered to produce a toxin that repels insects.
- 1998, January: France approves the commercial application of a pest-resistant corn variety from Novartis. For the first time a genetically modified foodcrop will be grown in Europe.
- 1998, March: The European Commission announces that it will not approve of new genetically altered crops for an undecided period of time, effectively introducing a moratorium on GMO approvals.
- 1998, May: Iceland, a British retailer, announced a ban on GMO ingredients from its own-label products. All its main competitors, except for Tesco, followed in 1999.
- 1998, May: Monsanto and Cargill sign a letter of intent to form a worldwide joint venture that will focus on applying biotechnology to improve feed products for animals raised for human consumption.
- 1998, May: The president and CEO of DuPont Charles Holliday states in public that "Our industry has a major communications job to do".
- 1998, May: The Swiss public votes against a ban on genetic modification, after Novartis and other Swiss companies opened up their laboratories to them.
- 1998, May: The Prince of Wales responds furiously to Monsanto's \$1.6 million dollar advertising campaign to promote genetic modification. He argues that the line has been crossed, and that companies are currently on territory that "belongs to God, and to God alone".
- 1998, June: Monsanto predicts that food without GM ingredients will become very expensive, comparable to organic food.
- 1998, July: Canadian supermarkets decide not to label genetically modified foodcrops.
- 1998, August: Dr Pusztai (Rowett Institute for Agriculture, Aberdeen) stirs up a media frenzy by announcing on television some preliminary and unconfirmed results about the effects of genetically engineered potatoes on laboratory animals.
- 1998, September: Official delegates from a broad range of African countries respond to Monsanto's European advertisement campaign. They state that they do not want Monsanto to use the poor and hungry from their countries as an excuse for pushing biotechnology.

Figure 2.2: Event history of the global genfoods issue (continued)

- 1999, January: English Nature, an official UK governmental advisory body, states that a moratorium on genetically modified crops is desirable.
- 1999, February: Dr Pusztai argues that the effects he previously identified were not caused by the protein in the new potatoes, but by the method of genetic modification. The media respond immediately with new pieces on 'Frankenstein foods.'
- 1999, February: A spokesman for Somerfield, a UK retailer, said: "We're not going to put a skull and crossbones on these products."
- 1999, February: Delegates from 170 countries met in Cartagena to work out an international "Biosafety protocol". Their aim is to make guidelines that make trade in GMOS possible, but also sensitive to justified concerns about safety and the environment. The Cartagena protocol is developed under the Convention on Biological Diversity.
- 1999, March: The head of communications at Monsanto appeared in "The Money Programme", a BBC TV show, to defend the company's stance. In their response to this appearance, the media stated that he gave an "arrogant" impression and that he "failed to read the rule book on how to behave in a crisis."
- 1999, March: A Unilever spokesman states that "when and if consumer pressure builds we would consider cutting out on soya."
- 1999, March: On another occasion, Unilever representatives (backed by Nestle) declared: "we support the use of biotechnology in food production with the necessary rules and regulations in place."
- 1999, March: Three fast food chains in the UK - Pizza Express, Wimpy and Domino's Pizza - have banned transgenic ingredients from their products.
- 1999, April: David Sawday, Tesco's corporate affairs manager, accused rival supermarket chains of being "disingenuous" in saying their ownlabel goods are GM-free.
- 1999, April: Robert Shapiro, CEO of Monsanto, states in public that he feels that biotechnology is the only way to prevent ecological disasters and to put an end to malnourishment.
- 1999, April: Representatives of the US, the EU, and 36 other countries discuss the labeling of genetically modified foods at a meeting of a World Health Organisation body called Codex Alimentarius.
- 1999, July: Monsanto CEO Robert Shapiro announces in an open letter to Rockefeller Foundation chief Gordon Conway not to commercialize "terminator technology," GM plants that bear sterile seeds so that farmers are forced to buy new seeds every year.
- 1999, August: In Japan, a consumer group submits a petition containing 1.7 million signatures to the ministries of agriculture and health calling for more safety assessments and the labeling of genfoods.

Figure 2.2: Event history of the global genfoods issue (continued)

- 1999, September: DuPont CEO Chad Holliday acknowledges that “industry does not have all the answers, and should not pretend to.”
- 1999, October: Deutsche Bank advises its investors to divest themselves of shares in companies involved in the development of genfoods.
- 1999, December: Based on a nationwide survey among 1,039 US consumers, The Gallup Organization concludes that 73% of all Americans do not believe that genfoods pose a serious health hazard to consumers.
- 2000, January: Delegates of 140 UN countries adopt a trade pact requiring the labeling of commodity shipments that may contain genetically modified foods.
- 2000, March: The major producers of genfoods, including DuPont, Monsanto, and Novartis, launch a multimillion-dollar public advertising campaign in an effort to counter opposition.
- 2000, April: The US congress issues a study saying that genetically modified foods may be safer to eat than traditional crops.
- 2000, April: The National Academy of Sciences releases a report saying that it had found no evidence that gene-spliced crops are unsafe to eat.
- 2000, April: A coalition of 50 activist groups is calling on the FDA to require stringent safety testing and labels for genfoods.
- 2000, May: The FDA unveils new rules after a review of its eight-year-old regulations for gene-spliced soy, corn, potatoes, and other foods. The rules require mandatory consultations between genfoods developers and the agency – but no new safety and environmental tests.
- 2000, May: The genfoods issue starts to appear at annual stockholders meetings: Pepsico, Kellog, and Quaker Oats organize votes on the use and labeling of GMO ingredients.
- 2000, October: Aventis’ Starlink corn, which may only be used in animal feed because it can cause serious allergies with people, mistakenly shows up in products as varied as tacos, corn chips, beer, and muffin mix.
- 2000, November: Aventis submits a proposal to the US Environmental Protection Agency to approve its Starlink corn as an ingredient for human food.
- 2000, December: Taco Bell, a leading US fast-food retailer, announces that its sales have dropped 12% in October and another 13% in November after its 7,100 restaurants had to replace their taco shells because of the Starlink incident.
- 2001, January: The FDA issues new, voluntary guidelines for food companies to follow if they choose to label foods as biotech-free or promote biotech ingredients.

Figure 2.2: Event history of the global genfoods issue (continued)

- 2001, February: A study by a group of researchers from London-based Imperial College shows that, contrary to popular belief, many genetically engineered organisms show no signs of increased weediness (also see Figure 2.3 below). In fact, many engineered plants have lost the competitive abilities needed to survive in the wild.

Sources: Austen, 1996; Bentley, 1996a, 1996b, 1997, 1998; *Chemical Reporter*, 2000; Darby, 1999a, 1999b; *Economist*, 1994, 1997a, 1997b, 1997c, 1998a, 1998b, 1998c, 1999a, 1999b, 1999c, 1999d, 1999e, 2001; Fairley, 1998; Farkas, 1992; Franz, 2001; Hess, 1999; Jardine, 1999a, 1999b, 1999c; Kenward, 1992, 1994; Lee, 1997; Maathai, 1998; Matthews, 1993; Mazur, 1999; Miller, 1992; Nicholas, 1998; Nikiforuk, 1997, 1998; O'Reilly, 2001; Powell & Leiss, 1997; *Progressive Grocer*, 1993, 1996; Roberts, 1994; Rotman, 1993; Scott, 1998, 1999; Shapiro, 1999; Schechter, 1993; Stringer, 1996; Sze & Van Arnum, 1998; *Time*, 1994; Walsh, 1999.

2.6.2 Regulatory responses

Naturally, all these events related to the development and introduction of modern biotechnology urged a regulatory response from the various governments that were involved with the issue. In the United States, the Food and Drug Administration (FDA) decided in 1992 that genetically modified products had to meet the same standards as all other foods, but no new ones. This meant that the FDA did not require the manufacturers of genetically modified foodcrops to label their products as such. In 1994, the FDA endorsed the first genetically altered food to be sold to consumers as safe, Calgene's Flav'r Savr tomato. In the same year, the FDA also offered Monsanto's Roundup Ready soybeans nonregulatory status, implying that the beans could be grown and sold like any other bean. In the spring of 2000, the FDA issued new rules after a review of its eight-year-old regulations for gene-spliced products. The rules require mandatory consultations between genfoods developers and the agency, but no new safety and environmental tests. Neither did the new regulations oblige producers of foods containing genetically modified products to label these as such. In sum, regulatory efforts with respect to genetic engineering started early in the US, but official agencies were and are still very reluctant to impose restrictive legislation upon the American biotechnology sector.

In Europe, regulatory affairs with respect to the biotechnology sector started even sooner. In 1990, the European union adopted two major directives concerning biotechnology - one on the use of the new technology in closed environments such as laboratories and factories and one on the deliberate release of modified organisms into the natural environment. In 1997, the European Commission issued and effectuated the novel foods regulation, which essentially targeted genfoods. The new legislation mentioned that products containing novel

ingredients should be labeled if the chemical properties of the new product were no longer “equivalent” to those of the conventional product. Effectively, the European Commission hereby demanded the labeling of products containing genetically altered soy and corn. Furthermore, in 1998 the European Commission decided that it would not approve of new genetically altered crops for an undecided period of time, thereby effectively installing a moratorium on GMO approvals. In short, the legislation issued by the European government with respect to the testing and labeling of genetically altered foods is much more restrictive than that of the US.

2.6.3 Public protests

However, many consumer and other non-governmental organizations in the US and the EU could not be appeased by the regulatory efforts of their respective governments. Over the years, public protesters have pointed at a broad array of remaining issues, which were not or not sufficiently touched upon by the new legislation. These issues are described in Figure 2.3.

Figure 2.3: Risks of modern biotechnology

Because modern biotechnology is a new and unprecedented technology, there are certain risks associated with its application. In general, three problem areas may be identified - health and environmental issues, and the ethics of genetic modification (Powell & Leiss, 1997). Health issues, for example, involve the creation of new pathogens, allergens, and/or irritants. In 1995, a Brazil nut gene was successfully inserted into the soy plant to increase the nutritional value of its beans. However, a number of clinical trials in 1996 showed that people that were allergic to Brazil nuts also developed an allergy to the modified beans, which had to be retrieved. Biotechnology might also have a profound environmental impact. One particular issue is the creation of plants that have extraordinary weedy characteristics. The genes that help foodcrops to resist insects or herbicides might also find their way into wild species, leading to the creation of new and particularly invasive weeds (Economist, 1997c). Finally, a number of ethical issues are attached to modern biotechnology, for example because it allows us to add alien genes to an organism’s DNA. This makes it possible, say, to insert a pig gene into a chicken. Would it still be acceptable for an orthodox Jew or Muslim to eat this sort of mutant poultry? Research by the Polkinghorne Committee showed that the Jewish community was found to take the view that the host organism remains the dominant species: a chicken that contains pig genes remains a chicken. But in contrast, Muslims were found to believe that the transferred gene retains its piggish nature, and therefore the mutant chicken would be subject to their dietary taboo on the consumption of pork (Roberts, 1994).

In the US, public protests against modern biotechnology started relatively early. Over 1,100 chefs joined their forces in the Pure Food Campaign, led by long-time anti-biotechnology activist Jeremy Rifkin, in 1992. They demanded the testing and labeling of foodstuffs that had been altered with genetic material from an outside donor. Ever since, chefs, dieticians, and other food professionals worried about the quality and safety of the US food supply have mainly fueled the public debate in the US. Interestingly, consumers and their representative organizations are hardly a source of discontent in the US. This is probably due to three factors (*source: focused interviews*). First, many US consumers do not even *know* that large parts of their food supply are genetically modified, because US consumers are on average less interested in food-related issues than Europeans. Second, the US public has relatively high confidence in state agencies such as the FDA, whereas the faith of European consumers in their national governments with respect to their ability to guarantee the safety of the food supply has rapidly diminished since the BSE and Mouth and Foot crises. Third, US consumers are less well organized than their European counterparts. There is no national consumer representative movement of any significance, and local initiatives are often marginal and fragmented. In short, there is a relatively long tradition of public protests against modern biotechnology in the US, but the intensity has never reached a critical threshold.

In contrast, the protests against genetically altered foods in the EU only started after the European introduction of such foods in 1996, but the intensity and adversity of the protests were immediately much higher than in the US. Greenpeace, for example, launched its "Genetic X" campaign in 1996, which involved high-profile actions such as the boarding of ships containing the new foodcrops and blocking the docks of various European ports. These actions caused a media frenzy about genetic modification, which continues until this day. In 1998, Prince Charles of Wales entered the public debate by stating in various public appearances that companies are currently on territory that "belongs to God, and to God alone." The European public was frightened again in 1998, when Dr. Pusztai of Aberdeen's Rowett Institute for Agriculture announced preliminary and unconfirmed results of a study showing that laboratory animals suffered from various illnesses after being fed with genetically modified potatoes. There was also a furious public response in 1999 when researchers from Cornell University found that harmless insects such as the Monarch butterfly could die after eating the pollen of corn plants that were modified to resist insect pests such as the European corn borer. In sum, the furore over genetic modification has reached a much higher level of intensity and adversity in Europe than in the US.

2.6.4 Corporate responses

The companies in the biotechnology industry as well as the other companies affected by the genfoods issue were forced to develop adequate responses to these public pressures. Again the responses of US companies differed quite radically from those of EU companies. In the US, Campbell's Soup was the first company to give in to the pressures of food activists in 1993. Faced with a potential consumer boycott, the company dropped its plans to start using Calgene's Flavr Savr tomato. But this rather reactive stance is not typical for many of the US companies involved with the issue. In 1997, Monsanto hired British and French advertising agencies to advise on a campaigning strategy for Europe. This was the first time that the company actually tried to "sell" its genetically modified products to the European public. Many of the key players in the American biotechnology industry followed Monsanto's example in the spring of 2000. Then, almost all of the main producers of genfoods, including DuPont, Novartis, and again Monsanto launched a multimillion-dollar campaign called "Why Biotech?" in an effort to counter opposition. The campaign featured advertisements in national newspapers, television commercials, and a website. In sum, most of the biotechnology companies in the US context use fairly aggressive "issue advertising" techniques (Grunig & Hunt, 1994) to "sell" the new technology to consumers.

In Europe, in contrast, many of the companies affected by the biotechnology issue have adopted a much more critical point of view with respect to the new technology. The first companies to respond to the issue were the British supermarket organizations, united in the British Retail Consortium. Already in 1996, the Consortium announced that it would support a ban on genetically engineered US crop. In 1997, a number of key foods producing companies got involved in the issue too. Nestlé and Unilever announced that they would no longer use genetically engineered soy in their main products if consumers did not want them to. In 1998, Unilever voluntarily started labeling its food products containing genetically modified ingredients, thereby acknowledging consumers' rights to know and to choose. Furthermore, in 1999 all British retailers announced that they would soon ban genetically modified ingredients from their own-label products. In short, many of the European companies involved in the issue are much more critical of the new technology than their American counterparts. Rather than actively trying to "sell" the new technology to the general public, these companies try to be responsive to consumers' concerns and to avoid association and involvement with the new technology wherever possible.

2.6.5 The situation in the Netherlands

The global developments with respect to genetic modification did not pass the Netherlands by unnoticed. The history of the genetic modification issue in the Netherlands dates back at least to 1988, when Gist-brocades (currently DSM) introduced a genetically engineered type of rennet (a product used to curdle milk in the process of cheese production) onto the Dutch market. More remarkable even than this early adoption of the new technology in the area of food production, however, is the relatively early implementation of issues management techniques by a significant number of Dutch industry members. In 1992, the industry started with the so-called Informal Consultations on Biotechnology, an early attempt to institutionalize processes of stakeholder dialogue. Several years later, these informal consultations evolved into an interorganizational issues management approach that is unprecedented in several important respects. Below, I will explain this collaborative issues management approach in more detail, but first I present a more detailed history of the introduction of genetically modified foods in the Netherlands in Figure 2.4.⁸

Figure 2.4: The situation in the Netherlands

- 1988: Gist-brocades (currently DSM) starts producing a genetically engineered type of rennet. This event represents the first application of modern biotechnology in the Dutch food industry. The modified rennet does not cause much of a commotion, since it is only an additive – the final product (cheese) does not contain the modified substance. Moreover, industrial products are more controllable, because they are not being released into the natural environment.
- 1992: In the first few months of 1992, a number of Dutch companies that are tentatively involved with modern biotechnology (amongst them Gist-Brocades [currently DSM], Nutricia [currently Numico], Unilever, and Sara Lee) start a dialogue with non-governmental organizations like the Consumers League, Consumer and Biotechnology, and Nature and Environment. The purpose of this dialogue (later to be called the “Informal Consultations on Biotechnology”) is on the one hand to increase the level of expertise of all the parties involved, and on the other to come to a number of procedural agreements. These agreements entail the supply of information towards consumers, the design of a public information campaign, and a first attempt at voluntary labeling.

⁸ This figure, as well as the remainder of this section, are based on van den Bosch, Heugens, & van Riel (1998) “De introductie van GMO-soja in Nederland: Beschrijving en analyse van de communicatie en de strategie van het margarine-, vetten- en oliën-cluster in de periode 1992 - 1998 (The introduction of genetically modified soy in the Netherlands: Description and analysis of the communication and strategy of the margarine, fats, and oils cluster 1992 - 1998)” Rotterdam: Corporate Communication Centre (in Dutch).

Figure 2.4: The situation in the Netherlands (continued)

- 1995: The Product Board for Margarine, Fats and Oils organizes a study tour to the United States from August 27 through August 31. The travelling company consists of representatives of the national government, consumer organizations, and the private sector. The purpose of the trip is to broaden the knowledge base with respect to genetically modified soy.
- 1995: It becomes clear that the 1996 harvest will contain genetically modified beans. To prevent coordination and communication problems within the Dutch foods industry, high-placed industry representatives decide to centralize the communication function. The sector asks the Product Board for Margarine, Fats and Oils to take the lead in this matter. The product board accepts this offer, and finances its new role by utilizing the compulsory contributions of its members.
- 1996: The Product Board initiates a task force in February 1996. This task force becomes responsible for a number of administrative duties, such as informing the public about genetic modification, monitoring the public discussion, the development of press communications, and maintaining favorable interorganizational relationships within the foods industry.
- 1996: In 1996, the European Union formally allows the use of genetically modified soybeans. It is European policy to accept all new foodstuffs for use that have been accredited by at least one of the members of the Union. Therefore, when Great Britain accepts the use of genetically modified soybeans in 1996, the Netherlands follows quickly.
- 1996: On May 16, 1996, the European Union issues the Novel Foods regulation. This piece of communal legislation offers a legal framework for the introduction of new foods into the European Union. The Novel Foods arrangement especially addresses issues like consumer safety and labeling.
- 1996: The task force becomes operative in May 1996. Its most important duties are to inform the press, to keep close track of the media, to prepare information materials, to establish and run a toll free telephone number for worried consumers, and to answer the questions that are being posed to the members of the Dutch fats and oils industry.
- 1996: The first shipments of genetically modified soy arrive in the Netherlands in the fall of 1996. This first wave of imports is accompanied by a number of protests on behalf of environmentalist organizations. Especially Greenpeace is one of the most active groups in this period. Initially, the activist groups succeed in preventing the landing of the various shipments of soy, but a court order puts an end to the actions.

Figure 2.4: The situation in the Netherlands (continued)

- 1996: The various parties in the Dutch foods industry, the national government, and the Consumers League reach an agreement concerning the voluntary labeling of products that contain genetically modified ingredients. The partners agree to the voluntary labeling of all food ingredients that are no longer equivalent (chemically speaking) to the original ingredient after genetic modification.
- 1997: Greenpeace resumes its actions against genetic modification in the spring of 1997. The organization selects the consumer as its primary target. At the entrance of various supermarkets, Greenpeace distributes “shopping lists,” lists of products that are assumed to contain genetically modified ingredients. The organization also distributes a list of companies that are supposed to offer GMO-free products.
- 1997: On March 11 1997, the Dutch Ministry of Public Health, Welfare, and Sport issues a piece of legislation stating that any food ingredient that is subjected to the communal Novel Foods arrangement should be labeled adequately. This decision makes conformation to the 1996 voluntary covenant mandatory.
- 1997: The court in The Hague decides that the Ministry of Public Health, Welfare, and Sport was not entitled to take the above decision. The court orders the Ministry to withdraw the legislation, thereby turning labeling into a voluntary act again.
- 1997: The second harvest of genetically modified soy arrives in the European harbors in the fall of 1997. Environmentalist groups like Greenpeace use the occasion to resume their actions against genetic modification in general. In the Netherlands, Greenpeace blocks the quays of EBS (European Bulk Services) in the Rotterdam harbor. The level of attention from the media is somewhat lower as compared to the year before, however.
- 1998: Unilever supports voluntary labeling, provided that the equivalence criterion is used. The organization uses labels that indicate whether a product contains genetically modified ingredients to inform its customers and to promote the acceptance of modern biotechnology. In January 1998, Unilever announces that it will start labeling its products voluntarily across Europe.

Source: Focused interviews, archival records, roundtable discussions, audiovisual materials, and news clippings from local newspapers.

The interorganizational issues management strategy that has been adopted by the Dutch fats and oils industry may be described as follows: The industry selected the Product Board for Margarine, Fats, and Oils as the primary intermediary organization between itself and its governmental and non-governmental stakeholders. The members of the fats and oils industry supported the Product Board financially and endorsed its position in their policy decisions in the hope that the communications of the Board would close any perceptual gaps

between their own insiders' views and the outsiders' views of organizational stakeholders (Dunbar & Ahlstrom, 1994). The implicit model underlying these efforts may be described by pointing at three clusters of factors, notably: (1) the *mission* of the combined issues management effort, (2) the *measures* adopted to reach this mission, and (3) the *means* used to support these methods.

Mission

- *Continuation of primary processes:* The Dutch fats and oils industry is characterized by a great number of highly interdependent business firms, each of which has a significant stake in the issue of genetic modification. It is common practice to divide these players into *upstream* companies (i.e., biotechnology companies, producers of oilseeds, and crushers of oilseeds) and *downstream* companies (i.e., bottling companies, sauce producers, food producers, and retailing companies [also see Figure 1.1]). The most important stake of the upstream companies in the issue is nonintervention. These companies operate in an industrial business-to-business environment where reliability of supply and the minimization of waste are key determinants of company success. Alternatively, the downstream players in this industry are confronted with a completely different set of key performance indicators. Due to their relative proximity to the final users of the products (i.e., consumers), these companies first and foremost want to prevent demand slumps and consumer boycotts.
- *Societal acceptance:* Even though the stakes of companies that operate in different parts of the fats and oils industry in the biotechnology issue seem to differ at first glance, the high level of interorganizational interdependence causes a natural alignment of interests.⁹ Both upstream and downstream companies are likely to benefit most from a situation in which modern biotechnology is accepted at the societal level. Furthermore, the incentives for both types of companies to jointly engage in issues management activities are increasing continually. The introductions that will be discussed in the present volume (genetically modified soy and corn) are only precedents. In the coming years, more and more food products will become genetically modified. Upstream and downstream companies will therefore experience an

⁹ The stakes of upstream and downstream companies (nonintervention and societal acceptance respectively) differ undeniably. Yet, several invisible hand mechanisms (Nozick, 1974; Pettit, 1996) provide for a subtle but powerful alignment of interests. For example, an upstream player adopting modern biotechnology is likely to disturb societal acceptance processes at the level of the downstream players. Consequently, however, the upstream party is likely to experience a drop in demand for its own products, because of reduced sales by its customers (the downstream companies). These non-intentional repercussions put a clear and obvious penalty on the unscrupulous adoption of modern biotechnology by upstream players.

increasing pressure to coordinate their issues management efforts in an attempt to legitimize genetic modification in the eyes of the general public.

Measures

- *Broad participation:* The fats and oils industry incumbents have deliberately structured their interorganizational model of issues management to include representatives from (almost) all of the relevant stakeholder groups involved in the issue. Many of the negotiations between these various groups tended to be rather informal, so that eventually the rather objective and formal ties between the organizations involved in the issue have become backed up by more personal and informal ties. Furthermore, what is remarkable about the selected structure is that it has evolved into a platform in which there was not only room for parties that had economical stakes in the issue (i.e., the industry participants), but also for stakeholders representing ethical, ideological, and ecological interests (e.g., environmentalists, consumer representatives, and religious groups).
- *Informing consumers:* The players in the Dutch fats and oils industry have attempted to inform consumers pro-actively by means of a number of national information campaigns. The supply of information towards consumers started well before the arrival of the first shipments of genetically modified soy. The Product Board was rather reluctant to supply the public with information directly (even though the Board issued a number of informative brochures and hosted a toll-free telephone number that was accessible to worried consumers). Alternatively, the Product Board emphasized the indirect supply of information through intermediaries like physicians, dieticians, chefs, and journalists.
- *Negotiating with governments:* Another distinguishing characteristic of the issues management model of the Dutch fats and oils industry is that the private parties involved have devoted a considerable amount of time and resources to forging a closer link with the various levels of government involved in the issue. These investments have resulted in a number of quite tangible successes, such as the aforementioned agreement on voluntary labeling between the Dutch government, the Consumers League, and the representatives of the Dutch fats and oils industry. Perhaps even more importantly, this approach has resulted in a situation in which the various levels of government in the Netherlands felt that they were actively involved in the issue and that their interests and perspectives were taken seriously by the various players in the private sector.
- *The role of the Product Board:* A final aspect of the chosen approach that is worth mentioning is the central role that the product board has played in the interorganizational issues management process. The various players in the Dutch fats and oils industry have very strategically delegated a number of

tasks towards the product board, including the organization and implementation of consumer information campaigns, the development and maintenance of issue-related press relations, and the management of the business-government interface. This act of delegation allowed the industry representatives to (a) establish a high degree of consistency in their external communications, and (b) avoid strong public associations between individual companies and the controversial issue of genetic modification.

Means

- *Monitoring legislative activities:* To realize the aforementioned goals, the Product Board has devoted a considerable amount of time and attention to monitoring the legislative activities of the communal (EU) and national governments. The Product Board supports the principle of self-regulation whenever possible, but sometimes legislators perceive self-regulation as a non-option. In that case, the Product Board strives for the development and implementation of legislation that is as transparent as possible, in order to create a level playing field.
- *Influencing the public opinion:* One of the main tasks of the Product Board is to monitor the development of the public opinion with respect to the issue of genetic modification. The Board has first and foremost sought to influence the public opinion pro-actively by means of activities such as organizing press workshops and initiating public information campaigns. Yet, the Board has also used a number of reactive issues management activities, such as responding to written articles in the press and answering the calls of worried consumers. The latter activities were mainly used to complement the more pro-active activities, in an attempt to address the remaining questions and grievances.
- *Maintaining cooperation within the industry:* The Product Board realized that maintaining the cooperative spirit in the Dutch fats and oils industry was key to the success of its joint issues management efforts. The coordination of external communications and the development of public information campaigns required willingness on behalf of the industry members to join their forces over an extended period of time. To support the necessary spirit of cooperation, the Product Board organized a series of meetings, mostly informal ones, between representatives of the key players in the industry. The official goal of these meetings was to allow the participants to gather and disseminate information, but an important and intended side effect was that they stimulated the development of favorable personal relationships between company officials.

2.7 CONCLUSION

In this chapter I have first of all sought to provide a *methodological* introduction to the first empirical study that will be reported in this book, a case study of the responses of the firms in the Dutch fats and oils industry to the societal turmoil associated with the introduction of genetically modified foodcrops. This case study serves the purpose of conceptualizing the specific issues management activities that organizations use to manage those forthcoming developments that threaten their ability to meet their objectives (cf. the first research question). Secondly, I have also attempted to provide an *empirical* introduction to the issue of genetic modification by sketching a brief historical overview of the global development of the issue, as well as an introductory description of the interorganizational issues management strategy used by the Dutch fats and oils sector. This introductory chapter thus provides the necessary background for understanding and appreciating the chapters to come that actually describe the issues management strategies I uncovered with the help of this case study.

The first issues management strategy I will report is an externally oriented one, aimed at the development of trust-based, cooperative relationships with a broad range of outside constituencies. I labeled this strategy *stakeholder integration*, and it will be discussed in more detail in chapter four of the present volume. The second issues management strategy that I arrived at was an internally oriented one, aimed at the development of organizational routines and procedures codifying valuable issues management-related experiences. I labeled this strategy *capability development*, and it will be discussed at some length in the fifth chapter of this book.

Chapter 3

Towards an integrative framework of strategic issues management

3.1 INTRODUCTION

The field of issues management has historically developed itself into several streams of thought, of which two will be discussed at some length in the present volume. The first of these is the *corporate communication* or *public affairs* perspective,¹⁰ a stream of research that focuses on the processes by which a corporation “anticipates, monitors, and manages its *relations* with those social and political environmental forces that shape the company’s operations and environment” (Gollner, 1983: 8, emphasis added). The second research stream in issues management is firmly rooted in *organizational behavior*. This field of inquiry has a strict intraorganizational focus, thereby emphasizing processes such as the interpretation and sensemaking of ambiguous data by practicing managers. For both of these research streams, I will first explain how they differ in their views on the strategic issue concept. Secondly, I explain how the views of scholars brought up in the corporate communication/public affairs and organizational behavior

10 The fundamental distinction between the fields of corporate communication and public affairs is that the latter field is principally oriented towards public policy matters (i.e., the business-government interface), whereas the former field focuses on a firm’s interactions with all its relevant stakeholder groups (i.e., including non-governmental organizations). Van Riel, for example, defines corporate communication as “that particular instrument of management that coordinates, as effectively and efficiently as possible, all deliberate forms of internal and external communication, in such a way that a positive and ongoing relationship can be obtained with all stakeholders upon which the firm is dependent” (1996: 33; my emphasis and translation). In this conception, the area of public affairs is a subset of the corporate communication field.

traditions differ with respect to their views on the strategic issues management process.

From a strategic management point of view, this somewhat artificial divide into two camps that are respectively inside-out and outside-in oriented is rather unfortunate, however.¹¹ After all, an assessment of how strategic issues management activities contribute positively to performance differentials across firms requires a simultaneous evaluation of the internal and external organizational environments. The basic postulates of the strategic management field are that sustainable competitive advantage can only be created when a firm (a) manages to make effective internal adaptations to external contingencies, and (b) subsequently uses these internal modifications to effectuate lasting positive changes in the external environment of the firm (Ansoff, 1965). In the present chapter I therefore attempt to go beyond a fragmented treatment of the issues management field, by presenting an integrated framework of issues management that simultaneously assesses and synthesizes these internal and external perspectives. In effect, this framework constitutes an extension of existing issues management theories.

3.2 CORPORATE COMMUNICATION AND PUBLIC AFFAIRS

In a widely cited report, the Public Affairs Research Group (1981) described public affairs management activities as “a *window out* of the corporation through which management can monitor and understand societal change, and simultaneously, a *window in* through which society can affect corporate policy and practice. Public affairs is, then, a *boundary-spanning function*, with one foot firmly planted in the organization, the other in the social and political environment” (emphasis in original). In this conception, the corporate communication/public affairs discipline entails much more than issues management alone (Wartick &

11 In reality, the positions that (a) the corporate communication/public affairs field is exclusively involved with interorganizational phenomena and (b) the organizational behavior community strictly focuses on intraorganizational facts are untenable. Corporate communication/public affairs scholars do pay attention to matters like organizational identity and the development and implementation of intraorganizational communication systems. Likewise, organizational behavior theorists often do focus on behavior of rather than behavior in organizations. Nevertheless, there are a number of important differences between the two approaches, of which their differential orientation (both empirically and theoretically) is perhaps the most important one. Corporate communication/public affairs scholars are mainly oriented towards the interactions between commercial organizations and the stakeholders upon which they are dependent, whereas organizational behavior scholars are mainly oriented towards the behavior of groups and individuals within the confines of the organization.

Wood, 1998). According to Bergner (1983), for example, the major categories of public affairs responsibility not only include issues identification and management, but also environmental assessment, government relations activities, community action and involvement, corporate public affairs training and constituency development, and corporate policy and strategy development. Although all of these responsibilities are relevant for the management of corporations, and to a certain degree interdependent, most of these responsibilities are only remotely connected to the theory and practice of issues management. In the present chapter I will therefore use a more confined conception of the corporate communication/public affairs framework, which focuses primarily on the management of strategic issues.

A helpful point of departure in this respect is offered by Grunig and Repper (1992), who describe a type of corporate communication/public affairs management that is much more attuned to issues management. In their view, corporate communication/public affairs management “is designed to build relationships with the most important stakeholders of an organization” (p. 123), where stakeholders are all actors that are affected by the decisions of the organization, or whose decisions in turn affect the organization (Freeman, 1984). According to van Riel (2000), one of the key instruments available to managers for structuring those relationships with stakeholders is (corporate) communication, which “enables an organization to begin a dialogue to create awareness, understanding, and appreciation for the firm’s strategic goals, ideally resulting in the satisfaction of the interests of both the firm and its environment” (p. 157).

Many stakeholders are passive most of the time, especially if they benefit from the status quo (Grunig & Hunt, 1984). But stakeholders may turn into *publics* by becoming more aware and active. Publics organize around issues, and they actively address the organizations that played a role in creating these issues by gaining information about them, by seeking redress of their grievances, and by pressuring them to conform to their wishes. When publics act this way, organizations have little choice other than to establish relationships with them. Seen from an issues management perspective, then, corporate communication/public affairs management fundamentally relates to the management of an organization’s relationships with its publics (Buchholz, 1986; Eyestone, 1978; Mahon & McGowan, 1996).

3.2.1 The corporate communication/public affairs conception of strategic issues

From a corporate communication/public affairs perspective, a strategic issue may be defined as “a conflict between two or more identifiable groups over procedural or substantive matters relating to the distribution of positions or resources” (Cobb & Elder, 1972: 82). Ansoff stresses, however, that *potential* (rather

than *extant*) conflict is often a sufficient condition for the emergence of strategic issues, and he therefore describes an issue as “a *forthcoming* development, either inside or outside of the organization, which is likely to have an important impact on the ability of the enterprise to meet its objectives” (1980: 133 [my emphasis]).¹² Perhaps the most widely used analytical tool for assessing the status of strategic issues at a given point in time is the issue life cycle model (Bartha, 1983; Bigelow, Fahey, & Mahon, 1991; Buchholz, 1990; Mahon, 1989; Post, 1978; Starling, 1980). This model asserts that strategic issues have a life cycle, going through a series of stages as they evolve.

Four such stages are commonly identified in the literature (Buchholz, 1990; Mahon & Waddock, 1992; Post, 1978). The life cycle begins with *changing public expectations* that create a gap between what constitutes corporate performance and what stakeholders expect from the firms with whom they interact. If the gap attracts significant numbers of people that are willing to express their dissatisfaction, it becomes *politicized*. At this stage the issue becomes widely discussed in the media, becomes a top priority for related interest groups, and may be introduced into the formal public policy process by politicians. During the *legislative phase*, the issue becomes institutionalized when legislation dealing with the issue becomes enacted. The last stage is called the *litigation phase*, in which firms, stakeholders, and governments jointly establish enforcement standards and timetables for meeting the new requirements.

The issue life cycle model has, however, been subjected to serious critique. Mahon & Waddock (1992), for example, argue that the model fails to (1) explain the interaction that goes on between various simultaneously existing issues, (2) recognize that stakeholders may change an issue’s definition by exerting strong influences upon other stakeholders, and (3) take into account that the stage at which a stakeholder perceives an issue may differ radically depending on that stakeholder’s stance towards the issue. In response to this criticism, a redefinition of the strategic issue construct has been proposed that focuses on strategic issue characteristics rather than stages (Oomens & van den Bosch, 1998; Wartick & Mahon, 1994; Wartick & Wood, 1998). The three proposed characteristics are (1) expectational gaps, (2) controversy, and (3) organizational impact.

1. *Expectational gaps*: Expectational gaps occur when relevant actors hold inconsistent views of what is and/or what ought to be corporate performance on a particular issue (Wartick & Wood, 1998). Early contributors to the business and society literature already defined strategic issues in terms of expectational gaps. Jacoby, for example, defined a social problem as “a gap between society’s expectations of social conditions and the present social realities” (1971: 35-36). Later, Ryberg defined an issue as “a gap between social

¹² As a scholar, Igor Ansoff is best known for his work in the area of corporate strategy (e.g., see Ansoff, 1965). He has also published extensively (and is widely cited), however, in the area of public affairs/corporate communication (e.g., see Ansoff, 1975, 1980).

perceptions of business behavior or performance and social expectations about what performance should be" (1982: 231). It is possible to identify three different types of expectational gaps (Wartick & Mahon, 1994). The first is the *factual gap* ("what is - what is"), which relates to a disagreement about the factual situation underlying a particular issue. A second type is the *conformance gap* ("what is - what ought to be"), describing a situation in which parties agree about the facts of an issue, but disagree about their relative salience or desirability. A third and final type is the *ideals gap* ("what ought to be - what ought to be"), referring to issues where the parties disagree about the values and ideals at stake.

2. *Controversy*: Controversy inevitably exists within the legitimate demands of stakeholders, and such controversy is the second constituting element of strategic issues (Wartick & Mahon, 1994). Strategic issues develop when one or more important stakeholders demand corporations to change their policies. They may exercise voice in two ways (Frooman, 1999; Kochan & Rubinstein, 2000; Rowley, 1997). First, stakeholders may be willing and able to confront the relevant parties in an expectational gap directly. Examples are consumers deciding to boycott products or activist groups pressuring organizations to provide explanations for their controversial behavior. Second, stakeholders may alternatively be willing and able to push their concerns into a broader public forum. Citizens supporting government regulation or environmentalists appealing to the sentiments of consumers provide cases in point. Controversy is not necessarily a bad thing. Organizations can communicate more easily with active than with passive stakeholders, because the former actively seek information rather than passively receive it. On the other hand, active stakeholders are not that easy to persuade because they gather information from many sources and persuade themselves rather than being persuaded by others (Grunig & Repper, 1992). As such, controversy therefore complicates the issues management process by limiting the amount of viable issues management alternatives open to managers.¹³
3. *Organizational impact*: Expectational gaps can develop and be controversial, but unless there is some identifiable current or future impact *on* a particular organization, a strategic issue does not exist *for* that organization (Bigelow, Fahey, & Mahon, 1991). This idea largely stems from the area of business policy and strategy. Ansoff, for example, defined issues as "major environmental trends and possible events that may have a major and discontinuous impact on the firm" (1975: 24-25). In a similar vein, Moore defined an issue as "a trend or condition, internal or external, that, if continued, would have a significant effect on how a company is operated over the period of its business plan" (1979: 43). These definitions are very

13 Also see the discussion on the relation between public activism and the relative attractiveness of various strategic issues management capabilities in the fifth chapter of the present volume.

important for understanding the *strategic* issue construct (as opposed to the *social* issue construct [Hillman & Keim, 2001]), because the existence of firm-specific impact (whether present or future, internally or externally triggered) “links corporate issues *to* – but at the same time differentiates corporate issues *from* – more general social movements, trends, events, and ‘forthcoming developments’” (Wartick & Mahon, 1994: 296, emphasis in original).

3.2.2 The corporate communication/public affairs conception of strategic issues management

In the eyes of corporate communication/public affairs scholars, issues management may be defined as “the process by which the corporation can identify, evaluate and respond to those social and political issues which may impact significantly upon it” (Johnson, 1983: 22). The purpose of issues management in this respect is to minimize “surprises” emanating from the business environment and to prompt systematic and interactive responses to environmental change (Brown, 1979). In reality, however, the term issues management may be a misnomer: “responses, not issues, are managed” (Wartick & Cochran, 1985: 766). As one commentator has noted, the term issues management “has proved to be irradicable in spite of its arrogant implication that corporations have the power to manage the public policy process” (Steckmest, 1982: 41).

Although the term issues management may in this sense be somewhat deceiving, the underlying processes it denotes are still widely recognized as useful corporate activities (Buchholz, 1990; Wartick & Wood, 1998; Wood, 1991). The earlier a company can identify a potential threat or opportunity, and develop an appropriate course of action, the more likely it will be able to influence the evolution of the issue or at least secure a relatively favorable position on it as compared to its direct competitors (Johnson, 1983). Most scholars with an interest in issues management identify three stages in the strategic issues management process (Daft & Weick, 1984; Johnson, 1983; Milliken, 1990). There are other issues management models with seven or even ten stages, but a model that consists of only three is both elegant and sufficient (Wartick & Wood, 1998). The three most commonly described stages in the issues management process are (1) scanning, (2) monitoring, and (3) responding.¹⁴

¹⁴ Above (paragraph 3.2.1), I briefly recapitulated Mahon & Waddock’s (1992) critique with respect to the issues life cycle approach. At present, I describe a phased approach to strategic issues management. This may seem like a contradiction, but in fact it is not for two complementary reasons. Firstly, the issues life cycle is a model of how strategic issues evolve, whereas the model proposed in this paragraph describes the process of strategic issues management. Secondly, the three stages of the strategic issues management process

1. *Scanning*: The purpose of scanning is to identify the key trends, changes, and events in the organizational environment that might affect the organization's effectiveness (Milliken, 1990). Scanning refers to "a radar-like activity by which the corporation attempts to detect and identify unforeseen obstacles to its strategy" (Gollner, 1983: 128). In terms of the public affairs conception of strategic issues, the goal of environmental scanning is to be able to see or even predict the opening of expectational gaps (Ansoff, 1975). In general, two different environmental scanning modes can be identified: a prospective and a retrospective mode (Fahey & Narayanan, 1986). *Prospective* environmental scanning is focused on the identification of precursors or indicators of potential environmental changes and issues. It is therefore aimed at warning the organization for potentially significant external developments before they have fully formed or crystallized (Lenz & Engledow, 1986). In contrast, *retrospective* scanning passively collects and transmits information on "surprises," fully developed but previously unnoticed strategic issues that require immediate action on part of the organization (Dutton & Ottensmeyer, 1987). Environmental scanning often unearths imminent environmental change because it explicitly focuses on areas that the organization may have previously neglected. However, because the activity is by its very nature ill structured and ambiguous, the noise level in scanning is likely to be high (Fahey & Narayanan, 1986).
2. *Monitoring*: Environmental monitoring is concerned with the tracking of trends and issues that have been identified in the scanning process (Buchholz, 1990). The activity ensures that the "hunches and intuitive judgments about the weak signals made during scanning are tracked for confirmation, elaboration, modification, and (in)validation" (Fahey & Narayanan, 1986: 39-40). The data search in the monitoring phase is both more focused and more systematic than in the scanning phase (Gollner, 1983). The search is more focused because it is guided by issues managers' *a priori* established opinions about strategic issues, which they either developed during the environmental scanning phase or which have been developed by outsiders and have been brought to the managers' attention at a later stage. The search for data is also more systematic because at this stage managers will have developed a general sense of the patterns in the environment they are looking for, and they will be collecting data on these patterns cumulatively (Fahey & Narayanan, 1986). The goal of monitoring is to assess the salience and urgency of a strategic issue's impact (Wartick & Wood, 1998). Salience in this respect refers to how important the impact of the issue will be for the organization, whereas an issue's urgency relates to the probability that its impact will occur within a given time frame. The reason for evaluating issues in terms of salience and urgency is that the typical corporation cannot respond to every issue of

are not directly related to the four stages of the issue life cycle as described by Buchholz (1990) and Post (1978).

interest because it simply does not have the resources to do so (Buchholz, 1990). Organizations must therefore prioritize strategic issues in order to use their limited resources sensibly (Wartick & Wood, 1998).

3. *Responding*: The third and final stage of the issues management process in the conception of public affairs theorists is the development of corporate responses to the monitored and prioritized issues (Wood, 1991; 1994).¹⁵ Arrington and Sawaya (1984) identify a number of common responses: (1) direct representation at the federal, state, and local levels of government, (2) coordination with other companies through trade associations, (3) grass-roots constituency-building, (4) maintaining community contacts and alliances with other interest groups, (5) improving media relations, (6) drawing on employee speaking engagements, and (7) issue advertising. The primary goal of all these response development activities is to close expectational gaps, and “a company’s response to an issue must first and foremost be consistent with the type of gap the issue represents” (Wartick & Wood, 1998: 191). Factual gaps (“what is – what is”) call for responses such as objective studies to clarify the disputed facts. A debate with stakeholders over what the corporation’s strategy ought to be is unlikely to resolve such gaps. Alternatively, conformance gaps (“what is – what ought to be”) can only be resolved when one (or several) of the conflicting parties is willing to adjust its position on the issue. In this case, negotiated responses such as collaborative problem solving or arbitration are more likely to be effective (Gray, 1989; Gray & Wood, 1991). Finally, ideals gaps (“what ought to be – what ought to be”) call for debates and discussions over the values and ideals at stake. Encouraging a public debate through advocacy advertising or putting “think pieces” in the press is the right response to gaps of this latter kind.

3.3 ORGANIZATIONAL BEHAVIOR

A second research stream on strategic issues management is rooted in the field of organizational behavior. In an important sense, this academic field of study represents the mirror image of the corporate communication/public affairs field. After all, corporate communication/public affairs is concerned with the organization of issues management activities *between* organizations. Alternatively, the organizational behavior literature on issues management is occupied with the (social and psychological) processes *within* organizations that are triggered by the management of external affairs.

In the broadest sense of the term, organizational behavior may be defined as “the study of factors that affect how individuals and groups act in

¹⁵ For an overview of the actual responses formulated by the managers of firms in the Dutch fats and oils industry to the highly salient strategic issue of genetic modification that have been identified in the present study, see chapters four and five of this volume.

organizations and how organizations manage their environments" (George & Jones, 1996: 4). More confined definitions of the discipline are, for example, offered by Hellriegel, Slocum, & Woodman ("the study of human behaviors, attitudes, and performance within organizational settings," 1992: 5) and Robbins ("the systematic study of the actions and attitudes that people exhibit within organizations," 2000: 2). The former definition is more encompassing because it relates both to the study of behavior *in* organizations and the study of the behavior *of* organizations, whereas the latter definitions are restricted to the study of human behavior in organizational settings. In this book I only refer to conceptions of organizational behavior in the restricted sense, since (a) I will limit my use of theories from the organizational behavior field to those describing the (socially and psychologically motivated) behaviors of certain individuals working for an organization (notably: practicing issues managers), and (b) the behavior of organizations as collective agents is more accurately captured by contributions to the organizational theory field (especially by institutional theory [DiMaggio & Powell, 1991; March & Olson, 1989]).

3.3.1 The organizational behavior conception of strategic issues

Organizational behavior scholars often "borrow" their definitions of the corporate issue construct from their colleagues working in the field of corporate communication/public affairs. Ashford, Rothbard, Piderit, and Dutton, for example, define strategic issues as "key trends, developments, and events that have implications for organizational performance" (1998: 23). In a very similar vein, Dutton and Dukerich describe issues as "events, developments, and trends that an organization's members collectively recognize as having some consequence to the organization" (1991: 518). Such consistency in the use of key terms certainly sheds legitimacy on the field of issues management by creating the impression that both its corporate communication/public affairs and organizational behavior branches add to a common stock of knowledge. At the same time it must be recognized that the *de facto* conception organizational behavior theorists have of strategic issues differs radically from the one held by their colleagues in public affairs. The latter view strategic issues as expectational gaps between organizations that may have an impact on performance once they become controversial. Alternatively, organizational behavior theorists interpret issues as *organizational problems (or opportunities) that are (1) socially constructed by organization members from (2) ambiguous data, under conditions of (3) great time pressure and (4) information overload. Strategic issues also serve as (5) "currency" in social exchange situations.* I explain this definition¹⁶ in five consecutive steps.

16 Elements of this definition can be found in Hilgartner & Bosk (1988); Isabella (1990); Morrison & Milliken (2000); Starbuck & Milliken (1988); and Weiss (1989).

1. *Social construction*: Dutton and Dukerich (1991) stress that issues only exist when certain events or developments are collectively recognized and labeled as such by organization members. This makes the definition of an issue a social construction (Berger & Luckman, 1967; Hilgartner & Bosk, 1988) that may emerge and evolve over time (Feldman, 1989; Isabella, 1990; Weiss, 1989).¹⁷ Some issues are routine and expected, in the sense that organization members can easily classify them into pre-existent mental categories. Once such routine issues are classified, they elicit a well-learned response (Starbuck, 1983; Starbuck & Milliken, 1988), a “recipe” of routinized behavior easily available in the organization (Weick, 1979). Issues may become problematic, however, when they do not easily fit well-used categorization schemes. Nontraditional issues require organization members to adopt a more intensive and deliberate information-processing mode (Dutton, 1986; 1993). What makes issues social constructions is that it is not their objective characteristics that determine the amount of time and processing capacity organization members devote to them, but rather the fit of such objective characteristics with the organizational identity (Brown & Starkey, 2000; Gioia, Schultz, & Corley, 2000).
2. *Ambiguous data*: Strategic issues represent a source of environmental uncertainty, because they do not present themselves in packaged form to decision-makers (Milliken, 1987, 1990). Rather, strategic issues consist of weak signals and vague stimuli that must somehow be interpreted by organization members (Ansoff, 1975). As Dutton puts it: “by their very nature, strategic issues are ambiguous and ill defined, complicating the process of issue diagnosis and making more difficult the task of resolving the issues” (1986: 501). Due to this ambiguity, issues epitomize “wicked problems” (Lyles, 1987). Three important characteristics of such problems are that they cannot be traced to an unambiguous set of causes because they are ill structured, that they are difficult to communicate because there is no single best way for formulating their nature in a narrative fashion, and that they are difficult to resolve because they cannot be isolated from connected problems (Mason & Mitroff, 1981).
3. *Time pressure*: Strategic issues are almost by definition important to firms because of their potential future impact on the firm’s ability to meet its objectives (Ansoff, 1980). In addition, strategic issues become *urgent* when they are accompanied by a sense of time pressure or immediacy (Dutton, 1993). Even when strategic issues are detected at a very early stage of development, external pressures such as extreme competition (D’Aveni, 1994) or high-velocity environmental change (Eisenhardt, 1989a) may put time pressure on managers. These feelings of urgency are magnified when

17 For an analogous, organizational behavior-oriented discussion of the corporate reputation concept, see Fombrun & van Riel (1997: 8-9).

managers also feel an internal pressure for creating an image of control and efficacy to the other members of the organization (Pfeffer, 1981).

4. *Information overload*: Dutton, Walton, & Abrahamson once stated that “organizational decision-makers are continuously bombarded by issues that potentially could affect current and future performance” (1989: 379). This already holds true for small firms that operate in only one national context, but the pool of potentially relevant information increases dramatically for large, multinationally operating firms (Wartick & Wood, 1998). Furthermore, it must be realized that organizations cannot address every relevant issue because of resource constraints (Dutton & Webster, 1988), and that cognitive processing power represents a scarce resource to organizational decision-makers (Denison, Dutton, Kahn, & Hart, 1996). All said, strategic issues often confront organizational decision-makers with more information than they can realistically process (Dutton, 1993: 246).
5. *Social exchange currency*: As Dutton & Ashford observe, “for individuals, strategic issues are part of the currency through which their careers are made or broken” (1993: 402). In many organizations, it is often middle managers rather than the top-level decision-makers who have their hands on the “pulse of the organization” (Dutton, Ashford, O’Neill, Hayes, & Wierba, 1997: 407) and are closer to customers, suppliers, and other stakeholders. These links provide middle managers with direct experience of what strategic issues require organizational attention, and they may subsequently try to draw the attention of top-level decision-makers to those issues. The voluntary, discretionary set of behaviors by which organizational members attempt to influence the organizational agenda by getting those above them to pay attention to issues of particular importance to the organization has been defined in the literature as “issues selling” (Dutton & Ashford, 1993; Dutton et al., 1997; Ashford, Rothbard, Piderit, & Dutton, 1998). However, issues selling is a double-edged sword. On the one hand, effective issues selling may have favorable career consequences for the individuals who successfully promote strategic issues (Cobb & Elder, 1972; Kingdon, 1984). Alternatively, issues selling in an unfavorable context or by politically vulnerable individuals may induce a “kill the messenger” response that poses a great risk to one’s further upward mobility in the organizational hierarchy (Ashford & Northcraft, 1992).¹⁸

18 In many organizations, employees and other constituencies fear the norms and power-games that prevent them from saying what they know about technical and policy issues (Argyris, 1977). As a consequence, members may choose to withhold their opinions and concerns about organizational problems (i.e., to refrain from issues selling activities). Morrison & Milliken (2000: 707) have labeled this collective phenomenon organizational silence.

3.3.2 The organizational behavior conception of issues management

The communal use of terminology involving both corporate communication/public affairs scholars and organizational behavior theorists stretches beyond a shared definition of the strategic issue construct. Most organizational behavior scholars also conform to the corporate communication/public affairs definition of issues management as identifying, evaluating, and responding to external events. Again, however, large differences exist between the two communities with respect to their focus and intentions. As outlined above, corporate communication/public affairs focuses on issues management activities between organizations, while organizational behavior focuses on processes within them. Thus, whereas corporate communication/public affairs scholars focus on environmental scanning, organizational behavior theorists are concerned with *perception*. Furthermore, while the former concentrate on environmental monitoring, the latter are occupied with *interpretation*. Finally, the interorganizational activity of responding is linked to the intraorganizational process of *learning*.

1. *Perception*: Robbins defines perception as “a process by which individuals organize and interpret their sensory impressions in order to give meaning to their environment” (2000: 23). Similarly, Banks and Krajicek describe it as “the selection and organization of environmental stimuli to provide meaningful experiences for the perceiver” (1991: 305). With respect to issues management, especially *perceptual selection* is a very important phenomenon. It refers to “the process by which people filter out most stimuli so that they can deal with the more important ones” (Hellriegel, Slocum, & Woodman, 1992: 105). To put this in issues management terms, the process of perceptual selection determines to which issues in their environment top-level decision-makers will devote their scarce cognitive processing capacities (Dutton, 1986). This selection process depends on a number of factors, some of which are internal to the decision-maker while others are external. The external factors of perception are characteristics of strategic issues themselves or of the organizational context that determine whether such issues will be noticed, such as *intensity*, *contrast*, *repetition*, and *issues selling*. The more intense a strategic issue (e.g., in terms of the level of adversity being raised), the more likely it is to be perceived. Also, issues that clearly stand out against the background noise of everyday business affairs (anomalies or unexpected events) are amongst the ones most likely to be noticed (Dutton, Walton, & Abrahamson, 1989). Furthermore, a repeated issue – one that occurs every month or year – is more likely to be perceived than an issue occurring only once. Moreover, issues that induce other organizational members to speak up for them (in the form of issues selling) are also more likely to be noticed by decision-makers (as stated above, however, this latter phenomenon may be

impeded by organizational silence [Morrison & Milliken, 2000], the outcome of a set of organizational norms that put a penalty on the upward transmission of issue-related signals). Alternatively, there is also a set of internal factors that influence perceptual selection, such as *pre-established schemas, learning, and motivation*. Schemas are abstract knowledge structures that are stored in memory and allow people to organize and interpret information about a given issue (Fiske & Taylor, 1984). All perceivers actively interpret strategic issues so that they are consistent with their expectations, which are, in turn, determined by their schemas (Jones, Kosnik, & George, 1993). Perception is furthermore strongly influenced by past experiences with previous issues management activities and by what was learned from those experiences (Daft & Weick, 1984). Finally, motivation also plays an important role in determining what issues a person perceives. Issues that are highly self-relevant are more likely to be perceived than those that are not (Dutton, 1993; Friedman, 1984).

2. *Interpretation*: Once a particular issue has been perceived, decision-makers must *interpret* it to determine whether the issue requires further action on their behalf. Daft and Weick define interpretation as “the process of translating events and developing shared understanding and conceptual schemes among members of upper management” (1984: 286). Dutton & Jackson (1987) explain the process of issues interpretation in terms of categorization theory (Mervis & Rosch, 1981, Rosch, 1978; Rosch & Mervis, 1975), and argue that the interpretation of strategic issues may legitimately be viewed as a categorization process. A critical assertion of categorization theory is that people form cognitive categories based on their observations of the attributes of certain phenomena such as, say, strategic issues (Maathuis, 1998). Such categories are composed of similarly perceived or judged phenomena, that are nonetheless nonidentical (Rosch & Mervis, 1975). Category systems are assumed to be structured along a vertical and a horizontal dimension (Rosch, 1978). The vertical dimension has three levels (subordinate, basic, and superordinate), with each higher level being inclusive of the systems below it. An example of three vertically related issue categories would be (1) “oil spill” (subordinate), (2) “environmental issue” (basic), and “strategic issue” (superordinate). The vertical system in its entirety is called a taxonomy (Kay, 1971). In contrast, the horizontal dimension consists of various categories at the same taxonomic level that are differentiated by crucial dissimilarities (Rosch, 1975). For example, both “environmental” and “health” issues are basic categories of the superordinate category “strategic” issues. The act of categorization itself essentially involves comparison between a target and categorical knowledge (Rosch, 1975). Targets may be attributed to a specific category for three reasons (Cohen & Basu, 1987). First, category membership may be deduced from a set of necessary and sufficient attributes of the target that jointly define the category to which it belongs (Dominowski, 1974).

Second, membership may be inferred from the goodness-of-fit with a category prototype, which represents a set of features commonly associated with members of a certain category (Rosch & Mervis, 1975). Third, targets may be categorized because they cue the retrieval from memory of specific category exemplars (Brooks, 1978). The entire idea of categorization - and its value to strategic issues interpretation - must be understood from the principle of cognitive economy (Rosch, 1978). Categorization allows decision-makers to maximize the availability of reliable and ready-to-use information about specific issues, while ignoring often irrelevant cues that are unique to the issue at hand (Dutton, 1986, 1993; Dutton & Jackson, 1987).

3. *Learning*: Through their perception and interpretation efforts, individuals develop cognitive "theories" about the issues that confront them, that subsequently have to be put into action (Argyris & Schon, 1978; Hedberg, 1981). The activation of previously developed interpretations may be described as a *learning process* (Daft & Weick, 1984). The concept of learning reflects a change in the frequency of occurrence of a specific individual behavior (Akin, 1987), and may be defined as a relatively permanent change in knowledge or behavior that results from practice or experience (Hamner, 1974). Individuals in organizations may learn from their involvement in issues management activities in two important ways - through *operant conditioning* and *social learning* (George & Jones, 1996; Robbins, 2000). The theory of operant conditioning mainly derives from the work of Skinner on behaviorism (1969, 1974). It refers to learning that takes place when the learner recognizes the connection between a behavior and its consequences (Luthans & Kreitner, 1985). This type of learning is called operant conditioning because it entails the learning of individuals to operate on their environment, which is to behave in a certain way to achieve desired outcomes (Hellriegel, Slocum, & Woodman, 1992). The principle driver of this type of learning is *reinforcement*, a process whereby the probability that a desired behavior will occur is increased by applying consequences that depend on the behavior in question (George & Jones, 1996; Weiss, 1990). An alternative approach that explains adaptive behavior in organizations is social learning theory (Bandura, 1969, 1977; Wood & Bandura, 1989). This approach holds that individuals can learn new behavior by watching others in a social situation and then imitating their behavior. The principles of social learning differ from those of operant conditioning in that social learning does not rely on external reinforcement to promote desired behavior. Rather, it relies on *self-control* and *self-efficacy* (Bandura, 1977; Gist, 1987). Individuals may learn on their own by relying on their self-control, a type of self-discipline that allows an individual to learn certain behaviors even though there is no external pressure to do so. This type of learning is strongly supported by high levels of self-efficacy, an individual's strong belief about his or her ability to perform a particular behavior successfully. Self-efficacy has a strong influence on

learning because individuals only try to learn those behaviors that they think they are capable of performing. In sum, learning is a process that takes place after perceiving and interpreting strategic issues, through which individuals pick up new skills that enable them (and consequently the organization as a whole) to respond to future issues in a more timely and accurate fashion.

3.4 TOWARDS AN INTEGRATED FRAMEWORK OF STRATEGIC ISSUES MANAGEMENT

As pointed out in the introductory chapter of this text, the ambition of any theory of *strategic* issues management should be to assess whether, as well as to explain how, issues management activities may create lasting competitive advantages for the firms adopting them vis-à-vis their non-adopting competitors. The realization of this ambition would make issues management theory a full-blown member of the family of theories that jointly comprise the business policy and strategy field.¹⁹ It remains to be seen, however, whether the explanatory power of and the normative implications to be derived from either of the two previously discussed perspectives on issues management (corporate communication/public affairs and organizational behavior) are sufficient to explain or generate such advantages.

The corporate communication/public affairs perspective, for example, stresses the need for external constituency building and issue-related communications (see Grunig & Repper [1992] for a review). Such outside-in oriented issues management activities may result in advantages like endorsement of the perspective of the company by outside stakeholders, improved media relations, and local community support. While issues management activities of this kind are therefore valuable in and of themselves, it must be pointed out that they are also subject to a number of serious deficits. First of all, if there is no *internal* policy to coordinate these outside-oriented issues management activities, they tend to regress towards a set of *ad hoc* responses to the signals of self-selected stakeholders, that may represent insignificant parties as seen from the perspective of the firm (Hillman & Keim, 2001). Secondly, the lack of an internal strategy also makes that the responses of firms to outside pressures tend to become *reactive* in kind. Rather than selecting a key group of salient stakeholders and closely monitoring and protecting their interests in the operations of the firm in order to secure their support, firms that pursue strictly reactive, outside-oriented issues management strategies can do little else but respond to the (often hostile) signals that such stakeholders provide when their interests are negatively affected.

¹⁹ Since the ambition of this field of academic inquiry is to explain the emergence and resilience of performance differentials between organizations (see, for example, Aharoni, 1993, and Rumelt, Schendel, & Teece, 1991).

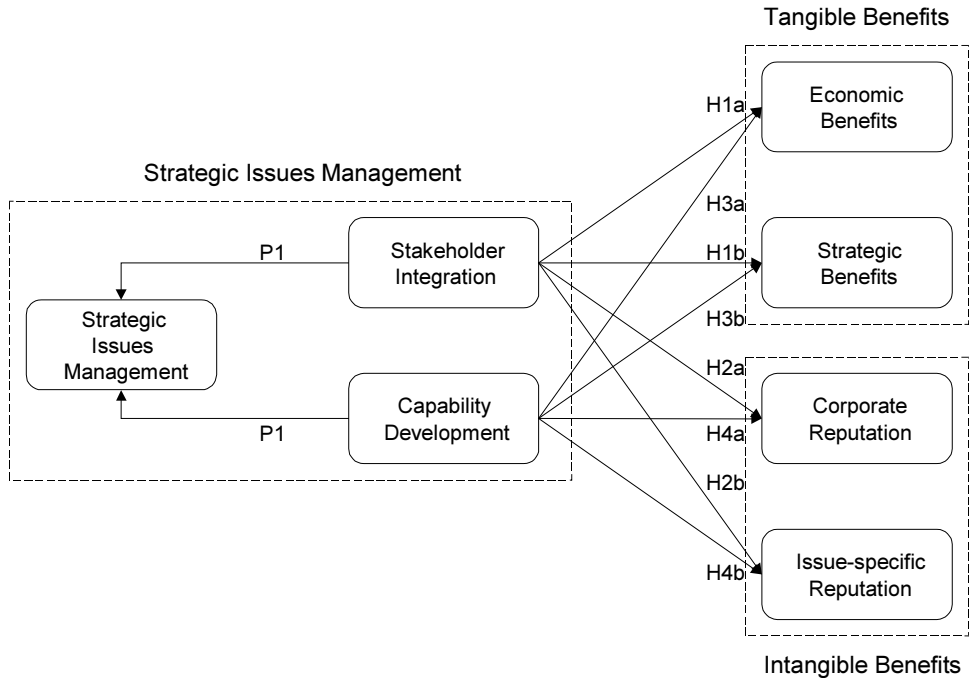
Thirdly, outside-oriented issues management strategies tend to suffer from a *short-term* orientation, aimed at restoring damages when necessary rather than pursuing sustainable stakeholder wealth (Kochan & Rubinstein, 2000).

Alternatively, the organizational behavior perspective highlights the importance of intraorganizational interpretation and sense-making processes, especially those aimed at the codification and accumulation of valuable issues management-related experiences. The major advantage of this approach is that it enables organizations to preserve unique learning experiences for later (alternate) uses. Nevertheless, the inside-out oriented organizational behavior approach also suffers from a number of major drawbacks. First of all, this approach is vulnerable to intellectual *autism*, since routines generated by internal knowledge creation and integration processes tend to be local and closely related to the existing repertoire of skills of the firm (Nelson & Winter, 1973). Secondly, the issues management skills that are created through internal knowledge accumulation procedures tend to be vulnerable to *environmental change*, since the evolving organizational environment is not a significant source of inspiration for their creation. Thirdly, internal knowledge creation processes are strictly *autonomous*, and therefore rather slow as compared to collaborative learning processes (Mowery, Oxley, & Silverman, 1996).

To benefit from the potential complementarity of the inside-out and outside-in views on issues management, I propose to extend the existing body of issues management theory by introducing a theoretical framework that integrates both the inside-out (organizational behavior) and outside-in (corporate communication/public affairs) perspectives on issues management.²⁰ This framework is depicted graphically in Figure 3.1. on page 57 I will now proceed by (a) briefly *explaining the key constructs* comprising this framework, and (b) developing one theoretical proposition and eight testable hypotheses *explaining the depicted relationships*.

²⁰ The fact that this model is already presented in the present chapter is in fact a slight anachronism, since it has been developed with the help of the theory-building case study that will be reported in chapters four and five of this manuscript.

Figure 3.1: Towards a synthesis of perspectives



3.4.1 Explaining the constructs (I): Strategic issues management

The central theoretical claim of this book is that *effective strategic issues management* (and hence the attainment of competitive advantage) *requires a simultaneous adoption of inside- and outside-oriented strategic issues management activities*. Only when (a) organizational learning is derived from an organization's experiences with the management of its stakeholders, and (b) the organization's stakeholder management activities are rooted in its previous internally codified learning experiences, can sustainable competitive advantage be obtained.

The primary outside-oriented issues management activity that will be described in this book is *stakeholder integration*. This concept was introduced by Hart (1995) in the context of product stewardship, the minimization of the costs of a product - both the production cost to the firm and the negative externalities that are passed on to the firm's external stakeholders - throughout its entire life-cycle. Companies that seek to adopt new technologies (like modern biotechnology) or new products face a number of real and potential expenses like pollution prevention, the redesign of existing product systems, and the accommodation of customer grievances. Hart proposes stakeholder integration as the principal managerial instrument to avoid these costs. He describes the concept as "integrating the 'voice of the environment,' that is, external (stakeholder)

perspectives, into product design and development processes" (1995: 993). Stakeholder integration thus refers to an organization's ability not only to coordinate functional groups within the firm, but also to integrate the perspectives of key external stakeholders (e.g., environmentalists, community leaders, the media, regulators) into the policy decisions of the firm (Sharma & Vredenburg, 1998).

Alternatively, the primary internally oriented issues management technique that will be described in this book is *capability development*. Grant (1996) has introduced this concept into the management literature, and has explained capability development in terms of the managerial task of integrating the specialist knowledge of individuals into higher-order knowledge-based resources. He roots this "knowledge-based view of the firm" (Grant, 1996: 377) in two fundamental assumptions. First, he claims that human knowledge accounts for the greater part of the value added in contemporaneous societies.²¹ Second, he states that barriers to the transfer and replication of knowledge endow it with strategic importance.²² The managerial relevance of these assumptions derives from the observation that some types of knowledge can only be acquired by (and stored within) specialized individuals. However, productive tasks at the organizational level require the simultaneous and coordinated input of a large number of such individuals. Therefore, joint efforts such as providing customer service, developing new products, or designing and implementing a new management information system require the *integration* of the specialist knowledge of several individuals into higher-level (team or organizational) knowledge-based resources. Grant labels such higher-order resources *organizational capabilities*, and defines them as "a firm's ability to perform repeatedly a productive task which relates either directly to or indirectly to a firm's capacity for creating value through effecting the transformation of inputs into outputs" (1996: 377).

The successful implementation of internally oriented strategic issues management activities (i.e., capability development) may overcome the drawbacks of the outside-oriented corporate communication/public affairs approach to issues management. First of all, rather than establishing a strict reliance upon *ad*

21 The fraction of national income attributable to the efforts of knowledge workers may be calculated as wages and salaries over and above the earnings of unskilled labor, plus royalties and license fees (see Grant, 1996: 385).

22 To fully understand the significance of this second assumption, one must make a distinction between tacit and explicit knowledge. The latter type can easily be written down in reports, notes, and manuals (or can straightforwardly be codified in any conceivable optic or electronic medium). The former type, however, cannot be codified because it is embedded in the unconscious routines of groups and individuals. The classical example is that of the swimmer, who does not stay afloat because of his body movements (which would be his own explanation for the phenomenon), but only because he inhales more air than he would normally do, and exhales less (see Polanyi, 1967). Only this tacit type of knowledge is of strategic importance, because the intrinsic transferability of explicit knowledge inhibits an important role in the realization of lasting competitive advantages.

hoc responses to the demands of external parties, capability development promotes the coordination of outside-oriented stakeholder integration activities into a concerted issues management policy. Secondly, capability development activities may release stakeholder integration activities from their strictly reactive character by selecting a key group of salient stakeholders whose interests are to be taken into account even before making important policy decisions. Thirdly, capability development activities may gear stakeholder integration activities towards the creation of sustainable stakeholder wealth (Sveiby, 1997), thereby overcoming the short-term orientation of many outside-oriented issues management approaches.

Furthermore, the skillful adoption of stakeholder integration activities may help organizations to resist the shortcomings of the internally oriented organizational behavior approach to issues management. First of all, rather than promoting local learning that leads to the establishment of new routines that resemble pre-existing ones, stakeholder integration activities promote truly novel, externally inspired learning. Secondly, by feeding new information about the changing environment of the firm into the knowledge-creation and integration activities that generate new organizational routines and capabilities, stakeholder integration activities make capability development activities more robust against the influences of environmental change. Thirdly, by expanding the pool of available knowledge that may be integrated into the organizational knowledge base (through the establishment of learning alliances, for example [see Ahuja, 2000; and Powell, 1998]), stakeholder integration activities act as catalysts that speed up the autonomous learning promoted by capability development activities. The apparent complementarity of stakeholder integration and capability development activities inspires the following proposition:

*Proposition 1. Effective strategic issues management consists of both stakeholder integration and capability development activities.*²³

3.4.2 Explaining the constructs (II): Performance indicators

In the literature, it is generally agreed upon that the discipline of strategic management is fundamentally concerned with explaining differential firm performance (Aharoni, 1993; Rumelt, Schendel, & Teece, 1991). This concise description of the field might give a false impression of its degree of focus, however, because corporate performance is in many respects a many-headed monster. The most recent complete volume (2000) of the *Strategic Management Journal*, for example, lists performance indicators as diverse as: durability of new product advantages (Lee, Smith, Grimm, & Schomburg, 2000); degree of learning

²³ This proposition will not fully be tested in the present volume. For a preliminary test, however, please consult Appendix B.

from competing partners (Dussauge, Garrette, & Mitchell, 2000); degree of influence on the public policy process (Shaffer & Hillman, 2000); created shareholder value (Merchant & Schendel, 2000); growth and innovation rates (Stuart, 2000); success rate of interorganizational linkage formation (Tsai, 2000), and corporate reputation (Ferguson, Deephouse, & Ferguson, 2000). In general, these performance indicators may be divided into two categories: indicators of *tangible* corporate performance (e.g., growth and innovation rates, and created shareholder value) and indicators of *intangible* performance (e.g., influence on the public policy process and corporate reputation). To assess tangible performance, this study uses two indicators, notably economic benefits and strategic benefits. Two further indicators, corporate reputation and issue-specific reputation, were used to assess intangible performance.

Indicators of tangible performance

To assess the competitive implications of strategic issues management, I first of all included a performance indicator which I labeled *economic benefits*. Benefits of this kind may be defined as *immediate increases in the wealth and earnings of a firm*. Such benefits may take the form of reductions in the costs of raw materials, manufacturing and marketing processes, and regulatory compliance. They may also constitute improvements in the efficiency of a company's operations, increases in its productivity, enhanced knowledge about effective ways of managing operations, and process innovations. Finally, economic benefits may also consist of product innovations, improved product quality, and improved employee morale. I have included the word "immediate" in the definition of this indicator in order to stress the fact that economic benefits essentially pertain to improvements in the competitive position of a firm in the short run (cf. Aharoni, 1993).

Alternatively, I have reserved the term *strategic benefits* for those gains that may improve a firm's competitive position in the long run. Strategic benefits are therefore defined as those *operational, tactic, and strategic changes to a firm's structure or core transformation processes, which enable it to realize future improvements in its competitive position vis-à-vis direct rivals* (cf. Aharoni, 1993; Porter, 1985, 1996). Such strategic benefits must be understood, for example, as changes leading to future reductions in the costs of production or regulatory compliance. Also, they may take the form of adaptations leading to increases in the productive efficiency of the organization, or to future process innovations. In combination, economic benefits and strategic benefits comprise two performance indicators, which can express a firm's competitive advantage in economic terms in both the short and the long run (cf. Rumelt, Schendel, & Teece, 1991).

Indicators of intangible corporate performance

To assess the more intangible outcomes of issues management strategies, I have first of all included an indicator called *corporate reputation*. This indicator has previously been defined as “a collective representation of a firm’s past actions and results that describes the firm’s ability to deliver valued outcomes to multiple stakeholders. It gauges a firm’s relative standing both internally with employees and externally with its stakeholders, in both its competitive and institutional environments” (Fombrun & van Riel, 1997: 10, emphasis added). It may not be instantaneously clear, however, why corporate reputation should be included as an indicator of *performance*. After all, corporate reputations are first and foremost indicators of the relative standing of firms in their institutional fields (Fombrun & Shanley, 1990; Fombrun & Zajac, 1987; Milgrom & Roberts, 1986), and as such they cannot directly be converted into, say, shareholder value. Yet, there are some good reasons to believe that viewing corporate reputation as an indicator of firm performance is more than an exercise in vanity. I will present five complementary views on how favorable reputations may bestow competitive benefits upon firms (also see Fombrun & van Riel, 1997: 7 [“the strategic view”]):

1. *Reservoir of goodwill*: It is often argued that a good corporate reputation can act as a reservoir of goodwill, an intangible asset that can protect organizations in times of crisis (Bostdorff & Vibbert, 1994; Fombrun, 1996; McGuire, Sundgren, & Schneeweiss, 1988; Patterson, 1993; Sobol, Farrelly, & Taper, 1992). The “reservoir hypothesis” states that communities will tend to give highly reputable firms the benefit of the doubt when these organizations are confronted with sudden moral or economic shocks. Recently, Jones, Jones, and Little (2000) conducted a direct test of this hypothesis by assessing the impact of the 1987 and 1989 stock exchange crashes on the decline in companies’ stock prices. They found that the stock prices of companies with better reputations dropped significantly less than those of companies not favored with such positive standing, thereby supporting the “reservoir” hypothesis with empirical evidence.
2. *Signal of quality*: Many contributors from fields as diverse as strategy, marketing, and game theory have shown that corporate reputations are often used by consumers and business-to-business clients as a sign of the relative quality of the products and services of a particular organization (Barney, 1986; Keller, 1993; Weigelt & Camerer, 1988). Stiglitz and his colleagues have pointed out that consumers and business-to-business clients necessarily rely on corporate reputation because they typically have less information about a company’s commitment to delivering high-quality products and services than, say, that company’s managers (Grossman & Stiglitz, 1980; Stiglitz, 1989). Furthermore, the costs of gathering accurate additional product- or service-related information is often very high, even for well-informed professionals

such as purchasing managers (Tellis & Wernerfelt, 1987). Companies that invest successfully in their reputations can therefore charge premium prices for their products and can also earn rents from the repeat purchases that their quality products will generate (Landon & Smith, 1997; Milgrom & Roberts, 1986).

3. *Facilitator of interorganizational collaboration*: Corporate reputation also has an important role to play in interorganizational collaboration.²⁴ Gulati (1998, 1995a, 1995b) has shown that one of the most critical factors leading to the successful establishment of interorganizational linkages is the extent to which partners are familiar with one another prior to the alliance formation negotiations. Familiarity is important because companies are most likely to make reliable estimates of the amount of relational risk that a potential alliance carries if they have prior experiences with the potential alliance partner (Zajac & Olsen, 1993). Such deep experiential knowledge of a partner enables them to endow the alliance with appropriate safeguarding mechanisms (Heugens, 2001; Nooteboom, 1999). As Andersen and Sørensen (1999) point out, however, experiential information is not always available, for example because firms are looking for alliance partners in industries or countries they did not explore previously. Corporate reputations can then be a substitute source of information in collaborative decision-making. They allow managers to make an estimation of at least moderate reliability of the relational risk associated with the alliance, which they can then take into consideration upon designing the alliance (Andersen & Sørensen, 1999; Nooteboom, 1999).
4. *Source of autonomy*: Firms have to cope with the continuous scrutiny of multiple evaluators, each of whom applies different criteria in assessing firms (Fombrun & Shanley, 1990; Fombrun & van Riel, 1997). Shareholders demand return on investment, employee representatives require remuneration and developmental opportunities, environmental groups urge the organization to minimize its impact on the natural environment, and so on and so forth (Freeman, 1984). Organizations that are forced to deal with all these pressures simultaneously are most likely to languish away because of “stakeholder overload.” Organizations therefore seek to “decouple” their everyday activities from their outside images, in order to generate more autonomy.

²⁴ Both corporate reputation (how outsiders view the organization) and perceived external prestige (how insiders think outsiders view the organization [Smidts, van Riel, & Pruyn, 2001]) play an important role in initiating interorganizational collaboration, because interorganizational activity is necessarily a two-way process. If there are large discrepancies between corporate reputation and perceived external prestige, organizations and their potential partners face what I have elsewhere (Heugens, Kaptein, & van Oosterhout 2000) called the problem of desolation – a situation in which organizations forego those specific external relationships which potentially could have been most beneficial to them, because they mistakenly do not recognize the value of engaging in a joint partnership.

Organizational sociologists often point at the role of organizational legitimacy in this respect (Aldrich, 1999; DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Suchman, 1995). Staw and Epstein (2000) have demonstrated, for example, that companies may improve their reputations merely by seeking association with popular management techniques such as empowerment and total quality management. Their study shows that the reputation of a company benefits from the company's association with such techniques in the media, even if the firm has never even tried to implement the techniques themselves. Findings like these are relevant to the present study, because they show that reputation management may buy a firm the autonomy it needs to escape from the condition of stakeholder overload (Granovetter, 1985; White, 1981).

5. *Corporate governance instrument*: Due to the separation of ownership and control (Berle & Means, 1932; Eisenhardt, 1989; Jensen & Meckling, 1976), shareowners need to rely on corporate governance instruments to safeguard their investments. Without such safeguards they would blindly allow the professional managers of modern corporations to pursue their private goals with the help of the resources of the company that employs them. Apart from the monitoring systems and the deliberately designed incentive schemes aligning the interests of managers with those of the organization that are suggested by positive agency theory (see Eisenhardt [1989] for a review), corporate reputation can be used as an instrument of corporate governance as well. Managers in general will be motivated to manage the organizational reputation, because it can critically reflect upon their own reputation (Carter & Dukerich, 1998; D'Aveni, 1990; Sutton & Callahan, 1987). Weigelt & Camerer (1988) present evidence for the two-sidedness of reputation-building by demonstrating that, while certain directors are brought on board to improve the corporate reputation, it is also the case that these directors' own reputations are affected by their affiliation with the firm. This makes that corporate reputations have a role to play as corporate governance instruments, because they offer directors an incentive to improve the relative standing of the firm they work for.

These five reasons support and legitimize the inclusion of corporate reputation as a performance indicator in the present study. It should not be forgotten, however, that corporate reputation is also a many-headed monster, like corporate performance in general. As the above definition suggests, it is a *collective* representation of a firm's past actions and results, that comes into being as a result of the *interactions* between many different stakeholder groups. This suggests that corporate reputations are an amalgam of many *issue-specific reputations*, each of which is held by a subset of the organization's stakeholders (Fombrun & Shanley, 1991). Well-established measures of corporate reputation, such as Fortune's "most admired companies" survey, usually acknowledge the composite character of the

reputation concept. For the annual Fortune survey, for example, companies are rated on eight different criteria (Fombrun, 1998): (1) quality of management, (2) quality of products or services, (3) innovativeness, (4) long-term investment value, (5) financial soundness, (6) ability to attract, develop, and keep talented people, (7) responsibility to the community and the environment, and (8) wise use of corporate assets.

Furthermore, a large number of studies have been conducted that started from the premises that issue-specific reputations exist, and that it makes sense to measure these partial reputations. Business Ethics (a US-based periodical), for example, regularly conducts surveys to measure the reputation of US-companies in terms of their corporate citizenship. Also, Working Mother Magazine publishes an annual list of the companies deemed most attractive for working women. Another example concerns the work of Graham (1993), that reports a study of 625 public and private companies, conducted with a view on how they treat minorities. These studies naturally reflect relatively narrow stakeholder agenda's, but this is besides the point. What counts is that these studies show that companies may possess partial, issue-specific reputations, and that it is both sensible and feasible to measure them.

In the present study I therefore included a fourth and final measure of corporate performance, which I labeled *biotechnology reputation*. I define this concept as *a representation of a firm's past actions and results with respect to the adoption and use of modern biotechnology, which describes the firm's ability to deliver valued outcomes to parties that are affected by or that may affect the company's use of the new technology* (definition adapted from Fombrun & van Riel, 1997; and Freeman, 1984). The *biotechnology reputation* construct is thus a measure of a partial, *issue-specific reputation*.²⁵ In combination the corporate reputation and biotechnology reputation concepts cover the intangible aspects of a firm's performance with respect to the biotechnology issue, both in the broad and in the narrow sense.

²⁵ In the integrative framework of strategic issues management (see Figure 3.1), I have included the term issue-specific reputation, whereas I will use the term biotechnology reputation in other parts of this dissertation. The relationships between these terms is that the former is the more generic term, whereas the latter represents the particular issue-specific reputation I have included and measured in the second empirical study of this project.

3.4.3 Explaining the relationships (I): Tangible performance implications of stakeholder integration

Previously, stakeholder integration has been described as “the ability to establish trust-based collaborative relationships with a wide variety of stakeholders, especially those with non-economic goals” (Sharma & Vredenburg, 1998: 735). The establishment of such relationships with stakeholders, and the subsequent engagement in processes of interorganizational exchange, inevitably leads to what Williamson has called a “fundamental transformation” (1985: 61). The *ex ante* phase of the decision to ally is characterized by large numbers bargaining on behalf of the firm. Its managers usually have the opportunity to select the most favorable relationship from a broad range of potential partners. During the process of engagement, however, the fundamental transformation takes place. After a deal has been made, the firm will typically abandon its negotiations with other parties and, more importantly, transaction-specific investments (those with little alternative uses) will be made. As a result, the *ex post* phase of the decision to ally is characterized by small numbers bargaining, i.e., the firm is locked into its relationship with the outside partner because it would be very costly²⁶ to switch to an alternative partner.

In his analyses, Williamson (1975; 1985; 1991) emphasizes the *transaction cost* aspect of the fundamental transformation. He has correctly noted that whenever asymmetrical transaction-specific investments are being made, the party that has invested the most in the relationship may become the victim of partner opportunism (the room for opportunism amounting the difference between the committed partner’s and the opportunistic partner’s relation-specific investments). Zajac and Olsen (1993) agree with this analysis, but stress that there is also a *transaction value* (as opposed to transaction cost) side to interorganizational partnering, in the sense that partnerships represent economic value to organizations. They maintain that “from a transaction value perspective, a firm’s inclination to act opportunistically in a small numbers situation (...) is often dominated by the firm’s estimate of the negative impact that the opportunistic behaviour will have on the *value* of expected future exchanges with its partner” (1993: 137; emphasis in original).

Dyer and Singh (1998) have recognized the relevance of the transaction value approach, and used it to systematically examine how business firms derive competitive benefits (in the form of what they call *relational rents*) from their

²⁶ These switching costs consist (at least) of the previously made irrecoverable investments in relationship-specific assets with the previous partner organization, as well as of the future costs of searching for a new partner, of establishing a satisfactory legal agreement (a contract) with this partner, and of the new relationship-specific investments that need to be made.

alliances with other organizations.²⁷ They have identified four sources of relational rents: (1) relation-specific assets; (2) knowledge-sharing routines; (3) complementary resources and capabilities; and (4) effective governance.

1. *Relation-specific assets*: Firms must invest in dedicated assets to create competitive advantages, because “strategic assets by their very nature are specialized” (Amit & Schoemaker, 1993: 39). Williamson (1985) has identified three types of asset specificity, namely: (1) site specificity, (2) physical asset specificity, and (3) human asset specificity. Site specificity is created when successive production stages are located in geographical proximity of one another. Site specificity potentially reduces inventory and transportation costs, and can lower the cost of coordination activities (Dyer, 1996). Physical asset specificity is the result of transaction-specific capital investments, such as customized machinery and tools, which are tailored to the needs of specific strategic partners. Such investments allow for product differentiation towards critical customers and may improve the overall quality of a product by reducing compatibility problems between buyers and suppliers (Clark & Fujimoto, 1991; Nishiguchi, 1994). Human asset specificity refers to a stock of transaction-specific knowledge that results from long-standing social relationships between organizations and their stakeholders. Partners that work together closely may accumulate specialized information and a shared language that allows them to communicate more efficiently (Asanuma, 1989; Dyer & Nobeoka, 2000).
2. *Knowledge-sharing routines*. Organizations often learn through interorganizational collaboration (Levinson & Asahi, 1996; March & Simon, 1958). Powell, Koput, & Smith-Doerr (1996) found, for example, that the locus of innovation in the biotechnology industry was the network rather than the individual firm. Alliance partners are often a very important source of new ideas and information, which may develop into interfirm knowledge-sharing routines (Dyer & Singh, 1998). Such routines consist of regular patterns of interfirm interaction that permit the transfer and recombination of specialized

27 Dyer and Singh’s (1998) relational view essentially provides a theory of how business firms may build sustainable competitive advantages from their relationships with other organizations. In their analyses, Dyer and Singh focus on a firm’s relationships with commercial entities. In the present study, however, I will focus on a broader set of interorganizational relationships, including those (a) with actors pursuing economic goals, but also (b) with organizations that are driven by non-economic goals (or that are not primarily driven by economic goals). The former relationships entail, for example, a firm’s strategic alliances with its buyers and suppliers. The latter encompass a firm collaborative, trust-based relationships with stakeholders like the national government, consumer representatives, the media, and environmentalist groups. Whether this extension of the theory to another domain is justified, is primarily an empirical question (since this specific extension does not involve conceptual stretching [cf. Sartori, 1970]). The viability of this effort may therefore be deduced from the empirical results reported in chapter seven.

- knowledge (Grant, 1996a). Through close collaboration, alliance partners (whether business-to-business or business-to-stakeholder) may transfer knowledge that is tacit, complex, and difficult to imitate (Kogut & Zander, 1992; Mowery, Oxley, & Silverman, 1996; Szulanski, 1996), thereby putting themselves in a better position for outperforming competitors that fail to establish such knowledge-sharing routines.
3. *Complementary resources and capabilities*: A firm's ability to generate sustainable competitive advantage may require that it deploys its capabilities and resources in combination with the complementary skills and resources of strategic partners (Hamel, 1991; Harrigan, 1985; Shan, Walker & Kogut, 1994). Dyer & Singh define such complementary skills and resources as "distinctive resources of alliance partners that collectively generate greater rents than the sum of those obtained from the individual endowments of each partner" (1998: 665-667). However, strategic complementarity, the situation in which one partner firm is endowed with resources that are of relevance to the other partner and *vice versa*, is a necessary but not a sufficient condition for the realization of interorganizational rents from complementarity. An additional requirement is organizational complementarity, a sufficient degree of interorganizational compatibility in terms of decision-making processes, information systems, organizational culture, and incentive structures (Doz, 1996; Doz & Prahalad, 1999; Kanter, 1994).
 4. *Effective governance*: Governance plays a key role in the creation of relational rents for two complementary reasons. First, an appropriately selected governance mechanism minimizes transaction costs, thereby enhancing the efficiency of the exchange between the alliance partners (North, 1990; Williamson, 1985). Second, governance mechanisms work as opportunism-curbing safeguards that may enhance the willingness of the partners to make relationship-specific investments (Heugens, 2001; Heugens & van Oosterhout, 2001; Rowley, Behrens, & Krackhardt, 2000). Two types of governance mechanisms are frequently used in strategic alliances, third-party enforcement and self-enforcing agreements. The first type relies on a third-party enforcer (e.g., the court system) to resolve disputes over either the terms of the alliance or the compliance of the partners (Macneil, 1980; Williamson, 1991). The second type involves agreements in which "no third party intervenes to determine whether a violation [of the agreement] has taken place" (Telser, 1980: 27). Firms that rely on the second type either use formal safeguards (e.g., financial hostages [Klein, 1980; Williamson, 1983]) or informal safeguards (e.g., reputation [Larson, 1992; Weigelt & Camerer, 1988]) to secure partner compliance.

In combination, the four sources of relational rent identified by Dyer & Singh (1998) expose the mechanisms along which business firms may realize economic value from their interactions with relevant stakeholder groups. Some of

these mechanisms clearly harbor the promise of immediate gains. Investments in relationship-specific assets and in complementary resources and capabilities are highly likely to start contributing to the economic performance of a firm in the short run already (cf. Hypothesis 1a & Figure 3.1). Other mechanisms, however, are more likely to have their greatest pay-off in the long run. The establishment of knowledge-sharing routines and effective governance mechanisms does not primarily contribute to a firm's short-term competitive success, but rather stimulates a more favorable competitive climate for its interorganizational arrangements. In turn, this climate will have a long-term positive effect on the ability of the firm to detract competitive benefits from its alliances with stakeholders (cf. Hypothesis 1b & Figure 3.1).

Hypothesis 1a. The degree to which a firm is involved with stakeholder integration activities will be positively associated with the extent to which it is able to realize economic benefits.

Hypothesis 1b. The degree to which a firm is involved with stakeholder integration activities will be positively associated with the extent to which it is able to realize strategic benefits.

3.4.4 Explaining the relationships (II): Intangible performance implications of stakeholder integration

Many contributors recognize that a strong organizational identity must lie at the heart of all reputation building efforts (Collins & Poras, 1994; Fombrun, 1996; Fombrun & Rindova, 1998; van Riel, 1996). Such organizational identities emerge when organizational members are urged to ask themselves self-reflective questions (Who are we anyway, as an organization? [Gioia, 1998: 21]) because of their work-related activities (Dutton, Dukerich, & Harquail, 1994; van Rekom, 1998) or because of turmoil in the organizational environment (Ashforth & Mael, 1996; Dutton & Dukerich, 1991). Adequate statements of organizational identity are generally believed to satisfy three criteria, notably: (1) claimed central character, (2) claimed distinctiveness, and (3) claimed temporal continuity (Albert & Whetten, 1985). If organizational identities are seen as conceptions concerning the own organization held by its individual members (Ashforth & Mael, 1989; Gioia & Thomas, 1996), then the first criterion holds that organizational identities typically consist of those conceptions that occupy a central position in the network of individually held attributes (Markus & Wurf, 1987). The second criterion can only be satisfied if the set of privately held conceptions concerning the own organization allow organizational members to critically differentiate it from other organizations in the same organizational domain (Rindova & Schultz, 1998). Finally, the third criterion maintains that organizational identities are comprised

of self-relevant conceptions that are relatively resilient with respect to longitudinal changes affecting the organization (Elsbach & Kramer, 1996).

Since organizational identities are first and foremost internal characteristics of organizations (Dutton & Dukerich, 1991), they do not readily translate into outside-held organizational images such as corporate reputation. Rather, for the sake of the external beholder organizational identities must be *converted* into corporate reputation through self-representation. Van Riel (1996) identifies a number of self-representative activities in the context of identity conversion, two of which can be considered as acts of stakeholder integration: (1) an organization's (objective) behavior with respect to specific stakeholders, and (2) an organization's (subjective) communication concerning these stakeholders. Presently, I will discuss two aspects of stakeholder-oriented behavior (charitable donations and stakeholder accommodation), as well as two aspects of stakeholder oriented communication (press releases and issue advertising).

1. *Charitable donations*: To stimulate the development of positive outside-held images, organizations may make charitable contributions to a broad range of secondary stakeholders. Such strategic corporate philanthropy has previously been described as "enlightened self-interest" (Wilcox, Ault, and Agee, 1995: 385), because charitable contributions can generate a reservoir of public support. Empirical research generally supports the hypothesis that there is a positive association between charitable donations and corporate reputation. Fombrun & Shanley (1991) found that the public assigns more favorable reputations to firms that have charitable foundations and give proportionally more to charity than other firms do. Wally and Hurley (1998), who examined the effect of sponsorship of the Olympic Games on corporate reputation, provide another example. They found that sponsoring of the Games typically improved an organization's rating on the *Fortune* Most Admired Companies reputation index.
2. *Stakeholder accommodation*: Apart from making charitable donations to secondary stakeholders in an attempt to boost their public image indirectly, organizations may also make direct contributions to primary stakeholders to stimulate a more favorable reputation amongst such target audiences. In today's labor market, for example, attracting and keeping talented people is key to competitive success (Lado & Wilson, 1994; Pfeffer, 1994). Empirical research has shown that corporate reputation is one of the most important factors attracting the attention of new applicants (Turban & Greening, 1996). Modern corporations are therefore highly likely to invest in activities that may establish a more favorable reputation amongst potential recruits, such as offering greater job security, better pay, and more favorable health benefits. A company's investment in the quality of its products in order to accommodate the wishes of consumers directly provides another case in point. It is widely recognized in the marketing literature that corporate reputation is an

important determinant of consumers' willingness to pay for a good (Landon & Smith, 1997; Rogerson, 1987; Shapiro, 1983). Organizations are therefore likely to invest in the quality and innovativeness of their products in an attempt to build a more favorable reputation amongst their customers.

3. *Press releases*: An organization's identity and reputation may sometimes be threatened by critical events like corporate accidents, lawsuits, or diminishing performance (Elsbach & Kramer, 1996; Elsbach & Sutton, 1992). These threats are often reinforced by the excessive interest of the media in reporting negative publicity about firms (Fombrun & Shanley, 1990). Managers may therefore be expected to issue press releases after a potentially negative event, in an attempt to limit or prevent the impact of perilous press coverage upon the reputation of the company they work for. Empirical research by Carter & Dukerich (1998) has indeed shown that the number of press releases a company issues is positively associated with indications of a downturn in its reputation. From an impression management perspective, the issuing of such press releases must be understood as "defensive self-presentation behavior [which] is reactive and typically occurs when the actor is faced with a predicament" (Tedeschi & Melburg, 1984: 32).
4. *Issue advertising*: In contrast to the more reactive press release strategy, organizations may also use a more pro-active approach for the management of corporate reputations through the media. They may review the whole range of issues with which they are confronted, and tactically select those particular items with respect to which they outperform their direct competitors. Subsequently, they can organize issue-advertising campaigns around these items in an attempt to convince outside constituencies of the desirability and legitimacy of their cause (Schumann, Hathcote, & West, 1991). Tedeschi and Melburg describe the initiation of such issue advertising campaigns as "assertive behavior [which] is initiated by the actor to establish a particular identity for an audience and is not merely reactive to situational demands" (1984: 32).

In sum, stakeholder integration activities like making charitable donations, stakeholder accommodation, issuing press releases, and the pursuit of issue advertising can be used to convert a favorable organizational identity into a positive corporate reputation (Collins & Poras, 1994, 1996; Fombrun, 1996; Fombrun & Rindova, 1998; van Riel, 1996). To the extent that these activities are aimed at the public at large, they will result in a more positive corporate reputation in general (cf. Hypothesis 2a & Figure 3.1). Previously, however, I have explained that the corporate reputation construct is an amalgam of many issue-specific reputations, like those for being a good employer, for being a company which serves its shareholders well, and (applied to the focal issue of this study) for being a company which uses modern biotechnology with care. To the extent that stakeholder integration activities are therefore aimed at those particular groups

that are most concerned about a highly specific issue that affects the company, these efforts will result in a more favorable issue-specific reputation (cf. Hypothesis 2b & Figure 3.1).

Hypothesis 2a. The degree to which a firm is involved with stakeholder integration activities will be positively associated with the extent to which it is able to realize a favorable corporate reputation.

Hypothesis 2b. The degree to which a firm is involved with stakeholder integration activities will be positively associated with the extent to which it is able to realize a favorable issue-specific reputation.

3.4.5 Explaining the relationships (III): Tangible performance implications of capability development

The broad interpretation of the relational view (see Footnote seventeen of this chapter) maintains that firms may realize tangible competitive benefits through stakeholder integration. In this particular view on corporate strategy, interorganizational linkages (including those with non-economic stakeholders) are seen as the principal carriers of competitive advantages. In contrast, the resource-based view on strategy holds that the capabilities of *individual* or *solitary* firms serve as sources of sustained competitive advantage (Dierickx & Cool, 1989; Mahoney & Pandian, 1992; Rumelt, 1984, 1987; Wernerfelt, 1984). In this perspective, the firm is seen as a repository of knowledge stocks that are accumulated in a firm-specific or path-dependent manner (Eisenhardt & Martin, 2000; Foss, 1996; Teece, Pisano, & Shuen, 1997). Therefore, the resource-based view provides a firm-specific perspective wherein the tangible and intangible resources that are unique to a firm are regarded as the sources of competitive advantage (Yeoh & Roth, 1999). A firm is said to have a sustained competitive advantage when it is implementing a strategy that creates superior value that is not simultaneously being implemented by competitors, and when these other firms are unable to duplicate the benefits of this strategy (Barney, 1991).

The resource-based view is an approach that has been developed within the field of organizational economics (Barney, 1986; Conner, 1991; Hirshleifer, 1980; Wernerfelt, 1984, 1989). Consequentially, it is a theory that centers on economic efficiency and that explains differential performance by pointing at sustainable efficiency differences among firms (Barney, 1991). Peteraf (1993) has summarized the conceptual model underlying the resource-based view in four theoretical conditions that she calls the “cornerstones of competitive advantage.” These cornerstones are: (1) heterogeneity; (2) *ex post* limits to competition; (3) imperfect mobility; and (4) *ex ante* limits to competition.

1. *Heterogeneity*: A basic assumption of resource-based work is that it is reasonable to expect that the resource bundles and capabilities underlying production are heterogeneous across firms (Barney, 1991; Barney & Hoskisson, 1989; Winter, 1995, 2000). One could describe such bundles and capabilities as possessing intrinsically differential levels of productive efficiency. Some capabilities are superior to others in the sense that they facilitate the firms possessing them to become more innovative (Yeoh & Roth, 1999) or establish better relationships with key constituencies (Sharma & Vredenburg, 1998). Observable heterogeneity across firms may point at the presence of superior productive factors which are limited in supply (Peteraf, 1993). They may be fixed factors that cannot be expanded, such as real estate locations or non-renewable natural resources. More often they are quasi-fixed, meaning that their supply can be expanded, but that the rate of expansion is inherently constrained (Dierickx & Cool, 1989). They are also scarce in the sense that they are insufficient to satisfy the demand for their services entirely. Thus, inferior resources are brought into production as well, allowing the firms owning the better resources to earn Ricardian rents (e.g., by reaping premium prices for their products [Amit & Schoemaker, 1993; Rumelt, 1987]).
2. *Ex post limits to competition*: Sustained competitive advantage requires that the condition of heterogeneity be preserved. If the heterogeneity is a short-lived phenomenon, the rents will likewise be fleeting (Peteraf, 1993). The preservation of rents therefore requires *ex post* limits to competition – forces that limit the competition for rents that are the result of a firm's unique resource endowments. Rumelt (1984) has used the term "isolating mechanisms" to describe phenomena which protect individual firms from imitation, and which therefore preserve the firms' competitive positions. These mechanisms include, but are not limited to, patents and property rights, quasi-rights in the sense of time-lags, and information asymmetries (Rumelt, 1987). Another isolating mechanism is causal ambiguity (Lippman & Rumelt, 1982; Mosakowski, 1997; Reed & DeFillippi, 1990), which refers to uncertainty regarding the causes of efficiency differences across firms. Causal ambiguity prevents prospective imitators from knowing what to imitate exactly. Furthermore, Dierickx and Cool (1989) argue that the imitability of specific assets critically depends upon the process through which they were accumulated. Process characteristics such as time decompression diseconomies and the interconnectedness of asset stocks serve to impede imitation.
3. *Imperfect mobility*: In general, firms cannot expect to obtain sustained competitive advantage when strategic resources are highly mobile (Barney, McWilliams, & Turk, 1989). If firm resources are perfectly mobile, then any resource that allows firms to implement a potentially valuable strategy can easily be acquired by potential entrants (Barney, 1991). Therefore, only immobile resources (the kind that cannot be traded) can be a source of

sustained competitive advantage, because they remain bound to the firm and available for use over an extended period of time (Dierickx & Cool, 1989; Peteraf, 1993). Resources are imperfectly mobile to the extent that they are more valuable within the firm that currently uses them than they would be in any other use. Cospecialized assets (Teece, 1986) provide a case in point. These are assets that must necessarily be used in conjunction with one another or which are more valuable when used together. These resources are largely immobile because selling them by splitting them up would largely destroy their economic value. Switching costs (Montgomery & Wernerfelt, 1988) are another example. The firm-specific investments that they represent may be regarded as a sunk cost inhibiting a factor's exit from the firm.

4. *Ex ante limits to competition*: Most resources for implementing strategies must be acquired from a firm's environment at some point in a firm's history (Pfeffer & Salancik, 1978; Hannan & Freeman, 1977). When firms that try to acquire such resources and firms who currently own them have exactly the same, perfectly accurate expectations about the future value of these resources, acquiring firms can only hope for normal returns (Barney, 1986). Unless there is a difference between the *ex post* value of certain resources and the *ex ante* cost of acquiring them, entrepreneurial rents are zero (Rumelt, 1987). However, strategic factor markets are often characterized by imperfections (Barney, 1991; Dierickx & Cool, 1989). The various firms in a market commonly have different expectations about the future value of any given strategy. These differences reflect the *ex ante* uncertainty in the competitive environment, as well as the bounded rationality of human decision makers (Simon, 1998). Firms can therefore generate above normal returns for two reasons. First, their expectations concerning the value of particular resources may be more accurate than those of competitors, because they successfully analyze both their competitive environments and the skills and capabilities they already control (Aharoni, 1993). Second, because environmental analysis and strategic introspection cannot reduce competitive uncertainty to zero, organizations may also acquire valuable resources without knowing their exact value in advance, in which case above normal returns must be attributed to good fortune (Barney, 1986).

Issues management capabilities are paradigmatic examples of valuable organizational resources, because organizations accumulate them through path-dependent processes of interaction with multiple stakeholder groups. Because every organization is characterized by a unique network of stakeholders (Rowley, 1997), the capabilities that a company may build as a result of its issues management activities are likely to be heterogeneous vis-à-vis those of its competitors. This heterogeneity is in itself a sufficient condition for explaining the emergence of some firms realizing above normal returns in an industry (cf. Hypothesis 3a & Figure 3.1). Furthermore, *ex post* limits to competition and

conditions stimulating imperfect mobility seem to be in place, because resources that are accumulated through idiosyncratic interactions with stakeholders are not readily mimicked or transferred. Finally, and somewhat ironically, issues management capabilities are highly likely to be protected by *ex ante* limits to competition. After all, organizations can only build such valuable capabilities if they are exposed to threatening strategic issues. Organizations that do possess well-developed issues management capabilities are therefore either mavericks who have exposed themselves to risks voluntarily or survivors who have successfully fended off threatening issues. Since issues management capabilities are imperfectly mobile, and since they are protected by *ex ante* and *ex post* barriers to competition, they may be expected to yield competitive benefits that can be sustained over time (cf. Hypothesis 3b & Figure 3.1).

Hypothesis 3a. The degree to which a firm is involved with capability development activities will be positively associated with the extent to which it is able to realize economic benefits.

Hypothesis 3b. The degree to which a firm is involved with capability development activities will be positively associated with the extent to which it is able to realize strategic benefits.

3.4.6 Explaining the relationships (IV): Intangible performance implications of capability development

The resource-based view, as introduced in paragraph 3.4.5, maintains that firms can improve the more tangible aspects of their performance through the development of competitively valuable capabilities. The logic underlying this view is that organizations can extract surplus profits from the market (i.e., Ricardian rents [Amit & Schoemaker, 1993; Peteraf, 1993]) if they succeed in developing capabilities which allow them to produce better products and deliver better services than their direct competitors. Through their direct experiences (in the case of experience goods), through corporate communication campaigns, or due to word-of-mouth, consumers and business to business customers will eventually recognize the desired properties of the company's offerings, and reward the firm for its capability building efforts by paying premium prices (Kay, 1993; Hamel & Prahalad, 1994).

There are good reasons to believe, however, that the value-adding capacity of organizational capabilities is not limited to the realm of tangible benefits, but that they can also stimulate the development of more intangible gains. Capability building adds more favorable dimensions to corporate reputations through the development of what is sometimes called competence trust (Barber, 1983; Nootboom, 1998). When external parties observe the

development or presence of competitively valuable capabilities within a firm, their estimations of the level of competence of this particular firm will rise. They will then, for example, expect it to produce more innovative and more reliable products, and to use cleaner and less wasteful production technologies. As a consequence, the reputation of this particular firm will rise in their perception. Four specific outcomes of the process of developing competitively valuable capabilities which stimulate the development of more favorable reputations will presently be discussed, notably: (1) third-party endorsement; (2) a reduction in the level of activism of non-governmental organizations; (3) a reduction in the amount of accidents and lawsuits; and (4) an increase in the level of more favorable customer experiences.

1. *Third-party endorsement*: The notion that organizations will be rewarded for displaying behavior which is in line with externally held beliefs and expectations is a ubiquitous theme in organizational theory (Ashforth & Gibbs, 1990; Lipskey, 1968; Zald, 1978). More favorable reputations will typically obtain when internal and external stakeholders endorse and support an organization's activities (Elsbach & Sutton, 1992). The development of valuable organizational capabilities, which demonstrate the competence of an organization in the eyes of both internal and external beholders, is one of the most important factors leading to such endorsement. Internal endorsement typically derives from the parent company of a firm (Olins, 1989, van Riel, 1994, 1996), whereas external endorsement stems from particular segments of society (Pfeffer & Salancik, 1978). Parent companies can be expected to be more willing to put the valued company name at risk by endorsing an individual business unit if they highly trust its competence because of demonstrated skills in the production and delivery of high-quality services. Likewise, societal actors are more willing to endorse a particular organization if they know from experience that it produces valued outputs (Dowling & Pfeffer, 1975).
2. *NGO activism*: Organizational managers engage in many activities that may be viewed as symbolic in an attempt to build and preserve favorable internal and external images (Pfeffer, 1981; Schlenker, 1980). One of the greatest threats to the favorability of such carefully construed organizational images is activism on behalf of non-governmental organizations questioning the legitimacy of the organization's goals and purposes (Elsbach, 1994; Marcus & Goodman, 1991). The reputation of an organization is likely to incur severe damage if activist groups succeed in finding societal audiences who are willing to listen to their accusations. The development of valuable capabilities is one of the most important instruments under the control of organizational managers to prevent the perilous impact of stakeholder activism. Organizations are likely to reduce the level of activism in their task environments if they succeed at building capabilities which effectively improve the efficiency of their

operations while minimizing the negative impact of the organization on its social and natural environments (Russo & Fouts, 1997).

3. *Accidents and lawsuits*: Since corporate reputation is often recognized as a critical feature of organizations (Barney, 1991; McGuire, Sundgren, & Schneeweis, 1988), managers devote considerable resources to the task of reputation management (Carter & Dukerich, 1998; Fombrun, 1996). It is therefore an unwelcome surprise for every organization to see its reputation being jeopardized by critical events such as corporate accidents and lawsuits (Perrow, 1984). The threat of unwelcome publicity urges managers to make simultaneous investments in corporate reputation and competitively valuable capabilities. This is because organizations characterized by highly efficacious production systems are less likely to be confronted with corporate accidents and lawsuits because of product failure. Such high-reliability organizations (Weick, 1987) are therefore in a better position than competitors with less developed organizational capabilities to safeguard their investments in reputation building.
4. *Favorable customer experiences*: Following Fombrun & van Riel (1997: 10), I previously defined corporate reputation as “a collective representation of a firm’s past actions and results that describes the firm’s ability to deliver valued outcomes to multiple stakeholders.” Stakeholder theory suggests, however, that some stakeholders matter more than others, and that stakeholder prioritization is an important management task (Frooman, 1999; Mitchell, Agle, & Wood, 1997; Rowley, 1997). Empirical research in the stakeholder tradition has shown that especially customers are often regarded as an important outside constituency by top-level organizational managers (Heugens, Kaptein, & van Oosterhout, 2001; Agle, Mitchell, & Sonnenfeld, 1999). A ubiquitous insight, which can be found in both the marketing and strategic management literatures, is that organizations can only gain the support of their customers if they produce desired products of high quality (Kay 1993). Organizations which invest in valuable capabilities enabling them to generate favorable customer experiences by offering them the products that they want can therefore expect to gain a more positive reputation in the eyes of their most important stakeholder group (Day, 1994).

In sum, organizational investments in the development of competitively valuable capabilities are likely to result in more efficacious production and service delivery systems. To the extent that these capabilities are observable to outside constituencies (through an increase in the quality of experience goods, for example), the level of competence trust in the organization of these constituencies will increase. Higher levels of third-party endorsement and favorable customer experiences combined with lower degrees of NGO activism and accidents and lawsuits will have a favorable effect on the general reputation of a company (cf. Hypothesis 4a & Figure 3.1). The same effect may be observed for the issue-

specific reputations of an organization. Once again applied to the issue at hand, if an organization manages to develop a set of competitively valuable capabilities which allow it to handle modern biotechnology more safely and with more efficacy than its direct competitors, its issue-specific reputation for the way it uses the new technology will improve (cf. Hypothesis 4b & Figure 3.1).

Hypothesis 4a. The degree to which a firm is involved with capability development activities will be positively associated with the extent to which it is able to realize a favorable corporate reputation.

Hypothesis 4b. The degree to which a firm is involved with capability development activities will be positively associated with the extent to which it is able to realize a favorable issue-specific reputation.

3.5 CONCLUSION

In this chapter I reviewed the two principal research streams in contemporary issues management - one stream rooted in corporate communication/public affairs, and the other in organizational behavior. Scholars brought up in the corporate communication/public affairs tradition primarily focus on the processes by which organizations anticipate, monitor, and manage their relations with outside constituencies. Alternatively, most contributors with an interest in issues management that stem from the organizational behavior field are principally concerned with the intraorganizational processes of perceiving, interpreting, and learning from strategic issues. In many important respects, these two research streams are each other's mirror images. It is certainly not the case that corporate communication/public affairs scholars and organizational behavior theorists with an interest in issues management focus on different empirical phenomena. Both communities focus on the process by which organizations observe, interpret, and respond to strategic issues. The real difference between the two groups is that their interests in this single empirical phenomenon differ. Whereas corporate communication/public affairs people focus on the impact of organizational conduct on external constituencies, organizational behaviorists are interested more in the reaction of organization members to the pressures exerted by outside groups.

For researchers working in the tradition of strategic management, however, this somewhat artificial schism between inside-oriented and outside-oriented approaches is undesirable, because strategic management theories require a simultaneous assessment of the internal consequences of external events and the reactions of external actors to internal decisions. I have therefore introduced an integrative framework of strategic issues management (see Figure 3.1), which attempts to synthesize both the inside-out and outside-in perspectives

on the field. The model links external and internal strategic issues management activities (i.e., stakeholder integration and capability development respectively) to various indicators of tangible corporate performance (i.e., economic and strategic benefits) and intangible corporate performance (i.e., corporate and issue-specific reputation). This framework will further be refined by means of the theory-building case study, which will be reported in the two subsequent chapters of this book. Thereafter, the framework will be tested empirically by means of a large-scale survey study. This latter investigation will be reported in chapters six and seven of the present volume.

Chapter 4

Strategic issues management (I): An outside-in perspective

4.1 INTRODUCTION

In the previous chapter I have introduced an integrative framework of strategic issues management, in which both externally and internally oriented issues management techniques (capability building and stakeholder integration, respectively) were presented.²⁸ Furthermore, the framework has provided a number of theoretical links (in the form of testable research hypotheses) between these techniques and various tangible (i.e., economic and strategic benefits) and intangible (corporate and issue-specific reputation) indicators of performance. This integrative framework represents the conceptual core of this dissertation, and the two aforementioned issues management techniques, in turn, are at the core of this framework. Since the framework is of such pivotal importance to the present endeavor, I have decided to devote this as well as the subsequent chapter to two further conceptual digressions on stakeholder integration and capability development respectively.

The purpose of these two chapters is twofold. First of all, I seek to deepen and strengthen the theoretical insights on actual issues management activities by offering a further conceptualization of these techniques in the form of two analytical typologies. These two typologies not only show that both stakeholder

²⁸ Of course, merely juxtaposing internally and externally oriented issues management techniques does not make a framework truly integrative. A full integration of perspectives requires a simultaneous assessment of how internal factors impact (and are impacted by) external factors, and vice versa. Both the present chapter and the next seek to contribute to the integrative qualities of the framework by means of a systematic analysis of these mutual influences.

integration and capability development may emerge and continue to exist in various alternative forms, but also that each of these forms is (a) connected to a specific set of competitive benefits, and (b) most viable under a certain set of environmental circumstances. Secondly, I will illustrate both of these typologies with evidence from the case study of the issues management practices of the firms in the Dutch fats and oils industry.²⁹ I will start by providing a digression on the externally oriented issues management activity of stakeholder integration³⁰ (Hart, 1995; Sharma and Vredenburg, 1998) in the present chapter, followed by a digression on the internally oriented activity of capability development (Grant, 1996) in the next.

4.2 STAKEHOLDER INTEGRATION MECHANISMS³¹

The view that stakeholder management and beneficial corporate performance go hand-in-hand has now become commonplace in the management literature (Donaldson & Preston, 1995). In the words of Freeman (1999), "if organizations want to be effective, they will pay attention to all and only those relationships that can affect or be affected by the achievement of the

29 The role of the empirical findings presented in this and the subsequent chapter is to illustrate the conceptual distinctions I make and to provide support for the theory-building process. As such, these findings contribute to the further refinement of the framework presented in the third chapter of this text. My efforts to actually test the conceptual framework are deliberately postponed to chapters six and seven of the present volume. Consequently, the role of the empirical materials presented in those chapters (i.e., theory testing) differs significantly from the role of the presently presented materials (i.e., illustration and theory development).

30 The basic postulates of the stakeholder integration view as it will be explained in this book bear a close resemblance to those of the resource dependence perspective (Pfeffer & Salancik, 1978). The premises of the latter view are: (1) the fundamental units of for understanding intercorporate relations are organizations; (2) these organizations are not autonomous but rather are constrained by a network of interdependencies with other organizations; (3) interdependence leads to a situation in which survival and continued success are uncertain; and therefore (4) organizations take actions to manage external interdependencies; and (5) tend to comply with the demands of those organizations in their environment which have relatively more power (Pfeffer, 1987, 1997). The stakeholder integration view accepts these postulates, but makes two addenda: (1) an organization's network of interdependencies is not restricted to other businesses and government, but also consists of non-governmental organizations that have a stake in the organization; and (2) appropriate actions to manage external dependencies not necessarily involve the establishment of structural linkages, but may entail interorganizational learning and problem-solving processes as well.

31 The text of paragraphs 4.2 through 4.4 is based on Heugens, van den Bosch, and van Riel (2001) "Stakeholder integration: Building mutually enforcing relationships," *Business & Society* (2nd review).

organization's purposes" (p. 234). Donaldson and Preston (1995) have labeled the specific branch of stakeholder literature that seeks to establish theoretical connections between such corporate practices and firm performance "instrumental stakeholder theory." Over the last decade, this branch of theory has been inextricably connected to the work of Jones and his colleagues (Hill & Jones, 1992; Jones, 1995; Jones & Wicks, 1999; Quinn & Jones, 1995).

Instrumental theory in general posits that certain outcomes will obtain if certain behaviors are adopted (Jones & Wicks, 1999). Instrumental stakeholder theory in particular holds that "*firms that contract (through their managers) with their stakeholders on the basis of mutual trust and cooperation will have a competitive advantage over firms that do not*" (Jones, 1995, p. 422, emphasis in original). As noted above, this particular strategy of obtaining a competitive advantage through the development of close-knit ties with a broad range of internal and external constituencies has been labeled "stakeholder integration" in the literature (Hart, 1995; Sharma & Vredenburg, 1998). Empirically, however, the phenomenon appears in many different guises. Examples range from employee stock ownership plans (Marens, Wicks, & Huber, 1999) to stakeholder representation on corporations' boards (Luoma & Goodstein, 1999). I suggest two conceptual dimensions to distinguish between these various types: the *locus* ("where?") and the *modus* ("how?") of stakeholder integration.

4.2.1 Locus of stakeholder integration

In their task environments (Dill, 1958), organizations are confronted with a variety of sources of uncertainty and interdependence (Bazerman & Schoorman, 1983; Pfeffer & Salancik, 1978; Thompson, 1967). To handle these problems effectively, organizations are forced to forge links with the critical constituencies in their environment (Bresser & Harl, 1986; Selznick, 1949; Pfeffer, 1972). As Schoorman, Bazerman, and Atkin (1981) observe, "The management of an organization's linkages to financial institutions, suppliers, and customers may be just as crucial to the effectiveness of the total organization as its internal management" (p. 244).

Such linkages may take the form of dyadic relationships between the firm and its most important stakeholders. In Freeman's early work (1984), for example, the stakeholder model is presented as a map in which the firm is the hub of a wheel and stakeholders are positioned at the ends of the wheel's spokes (cf. Frooman, 1999). This conceptualization suffices as long as a firm can isolate its most important stakeholders. Freeman also admitted, however, that a firm's stakeholder environment often consists of "a series of *multilateral* contracts among stakeholders" (Freeman & Evan, 1990, p. 354, emphasis added). In other words, since stakeholder relationships often occur in a network of influences, firms do not always respond to each stakeholder individually, but rather to the interaction of

multiple influences from the stakeholder environment (Rowley, 1997). In sum, I suggest that the *locus* of stakeholder integration can either be the *dyad* (one-on-one relationships between a firm and its stakeholders) or the *network* (multilateral contracts between a firm and its stakeholders).

4.2.2 Modus of stakeholder integration

Edelman (1992) notes that when faced with pressure from external sources, top managers seek to comply in a way that safeguards their own autonomy. One particularly effective way of dealing with outside pressures is the establishment of boundary-spanning *structures* to signal commitment to institutionalized beliefs and represent the organization favorably to valued stakeholders (Aldrich, 1979; Edelman, 1992; Rao & Sivakumar, 1999; Thompson, 1967). As Meyer and Rowan (1991) remark, adherence to such institutionally prescribed structures conveys the message that an organization “is acting on collectively valued purposes in a proper and adequate manner” (p. 50). External stakeholders who observe these structures may consequently see the organization as valuable and worthy of support (Suchman, 1995).

Not all strategies for managing outside dependence rely on structural adaptations, however (Pfeffer, 1972; Oliver, 1991). Organizations may also respond on a more informal (Selznick, 1949) basis to the pressure of specific centers of power within a community. External stakeholders may, for example, be offered the opportunity to informally influence a corporation’s policy as a recognition of the resources they command (Frooman, 1999; Pfeffer & Salancik, 1978). In particular, collaboration is often mentioned as an effective process for managing external dependencies and for producing solutions to boundary-spanning problems that none of the parties involved could achieve working independently (Gray, 1989). In this *modus* of stakeholder integration, the emphasis is not on a particular structural adaptation, but on interaction processes with external stakeholders. Following Pettigrew and Whipp (1991), I label the latter approach “processual.” In sum, the *modus* (or *modus operandi*) of stakeholder integration can either be *structural* (the creation of boundary-spanning structures) or *processual* (the development of informal means for managing outside pressure). Using the locus and modus dimensions, one can construct a two-by-two typology of stakeholder integration forms (see Figure 4.1 on page 83).

Figure 4.1: Typology of stakeholder integration mechanisms

Locus dimension	Dyad	Network
Modus dimension		
Structural	Co-optation	Buffering
Processual	Mutual learning	Meta-problem solving

4.2.3 Four types of stakeholder integration

1. *Buffering*: Organizations in general are motivated to secure enough stability and determinateness to preserve the efficiency and effectiveness of their primary transformation processes (Scott, 1998). The need for certainty induces many organizations to adopt *buffering* strategies, aimed at sealing off their core transformation processes from environmental influences (Thompson, 1967; van den Bosch & van Riel, 1998). As a stakeholder integration mechanism, buffering comes down to forging close links with representative organizations in order to avoid having to deal with many dispersed, anonymous, and therefore less controllable, individual stakeholders. Rowley (1997) shows that organizations facing many of these so-called *indirect* stakeholders are in a vulnerable position, because they are unable to influence the information exchange processes in the stakeholder network. By developing boundary-spanning *structures* with representatives of these indirect stakeholders, they are able to buffer themselves from these *network-level* influences. These structures enable them to preserve some autonomy regarding their operational structure (Meyer & Rowan, 1991).
2. *Co-optation*: Organizations must also deal with *direct* stakeholders (Rowley, 1997), who differ in their degree of perceived salience (Agle, Mitchell, & Sonnenfeld, 1999; Mitchell, Agle, & Wood, 1997). With respect to the most salient of a firm's stakeholders, buffering is often not an option, if only because some stakeholders actually contribute to a firm's technical core directly through investments in co-specialized assets (Dyer & Singh, 1998;

- Teece, 1987). Organizations may manage the uncertainty that results from such interdependencies through *co-optation*, which has been defined by Selznick (1949) as “the process of absorbing new elements into the leadership or policy-determining structure of an organization as a means of averting threats to its stability or existence” (p. 13, emphasis in original). According to Pfeffer (1972), co-optation is a partial absorption technique that is likely to be utilized when total absorption is forbidden by law, impossible due to resource constraints, or when partial inclusion is a sufficient condition for resolving the organization’s problems. Co-optation is therefore a *dyadic* stakeholder integration technique, which takes the form of adaptations to a firm’s leadership *structure* in order to obtain the consent of external stakeholders or to use them as messengers that transmit information of mutual interest (Galaskiewicz, 1985; Pennings, 1981).
3. *Mutual learning*: Not all interdependencies between organizations and their stakeholders need to be managed by means of structural adaptations such as buffering or co-optation (Pfeffer & Nowak, 1976). Organizations often face *symbiotic* interdependencies with other organizations – symbiosis being defined by Hawley (1950) as “a mutual dependence between unlike organizations” (p. 36) – that are best managed through processual adaptations. In particular, *mutual learning* is often noted as an especially appropriate capitalization strategy (March & Simon, 1958; Powell, Koput, & Smith-Doerr, 1996). Central to the mutual learning process is the notion of reframing or redefining the symbiotic interdependence between organization and stakeholder (Gray, 1989). Individual organizations are likely to bring their own feasibility preoccupations to the table, which unnecessarily limits the range of cooperative options to a restricted set. Through *dyadic* collaborative *processes*, however, symbiotically interdependent parties may discover each other’s feasibility preoccupations and find a solution that incorporates at least some of the interests of each of the stakeholders involved (Wood & Gray, 1991).
 4. *Meta-problem solving*: Symbiotic interdependencies are not necessarily restricted to the dyadic level, but may extend to the network level (Westley & Vredenburg, 1991, 1997). This happens, for example, when a number of organizations face a joint problem domain that is ill-defined, a problem domain in which relevant stakeholders are not defined *a priori*, or a problem domain in which there are clear disparities in terms of power or expertise among the parties involved (Gray, 1989). Such problem domains have been labeled “meta-problems” in the literature (Chevalier, 1966). Because meta-problems transcend the boundaries of many individual organizations, they must be addressed cooperatively by combining multiple perspectives and resources for their resolution (Emery & Trist, 1965). Alternatives like incremental or unilateral efforts to deal with such boundary-spanning problems typically produce less than satisfactory solutions (Gray, 1989). Effective *meta-problem solving* therefore consists of collaborative *processes*

operative at the *network-level* that help to integrate organizations “that may be widely disparate in wealth, power, culture, language, values, interests, and structural characteristics” (Westley & Vredenburg, 1991, p. 67).

In the remainder of this chapter I will (a) juxtapose these four conceptual types of stakeholder integration with evidence from the case study of the Dutch fats and oils industry’s responses to the introduction of genetically modified ingredients (cf. paragraph 4.3), and (b) explore the linkages between these stakeholder integration types and various kinds of competitive benefits (cf. paragraph 4.4). I will finish this chapter with some brief concluding remarks.

4.3 STAKEHOLDER INTEGRATION IN THE NETHERLANDS

During the period I investigated (1992 - 2000), the Dutch fats and oils industry tried to deal with the issue of genetic modification collectively by establishing three consecutive interorganizational platforms that were intended to forge close relationships with their most salient stakeholders. In order of initiation, these platforms were labeled *Informal Consultations on Biotechnology* (1992-1995), *Task Force of the Product Board for Margarine, Fats, and Oils* (1995-1998), and *Project Team Biotechnology Product Boards* (1998-2000). Following the example of Dutton and Dukerich (1991), I construct an event history of how these three platforms evolved. I describe them in terms of key events, attributes of the arrangement, and major responses adopted by the participating organizations.

4.3.1 Informal Consultations on Biotechnology

Key events: In response to the rapid scientific advancements in the field of biotechnology, the European Union adopted two major directives about biotechnology in 1990 (90/220/EEC and 90/221/EEC). The first of these focussed on the deliberate release of transgenics into the natural environment, and the second on their use in contained environments such as laboratories and factories. These two directives created additional constraints for European companies working in the biotechnology field. In contrast, US-based companies like Monsanto and DuPont were less hampered by regulations, because the US Food and Drug Administration (FDA) decided in 1992 that altered foods had to meet the same standards as all other foods, but no new ones.

Attributes of the arrangement: In response to the new EU regulations, a number of the key food- and ingredients-producing companies in the Netherlands (e.g., Gist-Brocades, Numico, Unilever, and Sara Lee) initiated a collaborative platform called “*Informal Consultations on Biotechnology*” in 1992. This collective effort emerged out of the awareness that this particular issue permeated and

transcended the boundaries of each individual firm in the industry. A quote taken from a speech on the impact of biotechnology by Morris Tabaksblat, at the time the chairperson of Unilever, illustrates this awareness:

Whether you are buyers, traders, crushers, regulators, or [working] in another sector of the foods business, you represent an enormous range of products and sectors. It's impressive to see how diverse and yet how closely interdependent these different areas are. At the end of the day, however, we all share the same ultimate goal - serving the consumer better. (*source*: Archives of the Product Board for Margarine, Fats, and Oils)

The membership of this informal platform was not restricted to business firms. The initiating organizations invited a number of NGOs to participate in the consultations. Organizations like the Consumer's League and Nature & Environment accepted the invitation.

Major responses: The purpose of the consultations was twofold. First, the participants wanted to collect and share information of mutual interest. Second, the meetings were intended to initiate an open dialogue between industry representatives and members of NGOs. Since the meetings started well over four years before the actual introduction of genetically modified ingredients in the Netherlands occurred, they allowed for the development of communicative relationships between the parties long before the public debate about biotechnology got heated.

4.3.2 Task Force

Key events: Monsanto's Roundup Ready soybeans (the first genetically modified ingredient to be exported to Europe) received FDA and USDA (United States Department of Agriculture) nonregulatory status in 1994. This implied that the new variety could be grown and sold like any other bean. Monsanto spent 1995 on producing seeds for commercialization, and in 1996 the first seeds found their way to US farmers. Approximately 2% of that year's crop consisted of the new beans.

Attributes of the arrangement: Industry members realized that the informal consultations were no longer the appropriate vehicle for managing the issue, because the platform lacked staff, budget, and a clear mandate. To fill the void, they appointed the Product Board for Margarine, Fats, and Oils (a semi-public organization representing the interests of the food industry) as their official spokesperson in the fall of 1995. The Board employs a permanent staff of around 30 people, and is endowed with sufficient budget (mostly through the compulsory contributions of industry members). It was decided that the Board would initiate a

Task Force to maintain close relationships with salient stakeholders during the introduction period. When I asked one of Unilever's managers why the company conceded part of its autonomy in biotechnology affairs to the Board, he provided the following statement:³²

I: Why did the industry appoint the Product Board as the central actor in this issue?

R12: If you are serious about providing customer service, you need to use a central information point. A worried mother does not want to dial twenty different telephone numbers. From a consumer's point of view, centralization of responsibilities is the best alternative.

Major responses: The Task Force used a threefold strategy. First, it recognized the salience of the media in this issue, and started organizing press workshops to provide the journalists that reported on the topic with factually correct information. Second, it initiated a national information campaign aimed at the general public featuring toll-free telephone lines and brochures with background information. Third, it arranged a number of informal meetings for industry representatives and NGO's in which the parties could nurture the ties that they developed in the informal consultations.

4.3.3 Project Team

Key events: Novartis' Bt-corn, a second modified crop after soy, was introduced on the Dutch Market in 1998.

Attributes of the arrangement: Corn does not belong to the jurisdiction of the Product Board for Margarine, Fats, and Oils, because the crop is primarily used for animal feed and for the production of starch, not for the extrusion of corn oil (which is only a marginal product). When I asked the secretary of the Board what impact the new introduction would have on the Board itself, he provided me with the following insight:

I: What does [the introduction of Bt-corn] imply for this organization?

R01: Currently, the newly introduced crops transcend the level of responsibility of the individual Product Boards. At the same time, consumers do not distinguish between the various introductions.

³² 1 In the quotations, the number following "R" indicates the particular respondent who was speaking. The numbers correspond with Table 2.3. I will also use this technique in the subsequent chapter.

This is why we intend to coordinate more of our efforts with the other Boards.

Soon thereafter, the Board established more formal linkages with the Boards that are responsible for the introduction of Bt-corn, namely, the Product Board for Animal Feed and the Product Board for Grains, Seeds, and Legumes. Jointly they established the Project Team Biotechnology Product Boards.

Major responses: The Project Team “absorbed” all the capabilities, resources, and contacts of the Task Force, and added additional funds and staff. It is therefore not surprising that the methods of the project team for dealing with the issue reflect those of the Task Force. The Team composes “fact packs” of every new introduction which are distributed among the affected stakeholders, and this contributes to an open dialogue between scientists, the national government, and NGOs. Also, the initiative of press workshops has been continued, and the Project Team has started a public information campaign about Bt-corn, featuring a toll-free telephone line and free brochures.

4.4 COMPETITIVE BENEFITS

The three platforms I have described above can be understood as stakeholder integration attempts, which ranged from highly process-oriented initiatives (the Informal Consultations on Biotechnology) to very formal structural solutions (the Project Team Biotechnology Product Boards). Furthermore, some of these integration efforts were aimed at specific actors (such as the attempts to involve the Consumers’ League in the Informal Consultations), whereas others were oriented towards a network of influences (for example, the attempts of the industry to inform consumers indirectly through Consumer & Biotechnology). In this section I will link these various forms to competitive benefits that firms in the Dutch food industry experienced as a result of their stakeholder integration attempts.

4.4.1 Cognitive legitimacy

I previously indicated that buffering entails the establishment of tight linkages with representative organizations in order to avoid having to deal with widely dispersed individual stakeholders. My case data contain several examples of such buffering attempts. For example, a number of industry officials stressed the central role that consumer representative organizations play in this respect. Therefore, many of the stakeholder integration attempts at the network level were oriented towards the establishment of linkages with consumer organizations, and some of them actually turned out to be successful. Consumer & Biotechnology, a

subsidiary of the powerful official Consumer's League, at one point decided to join the informal consultations. When I asked one of their policy directors why, he gave the following explanation:

- I:** By participating in the informal consultations, Consumer & Biotechnology strongly signals its commitment to biotechnology to the public at large. Why has your organization chosen to join the platform?
- R10:** Because we do not think that informing the public is a task for the national government. And also because we think that the parties in the private sector are a little too eager to provide only that information that suits their interests best. Therefore, we have decided, in conjunction with the food industry, to inform the public at large for them. In return, we receive early access to new information.

The endorsement of such third parties is critical, because affirmative backing may transform the organization's position into an intersubjective "given" that is no longer open for discussion (Suchman, 1995). The organization then acquires a state of "taken-for-grantedness" (Jepperson, 1991; Zucker, 1983) that Aldrich and Fiol (1994) describe as cognitive legitimacy. As Aldrich (1999: 230) explains, "The highest form of cognitive legitimacy exists when a product, process, or service is accepted as part of the sociocultural and organizational landscape." In other words, my case study findings show that the creation of stakeholder integration structures at the network level (i.e., buffering) leads to the establishment of cognitive legitimacy on behalf of the organization as perceived by its stakeholders.

4.4.2 Sociopolitical legitimacy

Alternatively, organizations may seek to establish direct linkages with stakeholders that they cannot or should not buffer from their technical cores. The Dutch food industry, for example, pro-actively tried to establish structural linkages with the national government in order to preserve its autonomy in biotechnology-related affairs. When I asked a high-placed official working for the Ministry of Economic Affairs for his opinion with respect to these matters, he provided the following account:

- I:** The industry has clearly opted for self-regulation in this issue. Why hasn't the national government demanded to receive a larger say?

R07: We have decided not to intervene in the process because the industry informs us well. We often meet one another in a range of different settings, such as the Communicative Consultations on Biotechnology and the Regular Consultations of the Food and Drug Administration. That is how we keep a finger on the pulse.

By allowing government officials to exert (some) informal influence over their biotechnology policies, the Dutch food producing organizations displayed their “willingness to relinquish some measure of authority to the affected audience” (Suchman, 1995, p. 578). Such co-optation practices turn audiences into constituencies (Wood, 1991), providing the co-opting organizations with what Aldrich and Fiol (1994) call *sociopolitical legitimacy*. Aldrich (1999: 230) has defined this form of legitimacy as “the acceptance by key stakeholders (...) of a [product] as appropriate and right.” Therefore, I propose that the creation of stakeholder integration structures at the dyadic level (i.e., co-optation) leads to the establishment of sociopolitical legitimacy on behalf of the organization as perceived by its stakeholders.

4.4.3 Symbiotic learning effects

Structural forms of stakeholder integration, however, are not the only ones that can lead to competitive benefits. More informal, collaborative processes yield other but potentially equally valuable results. Unilever, for example, was one of the companies which recognized early in the introduction process of modern biotechnology that the press would turn out to be a critical constituency. The company managed to fine-tune its press relations by listening to critical journalists and by changing its media policy accordingly. I discovered this when I spoke to a journalist from one of the leading Dutch newspapers:

I: Why do you have such high regards for the people at Unilever?

R21: They [have learned to] understand my profession. What matters to me is that I have a personal contact person inside the organization. I don't want to speak to some kind of Public Relations official, because they are only a burden. Unilever lets me speak to people that are of interest to me.

This example illustrates an important characteristic of collaborative relationships, notably that groups that have differing interests at the start of a collaborative venture may redefine and potentially align their interests as the collaboration proceeds (Gray, 1989; Wood & Gray, 1991). I attribute this effect to symbiotic learning, the discovery of mutual feasibility preoccupations by

interdependent but unlike organizations (cf. Hawley, 1950). I therefore conclude that stakeholder integration processes at the dyadic level (i.e., mutual learning) may result in symbiotic learning effects between organizations and their stakeholders.

4.4.4 Collective learning effects

Furthermore, the present study shows that firms can capitalize on network-level interdependencies by combining multiple perspectives that are not found readily under a single roof (Powell, 1998). When I asked the secretary of the Product Board for Margarine, Fats, and Oils what the firms his organization represents had actually gained from their involvement with the issue, he responded as follows:

- I:** What has the industry as a whole learned from the introduction of modern biotechnology?
- R01:** That we can only succeed in keeping this issue at manageable proportions if we, on the one hand, maintain our good relationships with what we call 'bridgeable partners.' On the other, we must continue to inform the 'unbridgeables,' those stakeholders that are against biotechnology and that do not want to compromise. Maintaining our dialogue with them, and supplying them with information, are key.

Insights like these result from what is sometimes called "the constructive management of differences" (Gray, 1989; Pasquero, 1991). Gray (1989) notes that there can be no positive symbiosis between parties in the absence of differences in terms of interest and insight between them. It is precisely the *collective learning* that results from the exploration of different viewpoints which enables collaborating organizations "to achieve desired ends that no single organization can achieve acting unilaterally" (Wood & Gray, 1991, p. 140). I therefore posit that stakeholder integration processes at the network level (i.e., meta-problem solving) may result in collective learning effects between organizations and their stakeholders.

This assertion concerning collective learning effects completes my effort at linking the four conceptual types of stakeholder integration to an equal number of distinct, empirically observable competitive benefits that may potentially enhance the market performance of commercial organizations. These benefits are once again linked to the modus and locus dimensions of stakeholder integration in Figure 4.2.

Figure 4.2: Benefits of stakeholder integration

Locus dimension	Dyad	Network
Modus dimension		
Structural	Sociopolitical Legitimacy	Cognitive Legitimacy
Processual	Symbiotic Learning Effects	Collective Learning Effects

4.5 CONCLUSION

In the present chapter I provided a digression on the first of two issues management activities that I uncovered with the help of my case study of the Dutch fats and oils industry. As I explained in the introduction to this chapter, I have included this digression to (a) deepen and strengthen the insights offered by the present volume on actual issues management activities, and (b) illustrate these insights with case study evidence. Through my case study research I discovered that the companies in the Dutch fats and oils industry tried to deal with the regulatory pressures and the public antagonism against the introduction of modern biotechnology collectively by creating three so-called stakeholder integration platforms. These platforms served to facilitate at least four conceptually distinct types of stakeholder integration.

First of all, the case study revealed that organizations sometimes secure stability and determinateness in their environments by buffering so-called indirect stakeholder from their technical cores (Thompson, 1967). Secondly, I found that organizations can deal with their most powerful external constituencies by co-opting them into the decision-making structure of the enterprise (Selznick, 1949). Thirdly, the study also revealed that organizations might deal with symbiotic dependencies by discovering their mutual feasibility preoccupations through processes of mutual learning (March & Simon, 1958). Finally, it was shown that business firms sometimes engage in meta-problem solving by combining resources and perspectives held by multiple organizations in an attempt to solve problems that transcend their individual boundaries (Emery & Trist, 1965).

The conceptual and empirical identification of these four stakeholder integration activities both helped to refine and strengthen the conception of an outside-oriented issues management approach, as it was introduced in the third chapter of this text. The present study also showed, however, that companies can pursue internally oriented issues management strategies next to their stakeholder integration attempts. Through these internal issues management activities these organizations may attempt to build dynamic issues management capabilities that they can retain over a longer period of time. This retention effort allows them to continuously apply these capabilities to the issue of genetic modification as it evolves, as well as to other issues in the future. The next chapter is devoted to a digression on this other perspective on strategic issues management.

Chapter 5

Strategic issues management (II): An inside-out perspective

5.1 INTRODUCTION

This chapter, like the previous one, provides a digression on one of the issues management activities constituting the conceptual framework as it was introduced in the third chapter of this text. Chapter four elaborated upon the *outside-in* perspective on issues management, the development of trust-based, cooperative relationships with the outside constituencies of the firm (cf. Hart, 1995; Sharma & Vredenburg, 1998). In contrast, this chapter provides a further analytical refinement as well as empirical illustrations of the *inside-out* perspective on issues management, the organizational accumulation and codification of experiences that derive from actual issues management processes (cf. Grant, 1996). What my case study research uncovered with respect to this second issues management activity was that many of the affected organizations actively tried to learn something positive from their involvement with the genfoods issue. Managers established internal communication platforms in order to disseminate newly acquired insights rapidly throughout their organizations, companies documented their issues management-related experiences in scenarios and manuals, external consultants were hired to reflect upon the introduction process of genetically modified ingredients, and so on and so forth. Since all of these learning and codification efforts were intended to improve upon the relative degree of efficacy with which the organizations involved were able to manage the issue of genetic modification, and since most of these organizations actively sought to retain these newly acquired abilities for subsequent reapplication to other issues, I labeled these processes *capability development*.

5.2 ORGANIZATIONAL ISSUES MANAGEMENT CAPABILITIES³³

Previous research in the issues management field has primarily focused on the development of so-called *early warning systems* (for example, see Ansoff, 1975, 1980; Fahey & Narayanan, 1986; Johnson, 1983), which are aimed at identifying forthcoming developments threatening the firm's reputation. Dutton and Ottensmeyer, for example, describe a strategic issues management system as "one set of organizational procedures, routines, personnel, and processes devoted to perceiving, analyzing, and responding to strategic issues" (1987: 355). The idea behind such systems is that companies should try to identify strategic issues as early as possible, so that they (a) have more time to respond to the issue, and (b) can deal with the event while it is still relatively harmless. For almost every company, however, it is a fact of life that some issues tend to slip through the mazes of the early warning system and may be catapulted into the public arena as full-blown strategic issues. Surprisingly, the issues management literature has paid limited attention to the specific *organizational capabilities* (Grant, 1996; Sanchez & Heene, 1997; Sanchez, Heene, & Thomas, 1996) firms need to develop to respond to such threatening strategic issues.

Organizational capability is defined by Grant as "a firm's ability to perform repeatedly a productive task which relates either directly or indirectly to a firm's capacity for creating value through effecting the transformation of inputs into outputs" (1996: 377). Capabilities like these may be viewed as an idiosyncratic *hierarchy* of accumulated knowledge (Eisenhardt & Martin, 2000; Teece, Pisano, & Shuen, 1997). This hierarchy is not an authority and control-based mechanism for facilitating a bureaucratic division of labor, however, as in the traditional concept of administrative hierarchy (cf. Weber, 1978). Instead, it is a hierarchy of integration in which lower-order knowledge resources are merged into broader, more encompassing knowledge resources as they move up the ranks (see Figure 5.1 on page 97).

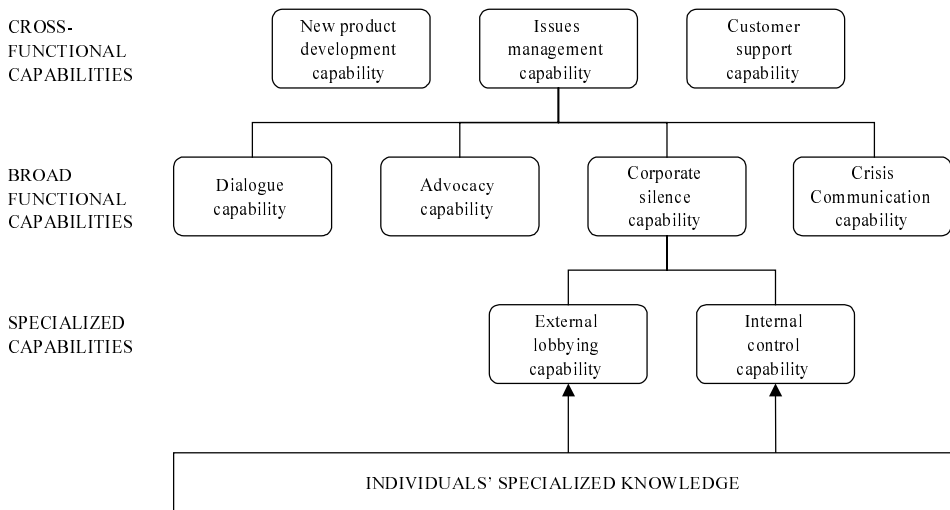
The base of this hierarchy is formed by the specialized knowledge held by individual organizational members. This type of knowledge is most relevant for the continued competitive success of the firm, but the capacity of the human brain for acquiring and storing new knowledge is not unlimited. Simply put, an increase in the depth of human knowledge implies reduction in breadth (and *vice versa*). Therefore, the fundamental role of the firm, as perceived by Grant (1991, 1996) and Conner and Prahalad (1996), is the *integration*³⁴ of this specialized knowledge into

³³ The text of paragraphs 5.2 through 5.4 is based on Heugens, van Riel, and van den Bosch (2001) "Dancing with the devil: Building dynamic issues management capabilities through knowledge integration," Long Range Planning (2nd review).

³⁴ Grant (1996) has forwarded the basic assumptions of the knowledge integration view on capability development. These assumptions are: (1) knowledge is the principal productive resource of the firm; (2) knowledge is acquired by and stored within individuals, often in

organizational capabilities (the integration process itself will be explained in paragraph 5.4.3). At the first level of the hierarchy of knowledge integration are capabilities that deal with specialized tasks. In Figure 5.1, for example, an external lobbying capability and a capability for internal control are put forward as illustrations of the specialized capability concept. One step up in the hierarchy, at the level of broad functional capabilities, these functional issues management skills merge into a corporate silence capability (cf. paragraph 5.2.3). In turn, several of these broad functional issues management capabilities dissolve into a cross-functional issues management capability. In sum, the higher the position of a specific capability in the hierarchy, the higher the span of specialized knowledge it integrates. Consequently, at the higher levels of integration, the organizational capabilities require wide-ranging cross-functional integration.

Figure 5.1: The organizational capabilities hierarchy†



† Source: Adapted from Grant (1996)

The basic premise of the present chapter is that organizations may not only develop capabilities for, say, new product development and customer support (as is commonly assumed in the strategic management literature), but also for issues management. At the broadest possible level (that of the cross-functional capabilities), these skills take the form of systematic procedures for early identification and fast response to important events both inside and outside an enterprise (Ansoff, 1980). Following Grant's knowledge integration approach, I assume that such cross-functional capabilities are comprised of many lower-order

highly specialized form; (3) production of products and services requires a wide array of knowledge; hence, (4) the fundamental role of the firm is the integration of individuals' specialist knowledge.

capabilities (the most comprehensive of which are of course the broad functional capabilities). I distinguish between four specific types of broad functional issues management capabilities in this chapter, notably: *dialogue capabilities*, *advocacy capabilities*, *corporate silence capabilities*, and *crisis communication capabilities*.³⁵

I root this distinction in two conceptual dimensions: The perceived amount of *allowed response time* an organization enjoys (high or low [cf. paragraph 5.2.1]), and the perceived degree of *activism of external publics* (high or low [cf. paragraph 5.2.2]). It should be noted that these dimensions are not to be understood as aspects of the broad functional capabilities themselves. Rather, they should be interpreted as dimensions of the task environment in which the organization is operative (Dill, 1958). In combination, these two dimensions produce four distinct environmental contingencies (i.e., [1] high allowed response time, high public activism, [2] high allowed response time, low public activism, [3] low allowed response time, high public activism, and [4] low allowed response time, low public activism), each of which is argued to be most favorable to one of the four broad functional capabilities which will be discussed below.

5.2.1 Allowed response time

The room to maneuver that managers experience in exercising their issues management capabilities is critically dependent on the response time that they have available. When the amount of allowed response time is sufficiently high, managers have the opportunity to communicate with critical stakeholders. They may do so in the form of a dialogue, which enables them to identify the core values and beliefs of their external constituencies and to incorporate these opinions into the policy-determining structure of the organization (Edelman, 1992; Pfeffer, 1972; Selznick, 1949). Alternatively, managers may try to convince external stakeholders by means of issue advertising, an asymmetrical form of communication aimed at persuading rather than informing organizational publics (Arrington & Sawaya, 1984, Grunig & Hunt, 1984).

Yet when the amount of response time that critical stakeholders allow an organization is low (in case of an immediate crisis, for example), organizations cannot rely on co-optation or issue advertising, because the amount of information the organization needs to communicate in order to pursue these strategies effectively would clearly be incompatible with the inherently limited information-processing capacities of its outside audiences (Simon, 1998). In such cases, organizations can either say nothing at all and hope that the crisis will blow over, or communicate in terms that closely match the perceptions held by their external

³⁵ In turn, these broad functional issues management capabilities are composed of several lower level specialized issues management capabilities, but this distinction is conceptually less relevant because it is a derivative of the decomposition of cross-functional capabilities into broad functional capabilities (see Figure 5.1).

constituencies (the so-called outsiders' view [Dunbar & Ahlstrom, 1995]), in order to tap into their limited cognitive abilities as efficiently as possible.

What follows from this discussion of the concept of allowed response time is that it should be acknowledged that organizations may benefit from effective early warning systems, because this allows them to pursue co-optation and issue advertising strategies. What is added to the *communis opinio*, however, is that organizations must also develop capabilities enabling them to resort to other strategies (which will be discussed below) when the amount of response time they are allowed is relatively limited.

5.2.2 Public activism

A second dimension that determines the amount of strategic choice (Child, 1972, 1997; see Barringer & Harrison [1999] for a recent review) available to issues managers is the level of *public activism* they face. The terms "stakeholder" and "public" are often used synonymously in the literature, but there is a subtle difference (Grunig and Repper, 1992). Stakeholders are parties that can affect or are affected by the strategic decisions of a company (Freeman, 1984, 1999). Many of these stakeholders will remain passive, especially if they lack the power and legitimacy to support their claims (Agle, Mitchell, & Sonnenfeld, 1999; Mitchell, Agle, & Wood, 1997). Publics, like stakeholders, also arise around problems that have consequences for them (Blumer, 1966; Cobb & Elder, 1972). What distinguishes them from stakeholders, however, is that they are more aware of the issues that affect them and display a higher degree of activism towards the companies behind these issues. The media often play an important role in generating public activism, because they not only collect and objectively transmit news facts, but also actively shape and reinterpret news stories that fuel the level of activism of an organization's publics (Fombrun & Shanley, 1990; van Riel & van den Bosch, 1997).

When companies face external audiences that are rather passive, they enjoy more slack in their issues management activities (Cyert & March, 1963). When they perceive themselves as underperformers with respect to a certain social or political issue, they may choose to capitalize on this passivity of their outside constituencies and attempt to let sleeping dogs lie. They may simply refuse to communicate about certain issues, and get away with it as long as their publics are not "awakened" by other affected parties or the media. Furthermore, when companies think that their performance with respect to a certain issue is above average, they may actively try to put the issue on the public agenda through issues advertising (Arrington & Sawaya, 1984; Dutton, 1986). They then may try to use the issue as an "image builder," a political or societal problem that they choose to communicate about because they outperform their competitors on it.

On the other hand, companies may find themselves in a situation in which they have to cope with aggressive and well-informed adversarial audiences that are demanding a response. Such publics are notoriously difficult to control, because they actively seek information from a variety of sources. Active publics typically persuade themselves more than that they allow others to persuade them (Grunig & Repper, 1992). This implies that companies cannot use buffering strategies (van den Bosch & van Riel, 1998; van Riel & van den Bosch, 1997) in which they avoid communication about the issue altogether. Buffering would result in a situation in which publics seek and find information from other sources, which would make the issue spin out of control for the companies' managers. Instead, public activism calls for bridging strategies (van den Bosch & van Riel, 1998; van Riel & van den Bosch, 1997) in which companies actively seek to enter a dialogue with the publics that are affected or offended by their policy decisions. Such bridging dialogues allow companies to provide key actors with relevant and factually correct information, and to obtain crucial cues from such actors that enable them to integrate outside views into their corporate strategies (Hart, 1995, 1997; Sharma & Vredenburg, 1998).

In combination, these two dimensions of the organizational task environment (allowed response time and public activism) can be used to distinguish between four broad functional issues management capabilities (cf. paragraph 5.2.3). First, when the corporate environment is characterized by low allowed response time and low public activism, it seems most attractive to use a corporate silence capability. Second, the conditions of high allowed response time and low public activism favor the employment of advocacy capabilities. Third, when high allowed response time is combined with high public activism, companies may exercise dialogue capabilities. Finally, the environmental conditions of low allowed response time and high public activism urge companies to deploy crisis communication capabilities (see Figure 5.2 on page 101).

Figure 5.2: Typology of organizational issues management capabilities

Public activism	Low	High
Allowed response time		
High	Advocacy capability	Dialogue capability
Low	Corporate silence capability	Crisis communication capability

5.2.3 Four broad functional issues management capabilities

1. *Corporate silence capabilities*: The first broad functional capability that will pass in review is corporate silence, which may be described as a set of knowledge integration processes that allow managers to avoid organizational “ownership” of a specific issue by keeping it out of the public arena. Issue ownership (Oomens & van den Bosch, 1999) may in this respect be regarded as a strong association in the eyes of relevant publics between the organization and a specific issue, which potentially leads to the organization having additional responsibilities for resolving the issue. There are two sides to the corporate silence capability, an external and an internal side. The external side pertains to knowledge integration processes aimed at gaining some form of control over the public agenda or over public policy. In particular, managers exercise these processes in order to make sure that certain issues will *not* be discussed in external arenas (Epstein, 1969). As Mitnick (1993) explains, managers may exercise corporate political behavior in order to use the power of government to keep private issues off the political agenda. They may use a broad range of tactics to gain such external control, such as lobbying, making contributions to political parties, and grassroots constituency building (Hillman & Hitt, 1999; Pfeffer & Salancik, 1978). The internal side of this capability consists of knowledge integration processes that stimulate the internal discipline to remain silent, even in the presence of high external pressures for communication. Gaining a high degree of control over the organization’s employees is key in this respect, because a successful execution of the corporate silence capability requires that every employee understand

that issue-related communications are the prerogative of communication professionals. An often-used way of gaining this type of control is the adoption of formal procedures that organizational constituencies should follow in external corporate communications (Hennart, 1993; Ouchi, 1979, 1980). Organizations may also rely on less formal control mechanisms that inform individuals on when and when not to communicate, such as on-the-job training and socialization (Danziger, 1971). Corporate silence capabilities work best when the organization's publics are relatively passive, because public activism increases the pressure on organizations to communicate. Furthermore, corporate silence is a capability that is often used when organizations have little response time available, because the initial avoidance of communication may buy organizations the time required to formulate a balanced view.

2. *Advocacy capabilities*: The second broad functional capability that I will introduce in the present chapter is advocacy, which may be described as a set of knowledge integration processes that allow managers to persuade external audiences to accept the organization's position on a specific issue as legitimate and desirable. Monsanto, a US-based biotechnology and agrochemicals company, provides a prime illustration of the advocacy capability. In order to legitimize its controversial biotechnology business, the company has teamed up with competitors like Novartis and DuPont to launch a multimillion-dollar advocacy campaign aimed at consumers of products that are affected by the new technology. Especially when the most relevant external publics of an issue appear to behave rather passive (when they do not show massive signs of protest against the corporate position on an issue or threaten to boycott the company's products), companies tend to use this persuasion-oriented advocacy capability. Organizations that seek to convince their external publics often rely on public relations instruments such as free publicity, lobbying, and so on (Grunig, 1992). According to Miller (1986), persuasion and public relations are "two 'Ps' in a pod." This is why the advocacy capability is sometimes called issue advertising (Arrington & Sawaya, 1984; Wartick & Wood, 1998). As Grunig (1989) argues, persuasion-oriented capabilities are often characterized by an internal orientation that makes organizational members look out from the organization and that makes members' views on the organization different from outsiders' views. Furthermore, persuasion asks for an asymmetrical type of communication where it is presupposed that the organization knows best and that publics benefit from cooperating with it. These characteristics make persuasion an option that can only be used if the amount of available response time is sufficiently high, because time (like human and financial capital) is a serious boundary condition to the development of sophisticated persuasion-oriented advocacy campaigns.
3. *Dialogue capabilities*: The third type of broad functional capability I will present here is dialogue, which may be described as a set of knowledge integration

processes that allow managers to build cooperative and trust-based relationships with a broad range of external constituencies, especially those with non-economic motivations (Hart, 1995, 1997; Sharma & Vredenburg, 1998). This capability has three distinguishing characteristics. First of all, dialogue-based issues management requires that the organization have a specific mindset or mentality. Its communication professionals and other boundary-spanning individuals should be willing to listen to outside constituencies and to get to know their feasibility preoccupations (Gray, 1989; Wood & Gray, 1991). Second, dialogues are easier to maintain with publics that are battling publicly for recognition and support by key organizational decision-makers, because such active publics are actively looking for information rather than passively receiving it (Grunig & Repper, 1992). Third, this specific type of issues management capability relies more than the other types on communication technologies that facilitate two-way communication (Grunig & Hunt, 1984), such as internet, toll-free telephone numbers, and public information campaigns. Again, available response time is a critical boundary condition to this type of issues management, because the development of trust-based, cooperative relationships with external constituencies is a process that might easily take several years to complete.

4. *Crisis communication capabilities*: The fourth type of broad functional capability that passes in review is crisis communication, which may be described as a set of knowledge integration processes that allow managers to engage in a purposeful exchange of information with interested outside constituencies when an immediate crisis occurs. Managers typically must engage in crisis communication when they face a situation in which they have relatively little response time available and when critical outside constituencies are urging the organization to communicate forcefully about its position with respect to a specific issue (Winter & Steger, 1998). Crisis communication is a difficult but critical capability to master, because it is hampered by three typical communication problems. First of all, organizations that engage in crisis communication typically suffer from *source credibility problems*, because of the simple fact that they are involved in an organizational crisis that might have a negative effect on their perceived legitimacy (Aldrich, 1999). Second, crisis communication is notoriously difficult because of *channel problems* (Leiss, 1994). The mass media, for example, cannot be expected to provide a balanced and objective view of the organization's position when it is involved in a threatening or scandalous issue. Third, communication professionals are likely to encounter *receiver problems* in times of organizational crisis, because they cannot expect non-experts to assimilate and react objectively to scientific assessments of risk (Powell & Leiss, 1997).

In the remainder of this chapter I will (a) juxtapose these four conceptual types of issues management capabilities with evidence from the case study of the

Dutch fats and oils industry’s responses to the introduction of genetically modified ingredients (cf. paragraph 5.3), and (b) explore the nuts and bolts of the capability development process (cf. paragraph 5.4). I will finish this chapter with some brief concluding remarks.

5.3 ORGANIZATIONAL CAPABILITIES OF DUTCH FIRMS

In the early 1990s, it was still unclear whether the genetic modification issue was going to be a major threat to the license to operate of the companies involved with the new technology. European companies like Gist-Brocades (currently DSM) and Novo Nordisk had been using genetic modification for years in areas such as additives and pharmaceutical products, and these companies almost never encountered negative reactions. During the decade, however, it became clear that the public responded quite differently to the genetic modification of food ingredients. Whereas consumers seem to accept genetic modification as a perfectly legitimate technique for the production of pharmaceuticals and functional foods (European Commission, 1997), they often reject it as a technique for producing conventional foods. The nicknames that were used by the popular press to describe the foods produced with the new technology provide a case in point (see Table 5.1).

Table 5.1: Nicknames for genetically modified foods

<i>Reporter</i>	<i>Nickname</i>
Walsh, 1999	Über-plants
Economist, 1998a	Demon seeds
Darby, 1999	Frankenstein foods
Miller, 1992	Franken-foods
Jardine, 1999a	Public enemy number one
Maathai, 1998	Terminator technology
Nikiforuk, 1997	The bad seed
Bentley, 1997	Unholy beans
Schechter, 1993	Brave new foods

Alarmed by these negative and sometimes hostile reactions, the industry felt the urge to start managing this public issue. Early warning systems were no longer an adequate issues management tool in this case, because it was obvious to all parties involved that this issue had already taken on major proportions. Instead, the companies in the industry tried to build and deploy organizational issues management capabilities that would enable them to manage the issue of genetic modification, even after it had evolved into a full-blown public issue. In this paragraph I report the first set of research findings that pertain to these

organizational capabilities. I organize this section according to the typology of broad functional capabilities that was presented in a previous paragraph.

5.3.1 Corporate silence

I previously described *corporate silence* as a set of knowledge integration processes that allow managers to avoid organizational “ownership” of a specific issue by keeping it out of the public arena. In the present study I found many examples of the corporate silence capability in action (such as the Monsanto example mentioned earlier), but also that environmental factors such as competition, governmental policy, and national culture influence the relative viability of the corporate silence capability. When I interviewed the Public Affairs manager of the largest Dutch retailing organization, he provided me with the following insight:

- I:** How does the fact that the operations of the company you work for are primarily transnational influence your issues management strategy?
- R19:** In Europe alone, we have operations in Holland, Portugal, Spain, Poland, the Czech Republic, and many other countries. In some of these countries, such as the UK, Germany, and Scandinavia, the consumers’ movement is very strong, and the protests against genetic modification in these countries are quite severe. In such countries we have to communicate about the issue, mostly in the form of product labeling. But Europe is divided in two by the “olive oil belt.” In the countries below that belt, such as Portugal and Greece, genetic modification is really a non-issue. We refrain from communication about the genetic modification issue in these countries altogether.

This quote illustrates that corporate silence capabilities are relatively viable when (a) allowed response time and (b) public activism are both low. This company might very well be using a corporate silence capability to “buy time” in the countries below what our respondent calls the “olive oil belt,” before the issue breaks there as well. Furthermore, the company is not forced to abandon its strategy before it pays off in these countries, because public activism there is relatively low as compared to the “vicious” markets above the belt. The corporate silence capability is therefore particularly useful when companies need to (re)consider their position on a specific issue before they start (or resume) communicating about it. Another illustration of the corporate silence capability may be derived from an interview with one of Unilever’s issues managers. When I asked him why his company had outsourced its communication tasks to the

Product Board for Margarine, Fats, and Oils to such a significant extent (see paragraph 2.6.5.), he provided the following explanation:

I: Why do you allow the Product Board to interfere with your communications about genetic modification?

R12: We simply don't see it as interference. Every time we appear in the news in relation to genetic modification, the public at large makes a stronger association between the new technology and us. This is not a very positive situation, considering the fact that genetic modification has recently become a rather controversial issue. Therefore, we are happy to direct some of our external communications through the Product Board each time we have opportunity to do so, because this relieves some of the pressure on our company.

This quote illustrates how Unilever has tried to avoid organizational ownership of the genetic modification issue by delegating some of its external communication responsibilities to a semi-public organization with a strong public image of neutrality and openness. This tactical ploy (which may be interpreted as exercising a corporate silence capability) allowed Unilever to dissociate itself (to a certain degree) from the genfoods issue.

5.3.2 Advocacy

Above, I described *advocacy* as a set of knowledge integration processes that allow managers to persuade external audiences to accept the organization's position as legitimate and desirable. During the present research, I came across a few examples of this capability. Various respondents pointed out that the most telling example of a company exercising advocacy capabilities was Monsanto, the US-based life sciences company that pioneered the commercial use of plant genetic modification. As one of the communication advisors working for a Dutch consultancy firm pointed out:

I: In what respects does the communication approach chosen by Monsanto differ from the one adopted by most Dutch companies?

R22: Monsanto really is out of tune with what the Dutch fats and oils industry tries to accomplish. They have adopted a high profile communications strategy, and they literally try to "sell" the new technology to the public by aggressively stressing the benefits of genetic modification. We, on the other hand, have decided to use much more of a low profile strategy, and

to communicate with consumers only if they ask for information themselves.

In slight contrast with the above statement, I found that some Dutch companies actually did try to use the advocacy capability for some time, but that most of them abandoned it fairly quickly. When I asked the External Relations officer of a large Dutch firm that actively uses modern biotechnology why his company did not pursue with its issues advertising campaign, he provided the following comment:

- I:** Why have you stopped using modern biotechnology as one of the focal points in your corporate communication campaigns?
- R18:** Initially, our policy was one of “public education.” We published a lot about modern biotechnology. But we got the door slammed right in our face. The information we provided was far too general. The public could not make the cognitive link between generic information about the technology and the products that they daily buy in the supermarket. That made us realize that we should not use biotechnology as a means to improve our image.

This interview in particular showed that advocacy is a contextually sensitive capability. It can best be applied when (a) allowed response time is high, and (b) public activism is low. In the above example, the company started communicating about modern biotechnology too fast, without investigating first whether the message they tried to advocate would go down well with the relevant publics of the company. Because the company did not capitalize on the fact that it had a sufficient amount of response time available, it had to stop exploiting its advocacy capability.

5.3.3 Dialogue

In a previous section I described *dialogue* as a set of knowledge integration processes that allow managers to build cooperative and trust-based relationships with a broad range of external constituencies, especially those with non-economic motivations. I found an overwhelming number of examples of the dialogue approach, indicating that this is the dominant issues management capability used by the Dutch food industry. The companies that participated in the Informal Consultations on Biotechnology (see paragraph 2.6.5) perhaps provide the most interesting example of a set of organizations that have jointly built and deployed dialogue capabilities. When I asked the Coordinator for Biotechnology affairs of

the Ministry of Agriculture for her opinion with respect to the Consultations, she responded as follows:

I: What is your opinion on the Informal Consultations on Biotechnology?

R08: I strongly support the roundtable negotiation model. My Ministry has organized a number of roundtables on biotechnology in the past, in collaboration with the Ministry of Economic Affairs. I also feel that the importance of open roundtable discussions will only increase in the future. The more products are brought to market, the more industries will become involved. Since this greatly complicates the complexity of the issue, the continuation of regular informal meetings in which every party is able to voice its own practices and principles is of utmost importance.

The example of the Informal Consultation illustrates that many of the parties involved believed the dialogue approach to be relatively effective in the Netherlands. At the same time, it also seemed to be one of the more costly capabilities to exercise. This became clear when I interviewed a representative of one of the most critical and powerful stakeholders involved in this issue (Consumer & Biotechnology, a subsidiary of the official Dutch Consumers' Representative Organization). This respondent indicated that his organization had agreed to participate in a dialogue with the Dutch food firms, but also that these firms did not get this symbolic support for free:

I: By participating in the Informal Consultations, Consumer & Biotechnology strongly signals its commitment to biotechnology to the public at large. Why has your organization chosen to join the consultation?

R10: [...] we are well aware that the companies in the sector have invited us to participate in a dialogue with them for instrumental reasons. We still accepted this invitation because we feel that we can play that game too. The participating companies are paying us a good price, so to speak. Through our participation we have been able to reach a few quite tangible successes, of which the agreement that the participating companies would start with voluntary labeling is perhaps the most important one.

The present research shows that the dialogue capability is most effective when (a) allowed response time is high and (b) public activism is high. Entering into a dialogue with critical stakeholders can be an expensive process, because these parties often have a very strong *quid pro quo* mentality. They will not let themselves be co-opted (Edelman, 1992; Pfeffer, 1972; Selznick, 1949) unless they get something in return that they truly value. Nevertheless, when firms face

highly active publics, they will feel a clear pressure to enter into a dialogue with them in order to neutralize their impact and to learn to understand their behavior (Heugens, van den Bosch, & van Riel, 1999).

5.3.4 Crisis communication

I described *crisis communication* in one of the above paragraphs as a set of knowledge integration processes that allow managers to engage in a purposeful exchange of information with interested outside constituencies when an immediate crisis occurs. I came across a number of examples of crisis communication in the present research. A finding of specific interest was that companies sometimes regress towards crisis communication from a dialogue capability, especially when they are confronted with an urgent crisis-like event. The following quote was taken from an interview with the Director of Corporate Affairs of one of the largest Dutch food-producing companies. He explained to me why his company initially opted for the dialogue approach, but subsequently chose to start with crisis communication:

I: Can you explain why your company has made such sudden changes in its corporate communications strategy?

R15: Our company mainly produces baby foods, functional foods, and medical supplements. We only use a very limited amount of soy oil, and in such quantities unmodified soy is relatively easy to obtain as long as you are willing to pay for it. Initially, however, we decided to stick with our industrial partners and to refrain from providing non-gmo statements [public statements in which a company announces that its products do not contain genetically modified ingredients]. But our company got confronted with a few very serious crises that were particularly hard-felt in our baby foods business [the discovery of traces of detergent in baby foods]. That's when we decided to change our communications strategy, and to start stressing that our company has origin certificates [certificates that state that a specific shipping of soy stems from a source of unmodified origin] for every bit of soy we use.

The above example illustrates the important role triggering events play in the managerial decision to start using crisis communication capabilities. It would be a mistake, however, to assume that triggering events can always be traced to internal corporate decisions or mistakes. In contrast, organizations are often forced to rely on crisis communication because external parties actively search for or even construct triggering events that might upset the company. The following

quote, derived from an interview with one of the editors of *Het Financieele Dagblad*, is telling in this respect:

I: Being a journalist, how do you approach this issue?

R20: Well, genetic modification happens to be in my portfolio, so it is my job to evaluate whether new developments have news value. The Dutch food industry has tried to speak with one voice about this issue ever since it first appeared in the media. As a journalist, such uniformity is not only boring; it is also bad for business. The reality of journalistic rivalry is such that you try to punch holes in uniform messages. You call different participants for their opinion, and you zoom in on the little differences. The more players involved, the larger the chance that some of them will break the mold. If that happens, you have a story.

The present research shows that crisis communication capabilities are most viable when (a) allowed response time is low and (b) public activism is high. Interestingly, the above examples show that the amount of response time a company has available is not constant. Triggering events (Wartick & Mahon, 1994) may reduce the amount of time a company has for responding to public pressures. Such a change in one of the antecedent variables of the typology can apparently urge companies to abandon the capability that they previously deemed most desirable (in this case dialogue) and adopt a new one that fits the current environmental contingencies better (here crisis communication).

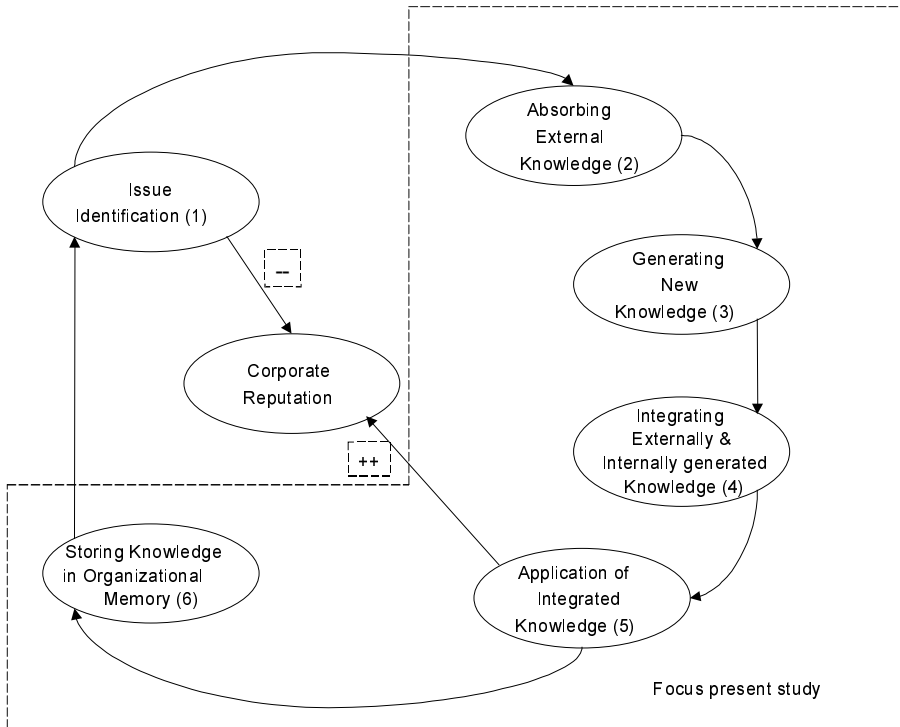
5.4 CAPABILITY BUILDING PROCESSES

After identifying four broad functional capabilities, I will use this paragraph to focus on the developmental processes that have led to their establishment. I here report a number of research findings which are consonant with the literature on organizational capabilities, which characterizes these resources as complicated routines that emerge from path-dependent processes (Eisenhardt & Martin, 2000; Zollo & Winter, 1999). In the present study, I have found numerous illustrations of the dynamic and evolving nature of organizational capabilities aimed at protecting the firm's reputation (see Figure 5.3).

Organizations in the Dutch genfoods industry appeared to be involved in a reputation game in which they had to protect their public image by early identification of important events (1). Subsequently, these organizations gained new insights by absorbing knowledge external to the organization (2) and generating new knowledge within the firm (3). In the next sequence, organizations integrated newly generated external and internal knowledge into higher-order

knowledge-based resources (4). After this step, organizations applied the previously acquired and integrated insights to the issue of genetic modification, aimed at improving the corporate reputation (5). Finally, the generated insights were stored in the organizational memory, enabling the organization to retrieve the capabilities if urged to do so by future issues (6).

Figure 5.3: The capability building process



In the current paragraph, I will illustrate the capability building process with the issues management experiences of Dutch food firms with respect to the issue of genetic modification. I will focus on steps two through six of this process. Issue identification was left out of the analysis because I pre-selected the highly salient development of genetic modification as our focal issue for this study. I also left corporate reputation out of the discussion because my main interest in this chapter lies with internal decision-making processes.

5.4.1 Absorbing external knowledge

Issues management capabilities are sets of knowledge integration processes that allow managers to deal with external pressures. However, the time available between the identification of a specific issue and its arrival may not be sufficient to allow a firm to internally develop the capabilities needed to respond effectively (Lane & Lubatkin, 1998; Dierickx & Cool, 1989). Managers are then urged to seek access to the knowledge of other firms, which they can then internalize and thus learn how to deal with certain pressures more quickly and more accurately (Mowery, Oxley, Silverman, 1996; Hamel, 1991). The ability of a firm to recognize the value of new, external information, assimilate it, and apply it to commercial ends has been labeled *absorptive capacity* in the literature (Cohen & Levinthal, 1990; van den Bosch, Volberda, & de Boer, 1999). It has been posited that this ability is by and large a function of the prior related knowledge of the firm (Cohen & Levinthal, 1990), which is consonant with Nelson & Winter's (1973) early finding that organizational learning tends to be local and incremental, rather than lateral and frame-breaking. Furthermore, the absorptive capacity of a firm is also influenced by its organizational form and its combinative capabilities (Kogut & Zander, 1992; van den Bosch, Volberda, & de Boer, 1999). The present study has generated a number of illustrations of the absorptive capacity phenomenon in action. The following quote is drawn from an interview with an issues manager of Unilever. He provided me with the following insights with respect to external knowledge absorption:

- I:** What did you learn specifically from your cooperative relationships with the other member firms of the Informal Consultations on Biotechnology?
- R12:** What we have learned from our experiences with the Informal Consultations on Biotechnology is that it is important not to create a new organization for every new issue. Consumers do not distinguish between introductions. They are not interested in the differences between modified soy and modified corn, so it is better if they receive their information regarding the entire "menu" of agricultural products from a single organization. You must respect existing channels, so to speak.

It is remarkable, however, that Unilever and a number of other parties involved in the informal consultations were able to absorb valuable issues management related experiences from the broad range of parties represented in the Informal Consultations. Lane and Lubatkin (1998) stress that organizations do not have an equal capacity to learn from all other organizations, but that they are inclined to learn more from parties that have comparable knowledge bases, organizational structures, and dominant logics. They view absorptive capacity as a dyad-level construct, hypothesizing that similarity between what they call

“student organizations” and “teacher organizations” is positively associated with interorganizational learning. The following quote, derived from an interview with the coordinator of biotechnology affairs of the Dutch Ministry of Economic Affairs, subscribes to this point of view:

I: How would you describe your relationship with the other ministries with a stake in modern biotechnology as compared to your relationship with industry members?

R19: There is definitely a difference. The Ministries of Agriculture, Economic Affairs, and Housing, Spatial Planning and the Environment are often on the same wavelength. The heterogeneity within the industry is much greater than that between the ministries. It is much easier for us to share our experiences with other ministries than to disseminate them amongst private parties.

5.4.2 Generating new knowledge internally

Managers need not only look at other organizations to find sources of valuable issues management related knowledge. They may also try to generate new knowledge internally. Managers can for instance look inside their own organizations for existing repositories of tacit and explicit knowledge that they may combine, convert, and recombine to generate new issues management-related knowledge. Another option is to invest in corporate research to answer questions that have not previously been addressed by the organization or its partners. The following quote, derived from an interview with one of Ahold’s public affairs managers, illustrates this latter option:

I: What types of activities does your company pursue in order to inform itself about the evolution of the genfoods issue?

R12: As a retailing organization, we are very close to the final consumer. They visit our shops frequently, and they are our most important external constituency. We therefore invest a lot of time and money in consumer research. We just completed a major consumer research project in the United States, for example, but we also monitor the European situation on a daily basis.

The internal generating of knowledge is a ubiquitous and continuous phenomenon. As Nonaka, Toyama, and Konno explain: “Instead of merely solving problems, organisations create and define problems, develop and apply new knowledge to solve the problems, and then further develop new knowledge

through the action of problem solving" (2000: 6). The identification and framing of strategic issues, the deployment of organizational resources for their resolution, and the subsequent codification in tacit or explicit rules of the associated experiences are thus invaluable antecedents to organizational capability building processes. I derived another example of these knowledge-generating activities from an interview with the Director of Public Affairs of a major Dutch company, whose core business is in food and medical supplements:

- I: What does your company do to make sure that it is ready for handling the issue of genetic modification?
- R17: Managing the issue of genetic modification is primarily a matter of making sure that you do your homework thoroughly. On the one hand, we try to monitor what is happening in Brussels and in Strasbourg, because we depend upon the European Union for the registration and approval of our products. On the other, we are continually testing and assessing the safety of our products, because we must rule out the possibility that our products will cause people to become sick or develop an allergy.

5.4.3 Knowledge integration

Although external knowledge absorption and internal knowledge generation are depicted above as *organizational* processes, knowledge acquisition of any kind is an activity performed by *individuals* that are inherently limited in the cognitive sense (Conner & Prahalad, 1996; Grant, 1996). In this view, the *raison d'être* of the contemporary business firm is the integration of specialist knowledge into organizational capabilities for the performance of complex tasks, whose execution requires resources that cannot be united in a single individual. Grant (1996) has identified four mechanisms for integrating specialist knowledge into organizational capabilities. First, organizations may rely on *rules and directives*: impersonal coordination mechanisms such as plans, schedules, forecasts, and rules. A second mechanism is *sequencing*: the organization of production activities in a longitudinal concatenation, such that each specialist can work independently of others in an assigned time slot. Thirdly, organizations may rely on *routines*, everything that is regular and predictable in organizational life (Winter, 2000), for the coordination of complex activities. Fourth and finally, organizations may use *group problem solving*: high-interaction, non-standardized coordination mechanisms that are most appropriately used when task complexity is high (Perrow, 1986). The Director of Public Affairs of Gist Brocades (currently DSM) provided me with an excellent illustration of the latter integration mechanism.

During the interview, he explained to me that product development at Gist is primarily an interdisciplinary activity:

I: But can you tell me why your company develops new products in interdisciplinary teams?

R12: For years, we have regarded ourselves as a research and development organization that happened to sell some products on the side. As you know, we are mainly operative in business-to-business markets, that's why. Our involvement with modern biotechnology was a big eye-opener for us, however. The level of controversy that we met when we introduced a number of genetic engineering-based products was unprecedented for us. Since then, we have started to integrate our research and development center more and more with our marketing and public affairs departments.

Alone or in combination, these integration procedures merge the specialist knowledge of individuals into organizational issues management capabilities - cross-functional repositories of knowledge that result from the united efforts of many organizational constituents. I derived the following example of such a broad functional capability (in this case: a specialized capability for issue interpretation) from an interview with the Secretary of the Dutch Product Board for Margarine, Fats, and Oils:

I: Can you describe the most important insight that your organization as a whole has obtained from its experiences with the biotechnology issue?

R01: [The most important insight we gained is that the idea] that we will ever achieve total consumer acceptance for modern biotechnology is an illusion, especially in the long run. "Business as usual" before the introduction of modern biotechnology will be completely different from "business as usual" thereafter. It is a fact of life that the issue of modern biotechnology has acquired a permanent position on the political agenda of many stakeholders.

5.4.4 Application of integrated knowledge

So far, I have been discussing the development of valuable organizational resources in terms of external knowledge absorption, internal knowledge generation, and the integration of specialist knowledge. Spender (1992) recognizes, however, that firms are not only engaged in knowledge creation, but also in knowledge application. March (1991) calls this the exploitation of

organizational learning – improving the organization’s current viability by applying its current repositories of knowledge to existing production processes and distribution channels. As Grant argues, “the essence of strategy formulation, then, is to design a strategy that makes the most effective use of [the organization’s] core resources and capabilities” (1991: 129). As explained above, I distinguished four broad functional capabilities: corporate silence, advocacy, dialogue, and crisis communication. I came across a very skillful application of a dialogue capability when interviewing a journalist working for a major Dutch newspaper. During the interview, this person was remarkably positive about the press policy of Unilever. When I asked him for the reason behind his positive evaluation, he gave me the following answer:³⁶

I: Why do you speak so highly of the press policy of Unilever?

R21: They [Unilever] understand my profession. What matters to me is that I have a personal contact person inside the organization. I don’t want to speak to some kind of Public Relations official, because they are only a burden. Unilever lets me speak to people that are of interest to me.

I derived another example of a successful application of the dialogue capability from an interview with the coordinator of biotechnology affairs of the Dutch Ministry of Economic Affairs. One of the most salient characteristics of the Informal Consultations on Biotechnology was that it involved many different parties – business firms, environmentalists, and consumer representatives – but not the Dutch national government. The industry had deliberately decided to keep the various ministries with a stake in the issue out of the consultations, in order to create a more decisive environment. It is not unthinkable that this strategy could have offended the government officials involved, but apparently they felt comfortable with the situation. The following quote illustrates that it was mainly the skillful application of the combined dialogue capabilities of the Dutch fats and oils companies that prevented the development of resentment on behalf of the passed over ministerial representatives:

I: The various parties comprising the informal consultations [on biotechnology] never invited your organization [the Dutch Ministry of Economic Affairs] to participate. Was this a big issue for you at the time?

R12: Not at all! The parties to the Informal Consultations just didn’t want us around when they were discussing their plans and options. We did not consider that to be a great loss. The important thing is to keep talking, to stay in touch. We may not have been invited to participate in the Informal

³⁶ This quote has also been used in the previous chapter to illustrate the occurrence of symbiotic learning effects between Unilever and Dutch journalists.

Consultations, but the parties involved made sure to touch base with us regularly in order to keep us informed about their proceedings.

5.4.5 Storing knowledge in organizational memory

The present study illustrates that companies can gain many valuable insights from managing threatening strategic issues. Some of these insights originate outside the firm, and are absorbed by it as a consequence of its interactions with sponsors and adversaries (Mowery, Oxley, & Silverman, 1996). Other insights are generated internally, as managers combine and convert the available tacit and explicit knowledge elements within the firm (Nonaka, Toyama, and Konno, 2000). To capitalize on these diverse streams of knowledge in the short run, managers are forced to integrate and apply them immediately to the issue at hand (Demsetz, 1991; Grant, 1996). If firms are also to benefit from these experiences in the long run, however, they must somehow find a way to preserve these insights in the form of intangible but resilient organizational routines and more explicit rules and procedures. In other words, managers should store the newly discovered knowledge in the organizational memory (Argyris & Schon, 1978; Morgan, 1986) and make sure that it can be retrieved when their organizations get confronted with similar and equally threatening issues at a later stage. A critical remark was made in this respect by one of the policy directors of Consumer & Biotechnology, the department of the Consumers' League that focuses explicitly on biotechnology-related affairs:

- I:** Is the industry doing a good job with respect to the introduction of Bt-corn [the second major product to be introduced to the Dutch market after Monsanto's Roundup Ready soy]?
- R10:** Well, certainly not on all accounts. They have learned how to organize themselves, and I think that they are doing okay with respect to external communications. But the industry is also disregarding the advice that they receive both from the government and from us, especially with respect to labeling and detection. They have adopted a rather passive attitude, and they seem hesitant to start applying the lessons that they should have learned from the introduction of soy to the corn issue. There is a risk that history will repeat itself.

Fortunately, some of my findings suggest that managers think in terms of applying previously learned lessons as well, and that they are well aware of the benefits of preserving present knowledge for future events and using it when necessary. When I spoke with the coordinator of biotechnology affairs of the

Dutch Ministry of Agriculture, I also asked her for her opinion with respect to the way the industry went about managing the introduction of Novartis' Bt corn:

I: Did the introduction of genetically modified corn represent a new and unexpected threat to the industry?

R08: Not really. The industry went through a really hard time with the introduction of genetically modified soy, because this crop hardly offers any direct benefits to consumers. But the industry has really learned from its experiences. Many companies have developed crisis scenarios, for example, and the industry as a whole has learned that it is sometimes wise to communicate in a concerted effort rather than going it alone. The introduction of corn turned out to be a good test ground for these newly developed skills.

5.5 CONCLUSION

This chapter offered a digression on the second of two issues management strategies that were introduced in the third chapter of this text in the form of an integrative framework of strategic issues management. Whereas the fourth chapter of the present volume highlighted the external side issues management (i.e., stakeholder integration), the present chapter specifically stressed the internal side of this process. My study showed that many companies try to codify their experiences with the management of critical outside stakeholders in an attempt to preserve these insights in the form of reusable skills and routines. Four specific broad functional capabilities (Grant, 1996) have been identified. I labeled the first *corporate silence*, a set of knowledge integration processes that allow managers to avoid organizational "ownership" of an issue by keeping it out of the public arena. The second was labeled *advocacy*, a set of knowledge integration processes that allow managers to persuade external audiences to accept the organization's position on a specific issue as legitimate and desirable. I named the third *dialogue*, a set of knowledge integration processes that allow managers to build cooperative and trust-based relationships with a broad range of external constituencies. Finally, I named the fourth *crisis communication*, a set of knowledge integration processes that allow managers to engage in a purposeful exchange of information with interested outside constituencies when an immediate crisis occurs.

In the present chapter I also introduced a conceptual model of the capability building process (see Figure 5.3). This model holds that the development of valuable issues management related capabilities is a phased process, which starts with absorbing external knowledge and generating internal knowledge, proceeds with the integration of these two sources of knowledge into higher-order knowledge resources and the application of these resources to the

issue at hand, and only finishes when these knowledge resources are stored in the organizational memory for subsequent reapplication to future issues. This inside-out oriented capability development view complements the outside-in oriented stakeholder integration view. In combination, these two perspectives provide a tentative answer to the first research question that I introduced in the introduction of this book. To assess whether the activities that have been identified with the help of the first empirical study of the present project really have a contribution to make to corporate performance, a second empirical study (a large-scale mail survey) will be reported in the next two chapters of this book.

Chapter 6

Testing the framework (I): Survey methods

6.1 INTRODUCTION

An integrative framework of strategic issues management has been introduced in the third chapter of this text, consisting of a theoretical proposition and eight formal hypotheses. These statements theoretically linked issues management activities (stakeholder integration and capability development) to various indicators of corporate performance (both tangible [economic benefits and strategic benefits] and intangible [corporate reputation and issue-specific reputation]). In order to test these hypotheses, I conducted a second empirical study: a large scale mail survey of the issues management practices of the Dutch fats and oils industry during the turbulent introduction of genetically modified ingredients. The sample used for this survey consisted of 551 managers who were in charge of biotechnology-related matters at the companies they worked for. Of this group, 288 managers (52%) eventually participated in the present research in one form or another (net response: 38 %).

The current chapter explains the methods that were used in conducting the survey research. First of all, the characteristics of the sampling procedure and the resulting sample are discussed at some length. Various relevant aspects, such as sample size, response characteristics, and background information on the participating organizations and managers will pass in review. Furthermore, the respondent group will be compared with a control group of non-respondents on a number of control variables to assess if there are any statistically significant dissimilarities between the two groups. Secondly, I shall deal with the crucial issue of measurement by reporting the scale development and purification procedures I have used, as well as the resulting measurement scales. These

measures will serve as input for the subsequent chapter, in which the results of this second study are discussed.

6.2 SAMPLE

The sample of managers working for commercial organizations in the Dutch fats and oils industry (covering both the local operations of Dutch companies and subsidiaries of foreign multinationals) was drawn from the 1999 mailing list of the Product Board for Margarine, Fats, and Oils.³⁷ The Product Board collects and updates these addresses annually for the distribution of both its annual report and the *Nieuwsbrief Biotechnologie* (“Newsletter on Biotechnology”). The mailing list consisted of 926 names and addresses of individuals who were potentially involved with modern biotechnology in the Netherlands, mostly because of their professional affiliations. I reduced the initial sample to a working sample of 638 by eliminating all unaffiliated individuals as well as those individuals working for non-commercial organizations. I was able to do this first part of the sample purification procedure myself, because unaffiliated individuals and non-commercial organizations were clearly marked in the file. As a second sample purification step, I eliminated all the individuals working for organizations who were not (yet) involved with modern biotechnology at the time of the research. I conducted this second purification step with the help of all three of the Product Boards involved with modern biotechnology, notably the Product Board for Margarine, Fats, and Oils, the Product Board for Animal Feed, and the Product Board for Grains, Seeds, and Legumes. This second step resulted in a final research sample of 551 managers (see Table 6.1).

Table 6.1: Sample purification

SAMPLE	RESPONDENTS	DESCRIPTION
Initial sample	926	Number of addresses on the mailing list of the “newsletter biotechnology”
Working sample	638	Initial sample <i>minus</i> unaffiliated individuals and non-commercial organizations †
Final sample	551	Working sample <i>minus</i> commercial organizations not directly involved with genetic modification ‡

† Deleted from the sample by the researcher.

‡ Deleted in cooperation with the Product Boards.

³⁷ I am greatly indebted to dr. G. Bressers, drs. E. Wermuth, and ir. R. Hiel of the Product Board for Margarine, Fats, and Oils (at the time Chairman, Secretary, and Policy Coordinator of the Board respectively) for sharing this valuable information with me.

A 16-page survey questionnaire (see Appendix A), measuring all the relevant constructs for the present study, was sent to the 551 managers comprising the final sample. After three rounds of data collection (the data collection procedure will further be explained below), 243 of these 551 recipients returned a questionnaire. This corresponds to an overall response rate of 44%. Of these returned questionnaires, 31 could not be used due to (sometimes partial) non-response. The remaining 212 responses represent an effective (or net) response rate of 38%. During the third round of data collection (a telephonic reminder) I was able to obtain scores on seven control variables from a sample of 45 non-respondents, which enabled me to test for non-response directly. Thus, the size of the control group corresponds with an effective response rate of 8%. A summary of this information is reported in Table 6.2.

Table 6.2: Response characteristics

RESPONSE GROUP	RESPONDENTS	RESPONSE RATE †
Overall response	243	44.10 %
Usable response	212	38.48 %
Control group response	45	8.17 %

† based on the final sample (N = 551)

The data collection procedure for this research consisted of three consecutive rounds of data collection, yielding a combined number of 212 usable responses. The first round of data collection (a mail survey among 551 managers) provided me with 131 usable questionnaires, representing 62 % of the effective responses. The second round of data collection (a reminder by mail) yielded 65 usable responses (31% of the net responses). The final round of data collection (a reminder by telephone) provided me with another 16 usable responses (8% of the net responses). A summary of these results is reported in Table 6.3.

Table 6.3: Net response by round of data collection

COLLECTION	RESPONDENTS	RESPONSE RATE	CUMULATIVE †
Round 1	131	61.79 %	61.79 %
Round 2	65	30.66 %	92.45 %
Round 3	16	7.55 %	100.00 %

† based on the usable responses (N = 212)

The usable responses covered all segments of the genetically modified foods value system. First of all, the response group consisted of a fair amount (31) of biotechnology and seed refinement companies. Most of these firms are subsidiaries of large foreign multinationals. The response group also included twelve fairly large agricultural companies. In absolute terms this is not a very large number, considering the far greater number of agricultural enterprises in the

Netherlands. However, two observations must be made in this respect. First, family farming is still much more important in the Netherlands than corporate farming (in contrast to the United States, for example), and I did not include family farms in my sample. Second, the Netherlands does not feature a primary sector for what is in economic terms the most important genetically modified crop - Roundup Ready soybeans. Also, a large proportion of the second-most important genetically modified crop - Bt corn - is imported. This dependence on foreign imports is clearly reflected in the response group. It contains 45 trade organizations, whose core business is the import and export of grains and intermediate products. These intermediate products are being produced by the processing industry, of which I have obtained 45 usable responses. This reflects the fairly large number of processing organizations located in the Netherlands, most of which are again foreign-owned subsidiaries. Their numbers cannot be explained by home market demand factors alone. Rather, the disproportionately high amount of processing organizations must be explained by pointing at the "gateway to Europe" function of the Netherlands, as large quantities of the imported raw materials are exported again as intermediate products after one or several processing steps. The Netherlands also features a large number of food producing organizations, most of which are again export oriented. With 62 usable responses, the food industry represents the largest fraction in my response group. This forms a marked contrast with the number of usable responses derived from the retail industry. Only five retail organizations are represented in my response group, but this must completely be attributed to the structure of the retail industry in the Netherlands. Due to the very high level of concentration in this industry, the absolute number of formally independent organizations is very limited. Finally, the response group also consists of eleven organizations that do not fit any of the aforementioned categories (see Table 6.4).

Table 6.4: Main industry of the participating organizations

INDUSTRY	FREQUENCY	PERCENT	CUMULATIVE †
Biotechnology	31	14.69 %	14.69 %
Agriculture	12	5.69 %	30.38 %
Trade	45	21.33 %	41.70 %
Processing	45	21.33 %	63.03 %
Food production	62	29.38 %	92.42 %
Retail	5	3.37 %	94.78 %
Other	11	5.21 %	100.00 %

† based on N = 211 valid observations

I initially used two different measures for corporate size in this study, notably *number of employees* and *annual turnover* (verify with Tables 6.5 and 6.6 on pages 125 and 126 respectively). Upon inspection of the former table it may be observed that the response group consists of a fairly large number of small- and

medium-sized enterprises. The size distribution in terms of employees is somewhat skewed, with almost 80 % of the companies employing 500 people or less. There are virtually no signs of skewedness in the size distribution in terms of annual turnover, however. About 60 % of the companies are captured by the hfl.10,000,000 - hfl.1000,000,000 interval, whereas 24 % is smaller and 15 % is larger. The (small) difference between the two distributions must largely be attributed to the large number of trade and biotechnology companies in the sample. In general, these organizations have a significantly higher annual turnover/employee ratio than companies in the processing, food production, or retail industries. Since the two size measures were highly correlated ($r = 0.81$), I decided to add them up to a single, more robust measure for size.

Table 6.5: Number of employees of the participating organizations

EMPLOYEES	FREQUENCY	PERCENT	CUMULATIVE †
1 - 10	46	21.70 %	21.70 %
11 - 50	51	24.06 %	45.75 %
51 - 100	24	11.32 %	57.08 %
101 - 250	26	12.26 %	69.34 %
251 - 500	18	8.49 %	77.83 %
501 - 1000	15	7.08 %	84.91 %
1000 - 5000	16	7.55 %	92.45 %
> 5000	16	7.55 %	100.00 %

† based on N = 212 valid observations

Not only did I use control variables at the corporate level in this study, a number of variables at the respondent level were also included. The first indicator in this respect is the *hierarchical job level* of the respondents (see Table 6.7 on page 126). This indicator is often regarded to be an important one, because only those respondents who belong to the upper echelons deal with more general (i.e., non-operational) business affairs. Consequently, they are the only ones in a position to provide a balanced judgement on corporate-level affairs (e.g., corporate performance). Five of the respondents indicated that they were a member of the board of directors of their firm. This small number comes as no surprise, due to the high proportion of small- and medium-sized enterprises in the sample (which usually do not have a board of directors). However, 82 respondents indicated that they were employed in a top management function, and another 42 labeled their function as one of senior management. These quantities suggest that my sample consist of a sufficiently large number of high-placed officials, adding to the overall validity of the corporate-level data. Furthermore, 65 of the respondents indicated that they were employed in a staff unit, and only 15 respondents labeled their own function as one of middle management.

Table 6.6: Annual turnover of the participating organizations

TURNOVER †	FREQUENCY	PERCENT	CUMULATIVE ‡
< 0.5	9	4.35 %	4.35 %
0.5 - 1	6	2.90 %	7.25 %
1 - 5	16	7.73 %	14.98 %
5 - 10	18	8.70 %	23.67 %
10 - 100	64	30.92 %	54.59 %
100 - 1000	62	29.95 %	85.54 %
1000 - 5000	14	6.76 %	91.30 %
> 5000	18	8.70 %	100.00 %

† in millions of Dutch guilders

‡ based on N = 207 valid observations

Although these data first and foremost tell something about who the respondents in this study are, they also provide some interesting information about the corporations in the sample. Since the sample consisted of the people in charge of managing the modern biotechnology issue, these data also provide insights into how the issues management process is organized within the companies in the response group. In 41 % of all cases, issues management is considered to be a top management responsibility. Furthermore, 31 % of the companies in the sample views issues management as a staff function. Finally, eight percent of the companies in the sample regard issues management primarily as a responsibility of the lower management echelons.

Table 6.7: Hierarchical job level of the respondents

JOB LEVEL	FREQUENCY	PERCENT	CUMULATIVE †
Board of directors	5	2.36 %	2.36 %
Top management	82	38.68 %	41.04 %
Staff function	65	30.66 %	71.70 %
Senior management	42	19.81 %	91.51 %
Middle management	15	7.08 %	98.58 %
Other	3	1.41 %	100.00 %

† based on N = 212 valid observations

A second respondent-level variable used in this study is *job title*. Again, this variable provides relevant information with respect to the organizations in the sample, because it shows what specific departments are responsible for managing the genetic modification issue. Table 6.8 (on page 127) shows that the largest category of respondents (33 %) works in general management functions. This coheres well with the finding that most of the respondents are employed in top management jobs (cf. Table 6.7). Perhaps more interesting is that the second-largest category of respondents (30 %) consists of research and development

managers. This indicates that a considerable number of the organizations in the research group view genetic modification as a technical issue. Furthermore, the third-largest group of respondents works in marketing management (17 %). In other words, a significant proportion of the represented organizations views genetic modification primarily as a marketing issue.

Table 6.8: Job title of the respondents

JOB TITLE	FREQUENCY	PERCENT †	CUMULATIVE
General management	69	32.55 %	32.55 %
Communication management	9	4.24 %	36.79 %
Human resource management	1	0.47 %	37.26 %
Marketing management	36	16.98 %	54.25 %
Strategic management	5	2.36 %	56.60 %
Financial management	1	0.47 %	57.08 %
R & D management	64	30.19 %	87.26 %
Production management	12	5.66 %	92.92 %
Other	15	7.08 %	100.00 %

† based on N = 212 valid observations

Above, a remark was already made about the general validity of the data. Another important variable in this respect is the *average tenure time* of the respondents (see Table 6.9 on page 128). One cannot expect a person that has recently accepted a new job to provide detailed and accurate information about the company that employs him or her. Therefore, a substantial average tenure time has an overall positive effect on the validity of the data. In this respect, it is comforting to see that more than 70 % of the respondents has been working for the company that currently employs them for more than five years. Furthermore, the average tenure period of the respondents is slightly over fourteen years, with a standard deviation of almost eleven years. In sum, the scores that obtained on this variable further strengthen the impression that the overall validity of the data is sufficient for the present purposes.

Another variable included in this study is the *age* of the respondents (verify with Table 6.10 on page 128). No surprises have to be reported with respect to this variable. Few of the respondents were younger than 26 years of age (only six) and little were older than 60 (only seven). Most of the people in the research group (more than 60%) reported that they were somewhere between 36 and 55 years of age.

Table 6.9: Tenure time of the respondents

TENURE †	FREQUENCY	PERCENT	CUMULATIVE ‡
1 - 5	49	27.53 %	27.53 %
6 - 10	37	20.79 %	48.31 %
11 - 15	26	14.61 %	62.92 %
16 - 20	17	9.55 %	72.47 %
21 - 25	15	8.43 %	80.90 %
26 - 30	17	9.55 %	90.45 %
31 - 35	7	3.93 %	94.38 %
36 - 40	6	3.37 %	97.75 %
> 40	4	2.35 %	100.00 %

† in years

‡ based on N = 178 valid observations; $\mu = 14.12$; $\sigma = 10.98$

A more interesting variable in this respect is the *gender* of the respondents (see Table 6.11 on page 129). More than 92 % of the respondents are males, accounting for an extremely skewed distribution. Two observations may explain this large overrepresentation of male respondents. First, my sample consists at least in part of companies from historically male-dominated industries. Especially the grain trade and processing industries traditionally employ many male employees. Second, the sample seemingly provides a clear illustration of the glass ceiling effect. The response group largely consists of people working in top management functions, and it is a regrettable but well-known fact that the intra-organizational upward mobility of women is much more limited than that of their male colleagues (Giddens, 1997).

Table 6.10: Age of the respondents

AGE †	FREQUENCY	PERCENT	CUMULATIVE ‡
< 26	6	2.83 %	2.83 %
26 - 30	21	9.91 %	12.74 %
31 - 35	24	11.32 %	24.06 %
36 - 40	34	16.04 %	40.09 %
41 - 45	34	16.04 %	56.13 %
46 - 50	27	12.73 %	68.87 %
51 - 55	36	16.98 %	85.85 %
56 - 60	23	10.85 %	96.70 %
> 60	7	3.30 %	100.00 %

† in years

‡ based on N = 212 valid observations

Table 6.11: Gender of the respondents

GENDER	FREQUENCY	PERCENT	CUMULATIVE
Female	16	7.66 %	7.66 %
Male	193	92.34 %	100.00 %

† based on N = 209 valid observations

Finally, two additional variables provide further clues on the validity of the data. These variables are (1) the *importance* of the various genetically modified foodcrops to the companies in the response group, and (2) the *relevance* of the various issues associated with genetic modification to these companies (verify with Tables 6.12 and 6.13 respectively). A relevant response on questions concerning the impact of the genetic modification issue cannot be expected from a manager working for a company that hardly uses any genetically modified ingredients for its products. The results show that especially corn and soy are highly important to most of the companies in the response group, and that sugar beet and potato (two other genetically modified crops that have been approved of by the EU government) are highly important to significant minorities. Furthermore, usable responses with respect to issues management strategies cannot be derived from managers who do not perceive the various aspects of the genetic modification issue included in this survey (i.e., health risks, environmental risks, and ethical dilemmas) as being relevant to the companies they work for. My findings indicate that a large majority of the respondents perceive the three dimensions of the genetic modification issue as highly relevant. These findings on the importance of the foodcrops and the relevance of the issue stimulate confidence in the validity of the data.

Table 6.12: Importance of genetically modified foodcrops

CROP	N	MIN.	MAX.	MEAN	S.D.	IMP. †
Soy	211	1	7	4.27	2.43	53.08 %
Corn	210	1	7	4.62	2.34	57.14 %
Beet	211	1	7	3.29	2.37	34.60 %
Potato	211	1	7	3.85	2.51	43.60 %

† fraction of the total number of respondents to which a particular crop is important, as indicated by a score of 5, 6, or 7 on a 7 point Likert scale.

Table 6.13: Relevance of the genetic modification issue

ISSUE	N	MIN.	MAX.	MEAN	S.D.	REL. †
Health	211	1	7	5.72	1.73	78.20 %
Environ.	211	1	7	5.32	1.72	71.56 %
Ethical	211	1	7	5.10	1.78	67.30 %

† fraction of the total number of respondents to which a particular aspect of the issue is relevant, as indicated by a score of 5, 6, or 7 on a 7 point Likert scale.

6.2.1 Comparing the two response groups

An interesting question to ask before proceeding with the formal data analysis is whether the response group is representative of the entire sample. For this purpose, an independent-samples *t* test will be used, a test that compares the means of one variable for two groups of cases. I will compare the means of the respondent-level variables *tenure*, *age*, and *gender* for the response and control groups. The *t* values for each of the variables will be reported, as well as the corresponding 2-tailed level of significance. Since the null hypothesis of the *t* test is that the means of two groups are *equal*, the test should turn out insignificant. However, one of the assumptions of the *t* test is that the variances of the two groups are equal (the standard *t* test is a pooled variances test). I therefore also compare the equality of variances of the three variables for the two groups by using a Levene’s test for the homogeneity of variances (an *F*-test). The *F* values for each of the variables and the corresponding significance level will be reported. This test shows that one of the variables (*age*) violates the homogeneity of variance assumption, so I will have to use a separate variances *t* test for this one. The results of the tests are reported in Table 6.14.

Table 6.14: A comparison of two response groups

VARIABLE	LEVENE’S TEST		T-TEST	
	F	Significance	T	Significance
Tenure	0.31	0.58	0.258	0.80
Age	12.56	0.00	2.40	0.02
Gender	0.21	0.65	0.228	0.82

Upon inspection of table 6.14 it can be observed that the *t* tests for gender and tenure do not show any significant variability at the 10 % level of significance, indicating that the two response groups may be compared. However, the two groups differ with respect to the variable *age*. The respondents in the main response group averaged on 50 years and seven months of age, whereas the control group averaged on 53 years and nine months. Inspection of the data shows that this difference must largely be attributed to 4 outliers in the control group. If these cases would be dropped from the (small) data set, the *t* test would not show a significant result at the 10 % level of significance anymore. Therefore, I decided that it was appropriate to assume comparability between the response group and the sample.

6.3 MEASUREMENT

A next step in the analytical procedure is the establishment of high-quality measures for the six theoretical constructs identified in chapters four through six (i.e., stakeholder integration, capability development, economic benefits, strategic benefits, corporate reputation, and biotechnology reputation). Following Churchill (1979), I perceive the quality of a measure as the extent to which it possesses four desirable properties, notably: (1) reliability, (2) unidimensionality, (3) content validity, and (4) construct validity. I develop this section in two further parts. First, I describe the general procedure I followed for determining whether the selected measures possessed the four aforementioned desirable properties. Second, I discuss the scale purification procedure for each of the individual measurement scales.

6.3.1 Four desirable measurement properties

1. *Reliability.* The reliability of a measure concerns the extent to which it yields the same result on repeated trials (Sullivan & Feldman, 1994). Basic measurement theory proposes that two kinds of errors affect empirical measurement: random error and nonrandom error. Random error is a term for all the chance factors that may impact the measurement of a construct. The amount of random error is inversely related to the degree of reliability of the measurement instrument (Carmines & Zeller, 1994). Reliability is therefore basically an empirical issue, focusing on the performance of empirical measures. To assess the reliability of the measures, I will use an internal consistency method, notably Cronbach's alpha (Cronbach, 1951). This technique requires only a single test administration and provides a unique estimate of reliability for the measure under analysis. Theoretically, alpha may vary between 0 and 1, corresponding to a completely unreliable measure and a perfectly reliable measure respectively. As a general rule, reliabilities should not be under 0.80 for widely used measures (Carmines & Zeller, 1994). At that level, correlations are attenuated very little by random measurement error. For all the scales I will report the items of which the scale consisted after purification, the deleted original items, the corrected item-total correlations, the item correlation matrix, and Cronbach's alpha.
2. *Unidimensionality.* Ideally, a scale should only measure a single underlying phenomenon. The unidimensionality of a scale can be assessed by means of factor analysis. Factor analysis consists of a variety of techniques for discovering clusters of interrelated variables. A factor is defined by a set of items that are more highly correlated with each other than with other items. An indication of the extent to which a factor is correlated with each item is provided by the factor loading. For the present purposes, principal

components analysis is the most suitable technique. For a set of items without perfect correlations, principal components analysis will extract as many components (factors) as there are items. The components are yielded in descending order with respect to the amount of variance explained. The sum of squared loadings of a component is called its eigenvalue. An empirical scale that only measures a single phenomenon has four characteristics (Carmines & Zeller, 1994). First, the first extracted component should explain a large proportion of the variance in the items (ideally over 40 %). Second, the subsequent components should explain fairly equal proportions of the remaining variance, except for a gradual decrease. Third, all or most of the items should have substantial loadings on the first component (ideally over 0.3). Fourth, all or most of the items should have higher loadings on the first component than on subsequent components. For all the scales I used I will report the communalities of the original items (the amount of variance a variable shares with the other variables in the analysis), the eigenvalues of all the extracted components, and the percentage of variance explained by the components.

3. *Content validity.* As was explained above, basic measurement theory suggests that there is also a second type of error affecting empirical measurement – nonrandom error. In contrast to random error, nonrandom error has a systematic biasing effect on measurement instruments (Carmines & Zeller, 1994). Because of these systematic effects, nonrandom error lies at the heart of validity. As Althausser and Heberlein phrase it, “matters of validity arise when other factors – more than one underlying construct or methods factors or other unmeasured variables – are seen to affect the measures in addition to one underlying concept and random error” (1970: 152). Whereas reliability depends on the extent of random error present in the measurement process, validity is inversely related to the amount of nonrandom error (Werts & Linn, 1970). Furthermore, in contrast to reliability, validity is not a purely empirical phenomenon. Validity is also a theoretically oriented issue, because it inevitably raises the question, “valid for what purpose?” (Carmines & Zeller, 1994: 8). Many different types of validity are identified in the literature. *Criterion-related* or *predictive validity* for example, refers to the extent to which a criterion [measurement instrument] corresponds to a behavior external to the measurement instrument itself (Nunnally, 1978). *Convergent validity* refers to the notion that very different measures ought to produce very similar results when they assess the same empirical phenomenon (Campbell & Fiske, 1959). Alternatively, *discriminant validity* suggests that measures should discriminate among traits that are distinct (Campbell & Fiske, 1959). However, in this chapter I will focus on two types of validity that are arguably more basic than the ones described above, notably *content* and *construct validity*. Content validity, first of all, refers to the extent to which an empirical measurement reflects a specific domain of content (Carmines & Zeller, 1994). A domain of

content in this respect refers to the empirical phenomenon that is the focus of the measurement efforts. Determining what empirical phenomenon to measure is not a trivial task because, as Cronbach and Meehl observe, “the acceptance of the universe of content as defining the variable to be measured is essential” (1955: 282). The establishment of a content-valid measure therefore requires that the full domain of content that is relevant to the particular measurement situation must be specified (Carmines & Zeller, 1994). For the stakeholder integration and capability development constructs, the domain of content has been discussed in chapters four and five respectively (in both the empirical and conceptual sense). For the economic benefits, strategic benefits, corporate reputation, and biotechnology reputation constructs the conceptual domain of content has been discussed extensively in chapter six.

4. *Construct validity.* Since it is often difficult to draw clear lines of demarcation between various domains of content in the social sciences, the establishment of content validity alone is of limited usefulness for assessing the overall validity of empirical measures of theoretical concepts. Therefore, a lot of attention is often paid to the establishment of construct validity. As Cronbach and Meehl observe, “construct validity must be investigated whenever no criterion or universe of content is accepted as entirely adequate to define the quality to be measured” (1955: 282). Essentially, construct validity is “concerned with the extent to which a particular measure relates to other measures consistent with theoretically derived hypotheses concerning the concepts (or constructs) that are being measured” (Carmines & Zeller, 1994: 15). Construct validity can be established through a series of three interrelated steps. First, the theoretical relationships between the concepts must be specified. Essentially, this first step involves the development of a set of theoretically grounded research hypotheses. Second, the empirical relationships between the measures of the concepts must be examined. In essence, this involves the empirical testing of the previously established theoretical hypotheses. Finally, the empirical results must be interpreted in terms of how they clarify the construct validity of the various measures in the “web” of theoretical propositions. If the performance of the measures is consistent with theoretically derived expectations, then it may be concluded that the measure is construct valid. The first step of this validation process – the specification of theoretical hypotheses – was taken in the sixth chapter of this text. In chapter eight steps two and three will be reported. In that particular chapter I first conduct a formal test of the previously established research hypotheses, and subsequently interpret these results in terms of the construct validity of the underlying measures. Before all that, however, I will first finish this section on measurement by discussing the individual purification procedures for each of the six measures used in this study.

6.3.2 Six scale purification procedures

Stakeholder integration. I measured the stakeholder integration construct by means of a seven-item psychometric scale (see Appendix A). I derived the items for this scale from the case study (see chapter four). Reliability analysis revealed that I could improve upon the internal consistency of the scale by dropping its first item. A possible explanation might be that this first item (“We are able to translate the potential risks of modern biotechnology into terminology that is understandable to our stakeholders”) refers more to a corporate-level ability than to a relational quality. What remains is a six-item scale (see Table 6.15) which not only covers the empirical domain of content rather well, but which also has a satisfactory degree of internal consistency. Both the corrected item-total correlations and the inter-item correlations are sufficiently high, resulting in a Cronbach’s alpha of 0.83 (see Table 6.16 on page 135). Furthermore, a principal components analysis revealed that the first component has an eigenvalue of 3.27 (on a six-item scale), and consequently explains 54 % of the variance. The second component has an eigenvalue of only .96, explaining no more than 16 % of the variance. Therefore, it may also be concluded that the stakeholder integration scale I developed is adequately unidimensional (see Table 6.17 on page 135).

Table 6.15: The 6-item stakeholder integration scale

Stakeholder Integration	
SI 1.	We have developed a mature relationship with the press, based on straightforwardness and respect. <i>(SI 2 in original scale)</i>
SI 2.	We are able to establish an open dialogue with our stakeholders. <i>(SI 3 in original scale)</i>
SI 3.	We understand in which respects our opinion on modern biotechnology differs from that of our stakeholders. <i>(SI 4 in original scale)</i>
SI 4.	We listen very well to what our stakeholders have to say. <i>(SI 5 in original scale)</i>
SI 5.	We understand what drives our stakeholders because we continuously think along with them. <i>(SI 6 in original scale)</i>
SI 6.	We integrate the opinions of our stakeholders into our decisions. <i>(SI 7 in original scale)</i>

Table 6.16: Stakeholder integration internal consistency assessment

VAR.	I - T	SI 1	SI 2	SI 3	SI 4	SI 5
SI 1	.53					
SI 2	.70	.54				
SI 3	.53	.47	.50			
SI 4	.71	.36	.58	.49		
SI 5	.59	.31	.50	.26	.64	
SI 6	.55	.32	.40	.29	.54	.54

$\alpha = 0.83$

Table 6.17: Stakeholder integration unidimensionality assessment

VARIABLE	COMMUNAL.	COMPONENT	EIGENVALUE	VARIANCE
SI 1	.44	1	3.27	54.47 %
SI 2	.65	2	.96	16.02 %
SI 3	.45	3	.58	9.72 %
SI 4	.69	4	.52	8.72 %
SI 5	.56	5	.37	6.10 %
SI 6	.49	6	.30	4.98 %

Capability development. To measure the capability development construct, I used a ten-item scale developed by Sharma & Vredenburg (1998). I was able to improve upon the internal consistency of the scale by dropping the first three items. The first two items of the original scale (“Our capabilities take a long period of time to build up” and “Competitors can not build up these capabilities faster through a greater application of resources”) refer to the property of time compression diseconomies (Dierickx & Cool, 1989). The third item (“Our capabilities can not easily be identified or imitated by competitors”) refers to the property of limited imitability (Barney, 1991; Peteraf, 1993). The idiosyncracies of the research setting offer a potential explanation for the relatively low item-total correlations of these items. The concept of time compression diseconomies is hard to apply to the present study, because the capability building process did not emerge out of a conscious decision by autonomous managers, but it developed in response to an external trigger (the upheaval surrounding the arrival of genetically modified soybeans in the fall of 1996). Therefore, contrary to most other empirically observed instances of capability building, most of the companies in the sample started building new issues management capabilities at more or less the same point in time. The time factor could therefore not be used to discriminate among the various companies I investigated. Furthermore, the concept of limited imitability vis-à-vis *competitors* seems of little use in a research setting characterized by extensive cooperative capability building efforts. The resulting seven-item scale is on display in Table 6.18 on page 136.

Table 6.18: The 7-item capability development scale

Capability Development	
CD 1.	Our capabilities span (provide benefits) to several functional areas/departments. <i>(CD 4 in original scale)</i>
CD 2.	Our capabilities span (provide benefits) to different levels within the company. <i>(CD 5 in original scale)</i>
CD 3.	Our capabilities lack a clearly identified owner within the company, i.e. an employee cannot leave with organizational reputation, knowledge, relationships, etc. <i>(CD 6 in original scale)</i>
CD 4.	Our capabilities act as triggers for collective learning within the company. <i>(CD 7 in original scale)</i>
CD 5.	Our capabilities act as triggers for innovation in the company. <i>(CD 8 in original scale)</i>
CD 6.	Our capabilities act as triggers for collaborative problem solving with stakeholders. <i>(CD 9 in original scale)</i>
CD 7.	Our capabilities combine with other assets to generate benefits for the company, e.g. improved reputation combines with an established retail network. <i>(CD 10 in original scale)</i>

The scale is internally consistent (see Table 6.19), as well as unidimensional (see Table 6.20).

Table 6.19: Capability development internal consistency assessment

VAR.	I - T	CD 1	CD 2	CD 3	CD 4	CD 5	CD 6
CD 1	.71						
CD 2	.79	.80					
CD 3	.62	.51	.56				
CD 4	.71	.55	.62	.61			
CD 5	.72	.52	.60	.48	.64		
CD 6	.66	.47	.60	.41	.47	.58	
CD 7	.66	.52	.52	.40	.46	.59	.66

$\alpha = 0.90$

Table 6.20: Capability development unidimensionality assessment

VARIABLE	COMMUNAL.	COMPONENT	EIGENVALUE	VARIANCE
CD 1	.64	1	4.31	61.61 %
CD 2	.74	2	.80	11.36 %
CD 3	.51	3	.60	8.58 %
CD 4	.63	4	.45	6.46 %
CD 5	.65	5	.37	5.31 %
CD 6	.58	6	.30	4.31 %
CD 7	.56	7	.17	2.38 %

Economic benefits. A seven-item scale adapted from Sharma & Vredenburg (1998) was used to measure the economic benefits construct. An internal consistency test revealed that I could improve upon the reliability of the scale by dropping items number one (“Our costs of regulatory compliance have been reduced”), five (“Our employees have learned to apply modern biotechnology safely”), and six (“We have improved our corporate reputation through the application of modern biotechnology”). Item number one probably had to be dropped because of the lack of clarity surrounding the regulatory situation with respect to biotechnology. The EU has consistently failed to develop and implement a satisfactory regulatory framework for the use of genetic modification, making it very hard for the companies in the sample to assess what their “true” costs of regulatory compliance (corrected for a potentially large hidden component) actually are. Furthermore, item number five probably had to be dropped because I included the word “safely” in it. As the survey results show, many of the respondents are in grave doubts with respect to the health and environmental effects of modern biotechnology (see Table 6.13). With the benefit of hindsight, it is not unreasonable to assume that respondents that have their doubts about the safety of modern biotechnology in general also do not believe that the technology can “safely” be used by their own companies. Finally, I most likely had to delete item number six because of the word “improved.” As the survey results show, corporate reputation scores in general are higher than the scores for biotechnology reputation (the corrected means are 5.80 and 3.59 respectively). Therefore, very few organizations dare to claim that their corporate reputation has actually improved due to their application of modern biotechnology, even though they perform relatively well in this respect in comparison with others. The remaining 4-item scale is listed in Table 6.21

Table 6.21: The 4-item economic benefits scale

Economic Benefits	
EB 1.	We have increased our production efficiency. (<i>EB 2 in original scale</i>)
EB 2.	We have increased our knowledge about effective ways of managing operations. (<i>EB 3 in original scale</i>)
EB 3.	We have improved the quality of our products. (<i>EB 4 in original scale</i>)
EB 4.	Our profitability has increased. (<i>CD 7 in original scale</i>)

After deleting the three items listed above, the results of the internal consistency assessment of this scale are acceptable. Corrected item-total correlations average on .58 and inter-item correlations on .46. Cronbach’s alpha for the four-item economic benefits scale is .77 (see Table 6.22 on page 138). Furthermore, the scale is adequately unidimensional (verify with Table 6.23 on page 138). Principal components analysis revealed that the first component has an eigenvalue of 2.42, explaining 61 % of the total variance. The second component

possesses an eigenvalue of only .78, explaining 20 % of the variance. In sum, it may be claimed that the economic benefits construct is measured adequately.

Table 6.22: Economic benefits internal consistency assessment

VAR.	I - T	EB 1	EB 2	EB 3
EB 1	.69			
EB 2	.70	.77		
EB 3	.55	.50	.50	
EB 4	.39	.34	.32	.34

$\alpha = 0.77$

Table 6.23: Economic benefits unidimensionality assessment

VARIABLE	COMMUNAL.	COMPONENT	EIGENVALUE	VARIANCE
EB 1	.76	1	2.42	60.60 %
EB 2	.77	2	.78	19.57 %
EB 3	.57	3	.57	14.15 %
EB 4	.34	4	.23	5.68 %

Strategic Benefits. I used a seven-item scale to measure the strategic benefits construct (adapted from Sharma & Vredenburg, 1998). Internal consistency analysis showed that the reliability of this measure could be improved upon by dropping items one (“We are able to anticipate on future legislation”), two (“We are able to secure the long-term efficiency of our production process”), and three (“In the future we will be able to manage our operations more effectively”). I probably had to drop item number one for the same reason mentioned above, notably the unclear legislative situation in the EU. It is somewhat more difficult to explain why items two and three had to be dropped, because these items correlated rather well with most of the other items in the scale. Principal components analysis showed, however, that these two items jointly comprise an interpretable distinct component. Whereas the other items seem to measure strategic benefits in the sense explained in chapter six, items two and three seem to relate more to “future economic gains.” In a sense, these two items are therefore more akin to the economic benefits construct outlined above. I decided to drop the two items, and the remaining four-item scale is on display in Table 6.24 (on page 139). The reliability analysis conducted on the four remaining items revealed that this scale possesses adequate reliability. On average, item-total correlations exceed .70, which provides the scale with an excellent Cronbach’s alpha of .88 (verify with Table 6.25 on page 139). A new principal components analysis on the remaining four items showed that the scale also possesses desirable unidimensionality properties (see Table 6.26 on page 139). The first component has an eigenvalue of 2.94, which corresponds with 73 % of the variance of a four-item scale. The second component had an eigenvalue of only

.45, corresponding to 11 % of the variance. In sum, I was able to measure the strategic benefits construct unidimensionally and with adequate reliability.

Table 6.24: The 4-item strategic benefits scale

Strategic Benefits	
SB 1.	In the future we will be able to use modern biotechnology for improving the quality of our products. <i>(SB 4 in original scale)</i>
SB 2.	The modern biotechnology issue triggers continuous learning among our employees. <i>(SB 5 in original scale)</i>
SB 3.	In the future our reputation in the area of modern biotechnology will improve. <i>(SB 6 in original scale)</i>
SB 4.	The introduction of modern biotechnology will improve our future profitability. <i>(SB 7 in original scale)</i>

Table 6.25: Strategic benefits internal consistency assessment

VAR.	I - T	SB 1	SB 2	SB 3
SB 1	.79			
SB 2	.69	.66		
SB 3	.73	.64	.60	
SB 4	.76	.73	.56	.67

$\alpha = 0.88$

Table 6.26: Strategic benefits unidimensionality assessment

VARIABLE	COMMUNAL.	COMPONENT	EIGENVALUE	VARIANCE
SB 1	.79	1	2.94	73.44 %
SB 2	.67	2	.45	11.27 %
SB 3	.72	3	.37	9.21 %
EB 4	.75	4	.24	6.08 %

Corporate reputation. I measured corporate reputation (or *perceived external prestige*) by means of a six-item scale developed by Smidts, van Riel, and Pruyn (2001). Reliability analysis showed that I could not improve upon the internal consistency of this scale. Therefore, I retained all the items (verify with Table 6.27 on page 140).

Table 6.27: The 6-item corporate reputation scale

Corporate Reputation	
CR 1.	Our company has a good reputation in the outside world. <i>(CR 1 in original scale)</i>
CR 2.	Our customers are generally satisfied with our products. <i>(CR 2 in original scale)</i>
CR 3.	Our company is seen as a good employer. <i>(CR 3 in original scale)</i>
CR 4.	Our company is seen as financially solid. <i>(CR 4 in original scale)</i>
CR 5.	In comparison with other companies in our industry, our company is seen as a positive role model. <i>(CR 5 in original scale)</i>
CR 6.	In comparison with other companies in general, our company is seen as a positive role model. <i>(CR 6 in original scale)</i>

Both item-total and inter-item correlations were sufficiently high, the former averaging on .61 and the latter on .47. This accumulates to a satisfactory Cronbach’s alpha of .83 (see Table 6.28). Also, the scale is adequately unidimensional. The first component possesses an eigenvalue of 3.45, explaining 56 % of the variance of the six-item scale, whereas the second only explains 14 % (see Table 6.29).

Table 6.28: Corporate reputation internal consistency assessment

VAR.	I - T	CR 1	CR 2	CR 3	CR 4	CR 5
CR 1	.53					
CR 2	.67	.57				
CR 3	.57	.37	.48			
CR 4	.60	.41	.50	.53		
CR 5	.63	.36	.49	.37	.43	
CR 6	.68	.40	.48	.47	.44	.73

$\alpha = 0.83$

Table 6.29: Corporate reputation unidimensionality assessment

VARIABLE	COMMUNAL.	COMPONENT	EIGENVALUE	VARIANCE
CR 1	.47	1	3.45	55.77 %
CR 2	.62	2	.82	13.64 %
CR 3	.50	3	.69	11.56 %
CR 4	.54	4	.48	7.95 %
CR 5	.58	5	.41	6.87 %
CR 6	.63	6	.25	4.22 %

Biotechnology reputation. To measure a company’s reputation in the area of modern biotechnology, I used a six-item scale that I adapted from the Smidts, van Riel, and Pruyn (2001) scale for perceived external prestige. Internal consistency

analysis of this scale revealed that I could improve upon its reliability by dropping items number three (“Our involvement with modern biotechnology is detrimental to our image as an employer”) and four (“Our involvement with modern biotechnology is detrimental to our financial image”). There are little theoretical explanations available for the negative effects of these two items on the internal consistency of the scale, since the items are theoretically similar to those of the internally consistent generic corporate reputation scale (see Table 6.27 on page 199). A plausible empirical explanation for their corruptness is that they were the only reverse-coded items on the scale. The remaining items of the biotechnology reputation scale are displayed in Table 6.30.

Table 6.30: The 4-item biotechnology reputation scale

Biotechnology Reputation	
BR 1.	In the area of modern biotechnology our company has a good reputation in the outside world. (<i>BR 1 in original scale</i>)
BR 2.	Our customers are generally satisfied with our modern biotechnology-based products. (<i>BR 2 in original scale</i>)
BR 3.	In comparison with other companies in our industry, our company is seen as a positive role model in the area of modern biotechnology. (<i>BR 5 in original scale</i>)
BR 4.	In comparison with other companies in general, our company is seen as a positive role model in the area of modern biotechnology. (<i>BR 6 in original scale</i>)

The internal consistency analysis for this scale showed that its reliability is excellent. Item-total correlations averaged on .81 and inter-item correlations on .74. This resulted in a Cronbach’s alpha for this scale of .92 (verify with Table 6.31). Furthermore, a principal components analysis revealed excellent unidimensionality properties. The first component has an eigenvalue of 3.20, explaining 80 % of the variance of the four-item scale. The second component only has an eigenvalue of .44, corresponding to 11 % of the variance (see Table 6.32 on page 142). In sum, it may be concluded that the measurement scale for the biotechnology reputation construct is both reliable and unidimensional.

Table 6.31: Biotechnology reputation internal consistency assessment

VAR.	I - T	BR 1	BR 2	BR 3
BR 1	.75			
BR 2	.79	.74		
BR 3	.84	.66	.70	
BR 4	.86	.69	.71	.91

$\alpha = 0.92$

Table 6.32: Biotechnology reputation unidimensionality assessment

VARIABLE	COMMUNAL.	COMPONENT	EIGENVALUE	VARIANCE
BR 1	.73	1	3.20	80.18 %
BR 2	.77	2	.44	11.03 %
BR 3	.84	3	.26	6.61 %
BR 4	.86	4	.09	2.28 %

6.4 CONCLUSION

In the present chapter I provided an overview of the methods used for the second empirical study of this text, a large-scale mail survey of the issues management practices of the firms in the Dutch fats and oils industry. I started by providing a detailed description of the research sample, both in terms of the response characteristics and in terms of a number of individual and organization level variables. Subsequently, I compared the group of respondents with a group of initial non-respondents to discover whether these groups were statistically different.

The second part of this methods chapter was devoted to a discussion on construct measurement. This section started with an overview of the properties that a desirable construct measure should possess (reliability, unidimensionality, content validity, and construct validity). Next, the psychometric scales I used for measuring the six central constructs of this study (stakeholder integration, capability development, economic benefits, strategic benefits, corporate reputation, and biotechnology reputation) were evaluated in terms of these desirable properties, with an explicit focus on reliability and unidimensionality. This evaluation showed that the measures in use were satisfactorily reliable and unidimensional. In the subsequent chapter these individual measures can therefore be used to evaluate the contribution of strategic issues management to corporate performance.

Chapter 7

Testing the framework (II): Survey results

7.1 INTRODUCTION

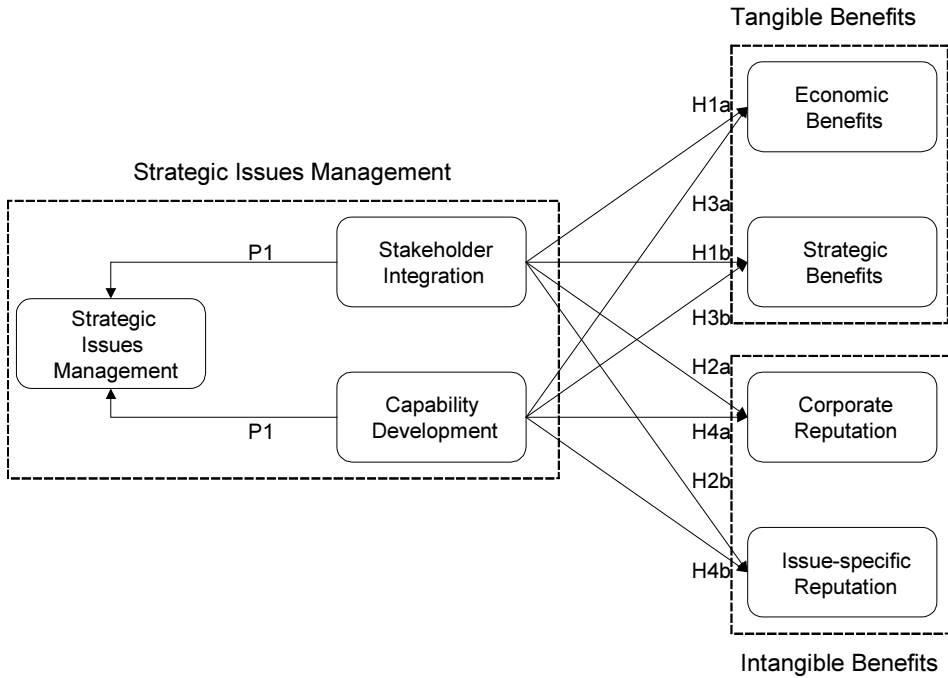
The current chapter presents the results of the survey study. It starts with a brief recapitulation of the research framework as it was presented in the third chapter of this text. This short recapitulation reintroduces the framework both graphically and in terms of the previously introduced formal research hypotheses. Next, I will briefly elaborate on the regression procedure that I followed to actually test these theoretical statements. This procedure consists of four interrelated steps, notably: (1) model specification, (2) assessment of multiple regression assumptions, (3) assessment of overall model fit, and (4) interpretation of the regression variate. Subsequently, the results of four distinct hierarchical regression analyses will be presented. I will respectively use economic benefits, strategic benefits, corporate reputation, and biotechnology reputation (i.e., issue-specific reputation) as the dependent variables for these regressions, while using stakeholder integration and capability development as the independent variables for each of them. Before I finish this chapter with some brief concluding remarks, I will present two short notes on the variance explained by the control variables and on the construct validity of the measures in use.

7.2 RECAPITULATING THE FRAMEWORK

In chapter three of this text the research framework underlying the second study was introduced. It consisted of a theoretical proposition and eight formal hypotheses, each linking an issues management activity (stakeholder integration

or capability development) to an indicator of corporate performance (economic benefits, strategic benefits, corporate reputation, or issue-specific reputation). This theoretical framework is depicted graphically in Figure 7.1.

Figure 7.1: A recapitulation of the framework



Furthermore, the eight formal hypotheses are restated in Table 7.1 on page 145. I have done so for two reasons. First, this brief recapitulation facilitates a more straightforward interpretation of the analyses reported in this chapter, because they can now be linked to the corresponding hypotheses directly. Secondly, as will be explained more fully in the sixth paragraph of the present chapter, these hypotheses play an important role in the assessment of the construct validity of the measures used in the present study. It was mentioned already in the previous chapter that construct validity can be perceived as the degree of correspondence between the conceptual relationships between a set of theoretical constructs and the empirical relationships between the measures representing these constructs. The degree of construct validity may therefore be assessed by comparing the *a posteriori* number of accepted (or rejected) hypotheses to the total number of *a priori* formulated hypotheses.

Table 7.1: A recapitulation of the research hypotheses

Hypotheses
Hypothesis 1a. The degree to which a firm is involved with stakeholder integration activities will be positively associated with the extent to which it is able to realize economic benefits.
Hypothesis 1b. The degree to which a firm is involved with stakeholder integration activities will be positively associated with the extent to which it is able to realize strategic benefits.
Hypothesis 2a. The degree to which a firm is involved with stakeholder integration activities will be positively associated with the extent to which it is able to realize a favorable corporate reputation.
Hypothesis 2b. The degree to which a firm is involved with stakeholder integration activities will be positively associated with the extent to which it is able to realize a favorable biotechnology reputation.
Hypothesis 3a. The degree to which a firm is involved with capability development activities will be positively associated with the extent to which it is able to realize economic benefits.
Hypothesis 3b. The degree to which a firm is involved with capability development activities will be positively associated with the extent to which it is able to realize strategic benefits.
Hypothesis 4a. The degree to which a firm is involved with capability development activities will be positively associated with the extent to which it is able to realize a favorable corporate reputation.
Hypothesis 4b. The degree to which a firm is involved with capability development activities will be positively associated with the extent to which it is able to realize a favorable biotechnology reputation.

7.3 REGRESSION PROCEDURE

I conducted four hierarchical linear regression analyses to test the eight formal research hypotheses, using ordinary least squares estimation methods. Regression analysis is a powerful statistical tool, but it is vulnerable to a number of serious pitfalls. More in particular, the technique is based on a number of stringent statistical assumptions that must be met if the conclusions drawn from regression analyses are to be valid (Mendenhall & Sincich, 1996). To guarantee proper use of the technique, I used the regression procedure proposed by Hair, Anderson, Tatham, and Black (1998). This procedure consists of six steps, of which four are relevant to the present purpose, notably (1) model specification, (2) assessment of multiple regression assumptions, (3) assessment of overall model fit, and (4) interpretation of regression variate.

1. *Model specification.* The specification of a probabilistic model is key to the success of a regression analysis (Mendenhall & Sincich, 1996). It involves writing a model that provides a good fit to a set of data and that will give good estimates of the mean value of the dependent variable y for given values of the independent variables $x_1, x_2, x_3, \dots, x_k$. I will be using hierarchical regressions, which in this case implies that I will specify two probabilistic models for each dependent variable. One of these models is the *full* model (Gujarati, 1995), in which all independent variables (predictors and controls) are included. The other is the *nested* model (Gujarati, 1995), which includes only the control variables. By comparing the amount of variance explained by these two models, it can be assessed directly whether the portion of the total variance that is uniquely explained by the predictor variables is significant.
2. *Multiple regression assumptions.* The results of the regression analyses should not be disturbed by influential observations (e.g., outliers). Therefore, I will calculate the Studentized residuals for all observations, and be closely inspecting those residuals with values over 2.5. If appropriate, influential observations will be removed from the data set for theoretical reasons. After removing the invalid cases, the full model will subsequently be re-fitted to the remaining observations. Furthermore, the outcomes of a regression analysis can only be “trusted” when certain stringent statistical assumptions are met. These assumptions are mostly related to the probability distribution of the error term (ε). Four assumptions about the general form of the probability distribution of ε are made in general (Chatterjee & Price, 1991; Jennrich, 1995; Mendenhall & Sincich, 1996). First of all, it is assumed that the mean of the probability distribution of ε is 0. Second, it is commonly assumed that the probability distribution of ε is normal. Third, it is assumed that the variance of the probability distribution of ε is constant for all settings of the x variables. Fourth, and finally, it is assumed that the errors associated with any two different observations are independent. The normality assumptions (one and two) will be “tested” visually by means of a normal probability plot and a histogram of the residuals. The homoscedasticity assumption (three) will be tested visually by means of a standardized predicted values - standardized residuals plot, and more formally by means of a Levene’s test for the equality of variances between subgroups with high and low predicted values of y respectively (using high and low scores on the most influential x variable as the demarcation criterion). I will test the independence assumption (four) by means of a Durbin-Watson test.
3. *Overall model fit.* I will be using regression analysis as a confirmatory technique. In other words, I will only test the models that include the predictor and control variables that have been identified for theoretical reasons in step one of this procedure. In order to assess whether these models fit the data in general, I conduct a series of tests in three steps. First, I inspect the amount of variance explained by the models. For this purpose, the more

conservative adjusted R^2 measure is preferred to the unadjusted value of R^2 . Second, an F test (ANOVA) is conducted to formally test whether the amount of variation explained by the regression models is more than the variation explained by simply supplanting each true score with the mean value of the dependent variable (i.e., that R^2 is greater than zero). Third, I will conduct a number of significance tests for the individual regression coefficients (β s). The appropriate test is the t test, assessing whether individual coefficients have an impact significantly different from zero, and hence whether they should be included in the predictive model.

4. *Interpretation of regression variate.* A next step in the regression procedure is to evaluate whether the regression variate is affected by (multi)collinearity problems. I will compute the Variance Inflation Factors (VIFs) for all the variables in the model. If (multi)collinearity is encountered, it will be solved by dropping one (or several) of the highly correlated variables from the model. Finally, the regression variate must be interpreted by evaluating the estimated regression coefficients for their explanation of the dependent variable. Standardized Betas will be used for this task, because these are not affected by scaling problems. I will be able to report the results of the formal test of the research hypotheses upon the interpretation of these standardized coefficients.

7.4 RESULTS

The results of this study will be reported as follows. Four full regression models and four nested models will be specified in this paragraph, with economic benefits, strategic benefits, corporate reputation, and biotechnology reputation as their dependent variables respectively. I will report the essential outcomes of the four steps of the regression procedure presented above for each of the aforementioned models. First, however, a matrix presenting descriptive statistics and Pearson correlations between all independent and dependent variables is provided in Table 7.2.

Table 7.2: Descriptive statistics and correlations

Variable	Mean	s.d.	1	2	3	4	5
Stakeholder	28.79	6.04					
Integration							
Capability	34.47	7.92	.53**				
Development							
Strategic	17.45	5.64	.26**	.31**			
Benefits							
Economic	17.79	4.95	.35**	.40**	.35**		
Benefits							

Table 7.2: Descriptive statistics and correlations (continued)

Corporate Reputation	34.77	4.58	.43**	.41**	.15*	.20**	
Biotech Reputation	14.36	5.69	.30**	.27**	.56**	.31**	.27**

* p < .05

** p < .01

Economic benefits

Model specification. For the first two models (a full model consisting of predictor and control variables and a nested model consisting of the control variables only), economic benefits will be used as the dependent variable. In order to conduct a formal test of Hypotheses 1a and 3a, I will include stakeholder integration and capability development in the full model as predictor variables. I control for industry effects, because the fifth chapter of this text has shown that the degree of industry-related stakeholder activism is an important determinant of the extent to which companies can build competitively valuable capabilities. I also control for size, because the possibility of scale economies in issues management activities cannot *a priori* be neglected. This combination of predictors and controls suggests the following regression models:

$$y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \varphi_1x_4 + \varepsilon \quad \text{(full model)}^{38}$$

$$y = \beta_0 + \beta_3x_3 + \varphi_1x_4 + \varepsilon \quad \text{(nested model)}$$

Where:

- y = Economic benefits (dependent)
- x₁ = Stakeholder integration (predictor)
- x₂ = Capability development (predictor)
- x₃ = Company size (control)
- x₄ = Industry (control)
- ε = Error term

Multiple regression assumptions. After running the initial analysis on the full model, the data set was explored for influential observations. Six cases had Studentized residuals with values over 2.5, but none of them had to be deleted for theoretical reasons. Therefore, the results of the initial analysis are reported in Table 7.3 on page 149.

38 The coefficient for the control variable industry is indicated by the Greek symbol φ, not by the symbol β. This is because this coefficient is actually a vector that is calculated by adding up all coefficients for the individual industry dummy variables.

Table 7.3: Regression results for economic benefits

Variable	Unstd. <i>B</i> (Std. Error)	Beta (<i>B</i>)	<i>t</i> -value	Sig.	VIF
Constant	9.166 (2.259)		4.058	0.000	
Stakeholder Integration	0.172 (0.061)	0.213	2.842	0.005	1.403
Capability Development	0.182 (0.048)	0.291	3.765	0.000	1.522
Corporate size	- 0.136 (0.093)	- 0.103	- 1.469	0.143	1.137
Biotechnology	- 1.361 (1.548)	- 0.100	- 0.879	0.380	3.234
Agriculture	- 1.037 (1.904)	- 0.048	- 0.545	0.587	1.926
Trade	- 1.565 (1.513)	- 0.131	- 1.035	0.302	4.010
Processing	- 1.041 (1.494)	- 0.087	- 0.697	0.487	3.960
Food	- 2.187 (1.466)	- 0.198	- 1.492	0.137	4.474
Retail	5.470 (2.610)	0.155	2.096	0.037	1.370
<i>R</i> ²	0.243				
<i>R</i> ² – adjusted	0.208				
<i>F</i> -statistic	6.831				
Prob. of <i>F</i>	0.000				
Durbin- Watson	2.117				
<i>N</i>	201				

Inspection of both the histogram of the standardized residuals and the normal probability plot revealed that the data did not violate the normality assumptions, since they did not deviate significantly from the normal distribution bell curve and the expected cumulative probability line respectively. Furthermore, to test for heteroscedasticity I conducted a Levene's test for the equality of variances. The test showed an *F*-value of 0.702 and a significance level of 0.403. At this level of significance it may safely be concluded that there are no serious heteroscedasticity problems in the data. Finally, a Durbin-Watson *d* test was used to assess whether the independence assumption would hold. The one-tailed zone of rejection at the 5 % level of significance for this statistic is $d > 2.137$. I found a *d* value of 2.117, so it may be concluded that the error terms are independent.

Overall model fit. The full regression model specified in step one showed an agreeable adjusted R^2 of 0.208. To assess whether this amount of explained variance should be attributed to the control variables or to the predictor variables, I also fitted a nested model containing the controls only. The change statistics for these two models are depicted in Table 7.4.

Table 7.4: Change statistics for economic benefits

Model	Change statistics				
	R ² Change	F Change	df 1	df 2	Sig. F
Nested	0.070	2.087	7	193	0.047
Full	0.173	21.855	2	191	0.000

These analyses revealed that the amount of additional variance explained by the predictor variables is indeed significant (see the significance level of the change of the F statistic in the above table), and that it was therefore justified to proceed with the analyses. I conducted an ANOVA analysis to assess the predictive power of the full model, which provided an F statistic of 6.831. This value corresponds to a significance level of 0.000. Inspection of the individual regression coefficients revealed that both stakeholder integration and capability development are strong predictors of economic benefits. The former coefficient was significant at the 0.01 level, whereas the latter was even significant at the 0.001 level. These results confirm Hypotheses 1a and 3a. Furthermore, the data showed only very small effects for both size and industry.

Interpretation of regression variate. Finally, I tested for collinearity among the regression coefficients by means of VIFs. The dummy variable for the food industry yielded the largest VIF, notably 4.5. The VIFs for stakeholder integration and capability development equaled 1.4 and 1.5 respectively, indicating the absence of severe multicollinearity in the predictor variables.

Strategic benefits

Model specification. I will be using strategic benefits as the dependent variable for the next two regression models (again a full model consisting of predictor and control variables and a nested model consisting of the control variables only). To conduct a formal test of Hypotheses 1b and 3b, I will include stakeholder integration and capability development as predictor variables in the full model. Furthermore, I will control for industry effects, because it may be expected that firms in business to business markets be less severely affected by the issue than their downstream counterparts. I also control for corporate size, because larger firms may be expected to devote more resources to issues management activities than smaller ones. This combination of predictors and controls provides the following probabilistic models:

$$y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \varphi_1x_4 + \varepsilon \quad (\text{full model})$$

$$y = \beta_0 + \beta_3x_3 + \varphi_1x_4 + \varepsilon \quad (\text{nested model})$$

Where:

y	=	Strategic benefits (dependent)
x_1	=	Stakeholder integration (predictor)
x_2	=	Capability development (predictor)
x_3	=	Corporate size (control)
x_4	=	Industry (control)
ε	=	Error term

Multiple regression assumptions. After conducting the regression analysis for the full model, I inspected the data set for influential observations. Three cases had Studentized residuals with values over 2.5. I decided to delete them for theoretical purposes, and subsequently reran the regression analysis. The results of the final analysis are reported in Table 7.5.

Table 7.5: Regression results for strategic benefits

Variable	Unstd. B (Std. Error)	Beta (B)	t -value	Sig.	VIF
Constant	6.599 (2.602)		2.536	0.012	
Stakeholder Integration	0.106 (0.070)	0.113	1.512	0.132	1.440
Capability Development	0.150 (0.056)	0.209	2.698	0.008	1.512
Corporate size	0.370 (0.107)	0.244	3.467	0.001	1.309
Biotechnology	0.571 (1.783)	0.036	0.320	0.749	3.185
Agriculture	4.656 (2.193)	0.187	2.123	0.035	1.949
Trade	0.577 (1.742)	0.042	0.331	0.741	4.144
Processing	-0.784 (1.721)	-0.057	-0.455	0.649	3.959
Food	-2.685 (1.6889)	-0.212	-1.590	0.113	4.568
Retail	-2.166 (3.006)	-0.053	-0.721	0.472	1.362
R^2	0.288				

Table 7.5: Regression results for strategic benefits (continued)

R^2 - adjusted	0.255
F-statistic	8.684
Prob. of F	0.000
Durbin-Watson	2.070
N	203

The distribution of regression errors did not violate the normality assumptions, since neither the histogram of the standardized residuals nor the normal probability plot showed great deviations from the normal distribution bell curve and the expected cumulative probability line respectively. I also used Levene’s test for the equality of variances to test for heteroscedasticity. The test showed an F value of 0.007 and a significance level of 0.936, indicating the absence of heteroscedasticity in the data. Finally, a Durbin-Watson d test was used to assess the validity of the independence assumption. The one-tailed zone of rejection at the 5 % level of significance for this statistic is $d > 2.137$. A d value of 2.070 was obtained, so it may safely be concluded that the error terms are independent.

Overall model fit. The full regression model specified in step one showed an acceptable adjusted R^2 of 0.255. To assess whether this amount of variance explained should mainly be attributed to the control variables or to the predictor variables, I also estimated a nested model which contained only the controls. The change statistics for these two models are depicted in Table 7.6.

Table 7.6: Change statistics for strategic benefits

Model	Change statistics				
	R^2 Change	F Change	df 1	df 2	Sig. F
Nested	0.167	5.523	7	193	0.000
Full	0.072	9.048	2	191	0.000

These analyses revealed that the amount of additional variance explained by the predictor variables over that explained by the control variables is indeed significant (see the significance level of the change of the F statistic in the above table), and that it was therefore justified to continue with the analyses on the full model. I conducted an ANOVA analysis to assess how well the full model fitted the data, which provided an F statistic of 8.684 at a significance level of 0.001. Inspection of the individual regression coefficients revealed that capability development is indeed a significant predictor of strategic benefits, thereby confirming Hypothesis 3b. Stakeholder integration, however, did not turn out to be a significant predictor of strategic benefits, thereby refuting Hypothesis 1b (the implications of these findings will be discussed in the concluding chapter of this book). The data also revealed a strong size effect, significant at the 0.001 level.

Interpretation of regression variate. As a final step, I tested for collinearity among the regression coefficients by means of VIFs. The largest VIF for an individual coefficient was 4.1 for the dummy variable for trade organizations. The VIFs for stakeholder integration and capability development equaled 1.4 and 1.5 respectively, indicating the absence of severe multicollinearity in the independent variables.

Corporate reputation

Model specification. For the next two models (a full model consisting of predictor and control variables and a nested model consisting of the control variables only), corporate reputation was used as the dependent variable. To conduct a formal test of Hypotheses 2a and 4a, I will use stakeholder integration and capability development as predictor variables. I furthermore control for industry effects, because downstream firms can be expected to devote more resources to the maintenance of their corporate reputations than their upstream counterparts. I also control for size effects, because larger firms may be expected to devote more resources to reputation management than smaller companies. This particular combination of predictors and controls provides the following models:

$$y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \varphi_1x_4 + \varepsilon \quad (\text{full model})$$

$$y = \beta_0 + \beta_3x_3 + \varphi_1x_4 + \varepsilon \quad (\text{nested model})$$

Where:

y	=	Corporate reputation (dependent)
x_1	=	Stakeholder integration (predictor)
x_2	=	Capability development (predictor)
x_3	=	Corporate size (control)
x_4	=	Industry (control)
ε	=	Error term

Multiple regression assumptions. I searched the data set for influential observations after running the regression analysis for the full model. Seven observations had Studentized residuals with values over 2.5. However, they did not have to be deleted for theoretical reasons. The results of the initial analysis are reported in Table 7.7 on page 154:

Table 7.7: Regression results for corporate reputation

Variable	Unstd. <i>B</i> (Std. Error)	Beta (<i>B</i>)	<i>t</i> -value	Sig.	VIF
Constant	22.479 (2.050)		10.967	0.000	
Stakeholder Integration	0.244 (0.055)	0.322	4.436	0.000	1.403
Capability Development	0.129 (0.044)	0.220	2.931	0.004	1.530
Corporate size	0.121 (0.085)	0.097	1.419	0.157	1.151
Biotechnology	- 1.038 (1.405)	- 0.081	- 0.739	0.461	3.231
Agriculture	1.385 (1.728)	0.068	0.802	0.424	1.926
Trade	0.877 (1.373)	0.078	0.639	0.524	4.004
Processing	- 0.059 (1.355)	0.005	0.043	0.966	3.955
Food	- 1.658 (1.333)	- 0.160	- 1.243	0.215	4.441
Retail	2.949 (2.359)	0.089	1.245	0.215	1.371
<i>R</i> ²	0.291				
<i>R</i> ² – adjusted	0.257				
<i>F</i> -statistic	8.663				
Prob. of <i>F</i>	0.000				
Durbin-Watson	1.969				
<i>N</i>	200				

The distribution of errors did not violate the normality assumptions, since neither the histogram of the standardized residuals nor the normal probability plot showed great deviations from the normal distribution bell curve and the expected cumulative probability line respectively. Also, a Levene’s test for the equality of variances was used to test for heteroscedasticity. The test showed an *F* value of 0.02, corresponding to a significance level of 0.966. This very low level of significance indicates the absence of heteroscedasticity problems in the data. Finally, the independence assumption was tested by means of the Durbin-Watson *d* test statistic. The one-tailed zone of rejection at the 5 % level of significance for this statistic is $d < 1.863$. I found a *d* value of 1.969, so it may be concluded that the error terms are independent.

Overall model fit. The full regression model specified in step one showed a satisfactory R^2 - adjusted of 0.257. To assess whether this amount of explained variance should be attributed to the control variables or to the predictor variables, I also fitted a nested model to the data, containing the control variables only. The change statistics for these two models are depicted in Table 7.8.

Table 7.8: Change statistics for corporate reputation

Model	Change statistics				
	R ² Change	F Change	df 1	df 2	Sig. F
Nested	0.087	2.613	7	192	0.013
Full	0.204	27.332	2	190	0.000

These analyses revealed that the amount of additional variance explained by the predictor variables is indeed significant (see the significance level of the change of the F statistic in the above table), and that it was therefore justified to proceed with the analyses. I conducted an ANOVA analysis to assess the predictive power of the full model, which provided an F statistic of 8.663. This value is significant at the 0.000 level. Inspection of the individual regression coefficients revealed that stakeholder integration and capability development are indeed strong predictors of corporate reputation. The former coefficient is significant at the 0.000 level, whereas the latter is significant at the 0.01 level. These results confirm Hypotheses 2a and 4a. The data showed relatively small effects for both size and industry.

Interpretation of regression variate. Finally, I tested for collinearity among the regression coefficients by means of VIFs. The largest VIF (4.4) was attributed to the dummy variable for the food industry. The VIFs for stakeholder integration and capability development were 1.4 and 1.5 respectively, showing the absence of severe multicollinearity in the independent variables.

Biotechnology reputation

Model specification. For the final two regression models (a full model consisting of predictor and control variables and a nested model consisting of the control variables only), biotechnology reputation is used as the dependent variable. To test Hypotheses 2b and 4b, stakeholder integration and capability development were used as predictor variables. I control for industry and size effects, because firms in consumer markets and larger firms may be expected to invest more in their biotechnology reputation than business to business firms and smaller enterprises respectively. This combination of predictors and controls provides the following probabilistic models:

$$y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \varphi_1x_4 + \varepsilon \quad \text{(full model)}$$

$$y = \beta_0 + \beta_3x_3 + \varphi_1x_4 + \varepsilon \quad \text{(nested model)}$$

Where:

- y = Biotechnology reputation (dependent)
- x_1 = Stakeholder integration (predictor)
- x_2 = Capability development (predictor)
- x_3 = Corporate size (control)
- x_4 = Industry (control)
- ε = Error term

Multiple regression assumptions. The data set was searched for influential observations after running the regression analysis for the full model. Two cases had Studentized residuals with values over 2.5, but I did not have to delete either of them for theoretical reasons. Therefore, the results of the initial regression analysis are reported in Table 7.9.

Table 7.9: Regression results for biotechnology reputation

Variable	Unstd. <i>B</i> (Std. Error)	Beta (<i>B</i>)	<i>t</i> -value	Sig.	VIF
Constant	7.184 (2.735)		2.915	0.004	
Stakeholder Integration	0.206 (0.074)	0.219	2.691	0.008	1.434
Capability Development	0.056 (0.059)	0.077	1.019	0.310	1.503
Corporate size	0.280 (0.112)	0.182	2.860	0.005	1,283
Biotechnology	- 2.367 (1.875)	- 0.148	- 1.276	0.204	3.180
Agriculture	- 1.206 (2.297)	- 0.048	- 0.451	0.653	1.949
Trade	- 3.288 (1.825)	- 0.238	- 1.566	0.119	4.141
Processing	- 3.156 (1.811)	- 0.224	- 1.665	0.097	3.864
Food	- 4.738 (1.769)	- 0.371	- 2.731	0.007	4.605
Retail	- 0.017 (3.149)	0.000	- 0.397	0.692	1.438
R^2	0.188				

Table 7.9: Regression results for biotechnology reputation (continued)

R^2 - adjusted	0.149
F-statistic	4.830
Prob. of F	0.000
Durbin-Watson	2.207
N	203

The distribution of regression errors did not violate the normality assumptions, since neither the histogram of the standardized residuals nor the normal probability plot showed great deviations from the normal distribution bell curve and the expected cumulative probability line respectively. Furthermore, Levene's test for the equality of variances was used to test for heteroscedasticity. The test showed an F value of 2.873 and a significance level of 0.092. These values show that the data are probably somewhat heteroscedastic, but certainly not at a problematic level. Finally, the independence assumption was tested by means of a Durbin-Watson d test statistic. I found a d value of 2.207, whereas the one-tailed *absolute* zone of rejection at the 5 % level is $d > 2.325$. Therefore, although I cannot draw conclusions with certainty, I do not expect the error terms to be correlated.

Overall model fit. The full regression model specified in step one showed an agreeable adjusted R^2 - adjusted of 0.149. To assess whether this amount of explained variance should be attributed to the control variables or to the predictor variables, I also fitted a nested model to the data, containing the controls only. The change statistics for these two models are depicted in Table 7.10.

Table 7.10: Change statistics for biotechnology reputation

Model	Change statistics				
	R^2 Change	F Change	df 1	df 2	Sig. F
Nested	0.122	3.770	7	190	0.001
Full	0.066	7.622	2	188	0.001

These analyses revealed that the amount of additional variance explained by the predictor variables is indeed significant (see the significance level of the change of the F statistic in the above table), and that it was therefore justified to proceed with the analyses. An ANOVA analysis was conducted to assess the predictive power of the full model, which provided an F statistic of 4.830. This value is significant at the 0.000 level. Inspection of the individual regression coefficients revealed that stakeholder integration is indeed a strong predictor of biotechnology reputation. The coefficient is significant at the 0.01 level, thereby confirming Hypothesis 2b. The regression analysis refuted Hypothesis 4b, however (the implications of these findings are discussed in the final chapter of this text). The data also showed that there is a size effect, significant at the 0.01 level.

Interpretation of regression variate. Finally, I tested for collinearity among the regression coefficients by means of VIFs. The largest VIF was attributed to the dummy variable for the food industry, notably 4.6. The VIFs for stakeholder integration and capability development amounted 1.4 and 1.5 respectively, indicating the absence of severe multicollinearity in the independent variables.

7.5 A NOTE ON CONTROL VARIABLES

In the above discussion, I have primarily focused on testing the effects of the *explanatory* variables (stakeholder integration and capability development) on various indicators of corporate performance. The change statistics for economic benefits, strategic benefits, corporate reputation, and biotechnology reputation revealed, however, that the *control* variables (corporate size and industry) also explained a nontrivial part of the variance captured by the regression models (see Tables 7.4, 7.6, 7.8, and 7.10 respectively). I therefore decided to (a) group the coefficients of the control variables and their level of significance together in a single table (see Table 7.11), and (b) devote a brief discussion note to this particular set of findings before I proceed with my treatment of the construct validity of the measures in use.

Table 7.11: Explanatory power of the control variables*

	Dependent variables							
	Economic benefits		Strategic benefits		Corporate reputation		Biotech reputation	
	<i>B</i>	Sig.	β	Sig.	<i>B</i>	Sig.	<i>B</i>	Sig.
Size	- 0.103	0.143	0.244	0.001	0.097	0.157	0.182	0.005
Biotech	- 0.100	0.380	0.036	0.749	- 0.081	0.461	- 0.148	0.204
Agri	- 0.048	0.587	0.187	0.035	0.068	0.424	- 0.048	0.653
Trade	- 0.131	0.302	0.042	0.741	0.078	0.524	- 0.238	0.119
Process	- 0.087	0.487	- 0.057	0.649	0.005	0.966	- 0.224	0.097
Food	- 0.198	0.137	- 0.121	0.113	- 0.160	0.215	- 0.371	0.007
Retail	0.155	0.037	- 0.053	0.472	0.089	0.215	0.000	0.692

*The significant relationships are printed in bold

I will start with a brief discussion on the relationships between the control variables and economic benefits. There is no significant size effect, and most of the relationships between the industry variables and the dependent variable are negative but also insignificant. Interestingly, the relationship between the dummy variable for the retailing industry and economic benefits is positive and significant. Apparently, the Dutch retailers are the only organizations that have managed to realize some short-term gains from the introduction of genetically modified foods. A potential substitution effect could contribute to a possible

explanation for this finding. Critical consumers stop buying foods that contain genetically modified ingredients, but they do not necessarily switch from one supermarket to another. Instead, they will substitute the foods on their diets that are contaminated with genetically modified ingredients with more expensive, higher margin organic foods. As a matter of fact, Albert Heijn (an Ahold subsidiary and the largest Dutch retailer) has successfully introduced a new product line of over 200 “biological” (organic) products in 1998, which sell for premium prices (see: www.albert-heijn.nl). The furore over genetically modified foods may well have contributed to the success of this introduction.

Two of the relationships between the control variables and the dependent variable strategic benefits turned out to be significant. First of all, there appeared to be a strongly significant positive relationship between the size of a company and its ability to realize strategic benefits. Buzzell and Gale (1987) point at four different explanations that could underlie this relationship. First of all, it might very well be that larger firms enjoy more strategic benefits because they are able to realize economies of scale in procurement, manufacturing, marketing, and R&D. Secondly, larger businesses are often able to capitalize on risk averse tendencies with final consumers, because the latter can be eager to avoid the chances sometimes associated with buying from a smaller competitor. Thirdly, size might buy firms a certain degree of market power, allowing them to bargain more effectively and “administer” prices. Finally, another explanation for the size – strategic benefits relationship is that both reflect a common underlying factor, and that is good management. Competent managers will be able to capture a large share of the markets in which their businesses are operative *and* control costs and realize high degrees of productivity.

Secondly, there also turned out to be a significant positive relationship between the dummy variable for the agricultural sector and the dependent variable strategic benefits. In other words, many farmers are relatively optimistic with respect to the long-term benefits that modern biotechnology will bring for them. In many respects, this optimism is not unfounded. Many of the advantages of the genetically altered crops that are currently on the market (such as soy, corn, sugar beet, and potato) mostly pertain to farmers. The new crops offer no direct advantages to the consumer, which makes them hard to sell for the food producing companies and the retailers, but traits like herbicide tolerance and pest resistance offer distinct strategic benefits for the farmers that are willing to adopt them (e.g., see www.monsanto.com, www.novartis.com, and www.dupont.com).

Finally, two more significant relationships have been identified between the control variables and the dependent variable biotechnology reputation. First of all, there appeared to be a significant positive relationship between the size of a corporation and its biotechnology reputation. The competence trust mechanism (Barber, 1983; Nootboom, 1998) that I introduced in the third chapter of the present volume could contribute to a possible explanation for this finding. This mechanism predicts that companies that are able to establish a high degree of

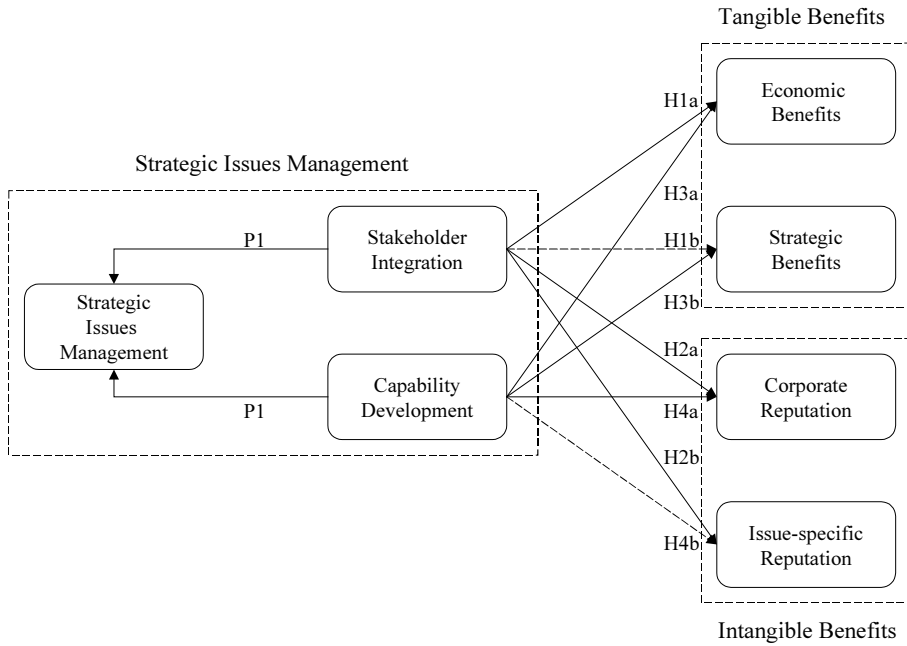
confidence with respect to the quality of their competence-base in the eyes of critical external stakeholders will enjoy a positive biotechnology reputation. The variable size moderates this relationship, because larger firms are perceived to be more accountable than smaller ones (Hannan & Freeman, 1989).

Secondly, a significant negative relationship could be identified between the dummy variable for the food industry and the dependent variable biotechnology reputation. Apparently, only the food producing companies have incurred some damage with respect to their issue-specific reputations so far, and not the retailers or the processing industry. This finding can be explained if we assume that much of the damage to a company's biotechnology reputation results from the actions of environmentalist groups and other NGOs targeting the organization. Many of the environmental NGOs protesting against modern biotechnology have so far targeted food *products* rather than the companies behind the scenes (e.g., see www.friendsoftheearth.net and www.greenpeace.org). This could explain why food producing companies suffer more from their attacks than the processing organizations that supply them with ingredients or the retailers that sell their products. Food companies will incur damage in terms of lost brand equity with every environmentalist attack, but the suppliers of raw ingredients as well as the retailers will only experience a substitution from one customer group to another and from one product to the next respectively.

7.6 A NOTE ON CONSTRUCT VALIDITY

In the present chapter, a formal test was conducted of the research hypotheses that were forwarded in the third chapter of this text. A detailed discussion on the results of this test will follow in the subsequent chapter, where they will be connected to the two research questions posed in the introductory chapter of this book. In the remainder of this chapter, I will restrict myself to an assessment of the construct validity of the measures used (coming back to chapter six, where this issue was first raised). The construct validity of a set of empirical measures may be seen as the degree of correspondence between the conceptual relationships between a set of theoretical constructs and the empirical relationships between the measures representing these constructs. To assess this correspondence, those relationships of Figure 7.1 that could be retained are displayed in Figure 7.2 on page 161.

Figure 7.2: The retained research framework*



*The rejected Hypotheses (1B & 4B) are displayed as dashed arrows.

Furthermore, a summary of the results of the survey study is displayed in Table 7.12. These results indicate strong construct validity on behalf of the empirical measures. Six out of eight of the original hypotheses were confirmed by the second empirical study, which provides a 75 % degree of correspondence between the *a priori* specified conceptual relationships between the central constructs of this study and the empirical relationships between the corresponding measures. Therefore, it may be assumed that in general the “web” of theoretical propositions holds true in empirical reality, providing for a relatively high degree of construct validity.

Table 7.12: Overall results of the regression analyses

HYPOTHESIS	STATUS	SIGNIFICANCE
1a	Confirmed	0.01
1b	Not confirmed	-
2a	Confirmed	0.000
2b	Confirmed	0.01
3a	Confirmed	0.000
3b	Confirmed	0.01
4a	Confirmed	0.01
4b	Not confirmed	-

7.7 CONCLUSION

The present chapter concludes the third part of this book, which consisted of two chapters in which the second empirical study of this book (a large-scale mail survey of the issues management practices of the Dutch fats and oils industry with regard to the issue of genetically modified foods) was explained and described. The sixth chapter was devoted to a discussion on the methods underlying this study, with a special emphasis on sampling and measurement. The present chapter discussed the results of the statistical analyses with regard to the previously introduced formal research hypotheses (cf. chapter three). The primary finding of this second study is that issues management activities indeed have a contribution to make to corporate performance (see Table 7.12). Attempts at stakeholder integration and investments in the development of competitively valuable capabilities seem to pay off in terms of both tangible and intangible positive performance differentials *vis-à-vis* other firms. The implications of these findings and the implications of the case study results are discussed in the final chapter of this text.

Chapter 8

Concluding remarks

8.1 INTRODUCTION

In this book I have investigated whether issues management may be seen as a *strategic* activity contributing to performance differentials across organizations. By its very nature, this question cannot be answered by means of a separate treatment of intra- and interorganizational issues management processes, but instead requires a truly integrated assessment in which the intra-organizational consequences of interorganizational activities (and *vice versa*) are being scrutinized. To that end, I introduced, refined, and tested an integrative framework of strategic issues management in the current volume (cf. chapter 3).

The present chapter assesses the fruitfulness of my attempts at grounding the issues management process in the strategic management tradition in four distinct steps. It starts with a brief synopsis of the conclusions of the two empirical studies reported in this text. Next, the methodological and contextual limitations of the present approach are discussed. Before finishing with some brief concluding remarks, this chapter also forwards an agenda for future research.

8.2 CONCLUSIONS

In the introductory chapter of this book I introduced two distinct but interrelated research questions pertaining to the issues management process (see chapter one of this text). The first was mainly a theory-driven question, notably: *How can we conceptualize the issues management activities that organizations use to manage those forthcoming developments that threaten to affect their ability to meet their objectives?* The second question was of a more empirical nature: *Do these issues*

management activities contribute positively to corporate performance? Apart from providing a review and extension of existing issues management theories to find answers to these questions, I also carefully designed two empirical studies. I illustrated and refined two characteristic issues management activities (i.e., stakeholder integration and capability development) by means of a detailed case study of the issues management practices of the firms in the Dutch fats and oils industry with respect to the highly salient issue of genetic modification. Furthermore, I used the same combination of industry and issue to assess the contribution of these two activities to various indicators of corporate performance (i.e., economic benefits, strategic benefits, corporate reputation, and biotechnology reputation) by means of a large-scale mail survey.

8.2.1 Conclusions of the case study

The issues management literature reports myriad techniques for scanning, interpreting, and responding to issues. This causes some problems in case one tries to assess the impact of the adoption of issues management techniques on corporate performance, because it is hard to decide which of these techniques should be selected for operationalization and measurement. I therefore started this research by designing and conducting a detailed case study, which served a twofold purpose. First, through this study I sought to assess the extent to which the various issues management activities described in the literature were actually being used in practice. Second, I sought to refine these issues management techniques conceptually by juxtaposing theoretical insights with empirical illustrations. The study showed that the organizations in the Dutch fats and oils industry primarily relied on two issues management instruments: stakeholder integration and capability development.

Stakeholder integration. Hart (1995) and Sharma & Vredenburg (1998) have previously described an externally oriented issues management activity which they labeled stakeholder integration. A company's successful attempts at integrating the voice of its stakeholders into its decision-making processes reflects an ability to establish trust-based collaborative relationships with a wide variety of external parties, especially those upon whom the company is economically and politically dependent (Pfeffer & Salancik, 1978). The case study has shown that the Dutch fats and oils industry had adopted such stakeholder integration mechanisms *avant la lettre*,³⁹ to structure and coordinate their interactions with critical outside constituencies. More in particular, four distinct stakeholder integration mechanisms seemed to have been used, notably: (1) buffering, (2) co-optation, (3) mutual learning, and (4) meta-problem solving.

³⁹ That is, before Hart (1995) introduced the concept.

1. *Buffering*: One of the recurring themes throughout the case study research was that many managers reported that their organizations engage in issues management activities to increase their autonomy versus certain critical outside constituencies. Safeguarding autonomy is notoriously difficult if the management of an organization fails to establish a direct linkage with a certain external constituency group, especially if this group is perceived to play a critical role in determining organizational success or failure (examples may be consumers or radical environmental organizations). To protect their autonomy *vis-à-vis* such constituencies, many organizations adopted buffering techniques. Buffering may be perceived as a technique through which organizations approach their stakeholders indirectly through representative organizations, in an attempt to gather as well as disseminate information through these intermediaries
2. *Co-optation*: By virtue of being open systems, organizations also have to deal with many crucial stakeholders directly (examples are buyers, suppliers, and competitors). In some respects this makes the task of stakeholder management somewhat easier, because organizations know better who their direct stakeholders are and what they want. On the other hand, however, it is difficult to gain some form of control over these directly involved parties, because they tend to be more influential than a firm's indirect stakeholders are. Organizations often respond to such pressures by means of co-optation, the absorption of new elements in the decision-making unit of the organization in order to neutralize their potential impact.
3. *Mutual learning*: Buffering and co-optation are important issues management techniques, especially with respect to those potentially antagonistic stakeholders who may cause or support issues that have a critical negative impact on the ability of the organization to reach its objectives. Yet, the organizational environment is not only characterized by adversaries, but also by supporters (e.g., organizations in the same domain that are addressed by the same potentially harmful issues and that therefore also have a stake in their resolution). Organizations may get to know more about a specific issue and about the pathways towards resolving it by means of mutual learning, the sharing of valuable experiences with other organizations.
4. *Meta-problem solving*: Oftentimes, however, strategic issues transcend the boundaries of individual organizations. Such issues require more resources, and often also more points of view, than can be found under a single roof. Meta-problems, as they are sometimes called, typically evolve over an extended period of time. They often start out being very ill defined; in which case their interpretation necessarily requires multiple points of view. Once such meta-problems become politicized, they can only be resolved in a collaborative effort by multiple organizations, because each organization in and of itself will lack both the legitimacy and the resources to address the issue in its entirety.

Capability development. Organizations not only seek for solutions to strategic issues in their external environments, however. My case study shows that managers invest considerable amounts of resources in the codification and interpretation of the issues management experiences of their subordinates, as well as in the integration of those individual experiences into higher-order organizational knowledge-based resources (Grant, 1996). They do so in an attempt to develop valuable issues management capabilities, which cannot only be applied to the present issue, but to future ones as well. Grant therefore defines organizational capability as “a firm’s ability to perform *repeatedly* a productive task which relates either directly or indirectly to a firm’s capacity for creating value through effecting the transformation of inputs into outputs” (1996: 377 [my emphasis]). In turn, this organizational capability consists of broad functional capabilities, of which four have been identified by means of combining two conceptual dimensions (*public activism* and *allowed response time*) into a two-by-two typology, notably: (1) corporate silence capabilities, (2) advocacy capabilities, (3) dialogue capabilities, and (4) crisis communication capabilities. These four broad functional capabilities have subsequently been illustrated with examples derived from the case study research.

1. *Corporate silence capability:* When an organization becomes associated with an issue in such a way that the general public or a specific stakeholder starts to believe that the organization is responsible for resolving it, we speak of issue ownership (Oomens & van den Bosch, 1999). Organizations may learn how to keep such salient issues off the public agenda by developing a capability that I previously labeled corporate silence. Essentially, this capability involves the ability to execute two distinct issues management activities. The first activity entails the avoidance of external control of the own organization through activities such as lobbying and public affairs management. The second activity involves the establishment of internal rules and procedures, which make issues-related communication the prerogative of the communication professionals of the organization.
2. *Advocacy capability:* Managers do not perceive all strategic issues as threats to the autonomy of the organization that employs them. When managers believe that their organization outperforms its direct competitors with respect to a specific issue, they may well start to see this issue as a distinct opportunity rather than a threat. After all, organizations may benefit from their association with a particular issue if they are able to gain the support of the public by convincing it of their above average performance. To do so, organizations need to invest in a capability that was previously labeled advocacy. This capability is in some respects the reverse of the capability for corporate silence, because it is aimed at catapulting certain issues onto the public agenda, rather than silencing these issues by keeping them far from the public domain.

3. *Dialogue capability*: Whereas the corporate silence and advocacy strategies are largely rooted in a one-way communication philosophy in which managers assume that their organizations know best and that external audiences may benefit from cooperating with them, the dialogue capability is based on the two-way communication model (Grunig & Hunt, 1984). This model is rooted in the communication behavior of managers, who realize that they cannot adopt an elitist position if they have to deal with highly educated and well-informed audiences, who aggressively try to state their case. Under such conditions, it is highly likely that it is the corporation that benefits most from cooperation, and not its stakeholders. Organizations may assume to have developed a dialogue capability successfully if they are able to communicate and cooperate effectively with critical outside stakeholders, whose interests are not naturally aligned with those of the organization.
4. *Crisis communication capability*: The advocacy and dialogue capabilities work well when organizations have a sufficient amount of time available for developing corporate communication campaigns and stakeholder integration platforms respectively. Sometimes, however, strategic issues are characterized by great, externally commanded time pressure. In such cases, organizations will have to formulate the right answers to urgent questions in only a limited amount of time. One of the key success factors behind successful short-term corporate responsiveness is a high degree of empathy on behalf of the communication professionals with respect to the outside audiences of the organization. Managers know that they have efficaciously developed crisis communication capabilities when they are able to exchange information with critical outside audiences in terms that these groups can understand without asking them to violate the principles of cognitive economy.

In sum, the case study has been used to develop and illustrate an integrative framework of strategic issues management that synthesizes the outside-in and inside-out views on issues management. As such, the case study has addressed the first research question reported in the first chapter of this book, notably: "How can we conceptualize the issues management activities that organizations use to manage those forthcoming developments that threaten to affect their ability to meet their objectives?" A twofold answer to this question has been forwarded in the present volume. A first activity, which I labeled stakeholder integration, may be conceptualized as the organizational ability to establish trust-based, collaborative relationships with a broad range of external constituencies (Hart, 1995; Sharma & Vredenburg, 1998). A second activity, which I labeled capability development, may be conceptualized as the integration of the knowledge of specialized individuals into higher-order organizational knowledge resources (Grant, 1996).

8.2.2 Conclusions of the survey study

Through the survey study it was attempted to link the two previously identified issues management strategies to several indicators of corporate performance. I divided these indicators over aspects of tangible performance (economic and strategic benefits) and aspects of intangible performance (corporate reputation and biotechnology reputation). The distinction between the former two indicators is that economic benefits primarily consist of short-term gains, whereas strategic benefits allow a company to upgrade its competitive position in the long run. What distinguishes the latter two indicators is that corporate reputation consists of the broadest possible assessment of a firm's relative standing *vis-à-vis* other organizations in the institutional field, whereas biotechnology reputation represents an issue-specific (and therefore more narrow) assessment of the organization's prestige.

The integrative framework developed in chapter three (which was further refined in chapters four and five) theoretically linked the two aforementioned issues management strategies to both tangible and intangible aspects of corporate performance by developing testable hypotheses derived from four alternative conceptual frameworks. Stakeholder integration was linked to economic and strategic benefits by using theoretical insights derived from the *relational view* on corporate strategy (cf. Hypotheses 1a & 1b). Alternatively, stakeholder integration was connected to corporate reputation and biotechnology reputation through the concept of *identity conversion* (cf. Hypotheses 2a & 2b). A link between capability development on the one hand and economic and strategic benefits on the other could be established with the help of straightforward arguments derived from the *resource-based view* on corporate strategy (cf. Hypotheses 3a & 3b). Finally, a connection was sought between capability development and corporate and biotechnology reputation by pointing at the importance of *competence trust* in interorganizational relationships (cf. Hypotheses 4a & 4b).

1. *Relational view*: The relational view on strategy (Dyer & Singh, 1998) holds that interorganizational relationships may form a source of competitive advantage for the individual firms comprising them. More specifically, the establishment of a relationship causes a number of profound changes in the capacity of the partners to exchange information and coordinate activities amongst themselves, a process which has sometimes been described as a "fundamental transformation" (Williamson, 1985; Zajac & Olsen, 1993). I hypothesized that the establishment of interorganizational relationships through stakeholder integration would be positively associated with the organizational ability to realize economic and strategic benefits, precisely because of this increased potential for the dissemination of information and the coordination of tasks (see Hypotheses 1a & 1b respectively). The results of the survey research confirmed the first of these two theoretical claims, supporting Hypothesis 1a

at the 0.01 level of significance. This evidence suggests that companies may realize economic benefits from their stakeholder integration attempts. They can accumulate these benefits because cooperation allows them to (a) buffer certain external stakeholders from their technical cores, (b) co-opt critical constituencies by incorporating their values and beliefs into corporate decisions, (c) learn from their partners by stimulating the interorganizational dissemination of information, and (d) solve problems that transcend the boundaries of individual firms. Hypothesis 1b was not confirmed, however. The adoption of stakeholder integration activities turned out not to be positively associated with the attainment of strategic benefits. Two complementary explanations for this finding will be presented in paragraph 8.2.3.

2. *Identity conversion*: Many organizational theorists hold that all reputation building efforts must be grounded in a strong and positive organizational identity (Collins & Porras, 1994; Fombrun, 1996). One salient characteristic of such identities, however, is that they are primarily internal characteristics of organizations. They consist of a set of beliefs commonly held by organizational members concerning the central, distinctive, and enduring aspects of the own organization (Albert & Whetten, 1985). These beliefs are only to a very limited extent observable to outside constituencies, and must therefore be *converted* into signals that outsiders can perceive and interpret. After all, since reputation represents an assessment by *outside* constituencies of the relative standing of the organization vis-à-vis its rivals, *internal* identity signals must somehow be *translated* into a language that outsiders can understand and be *transmitted* to such outsiders by means of a medium that they can access before such signals can be expected to contribute positively to corporate reputation. Hypothesis 2a stated that corporate reputation may benefit from a strong organizational identity if such an identity is appropriately converted into signals that are interpretable to outsiders, like charitable donations, press releases, issue advertising, and the accommodation of critical stakeholder interests. The results of the survey supported this hypothesis, confirming it at the 0.000 level of significance. Hypothesis 2b stated that a company's issue-specific reputations (like in this case biotechnology reputation) are also likely to benefit from such identity conversion attempts. The results of the survey study supported this hypothesis at the 0.01 level.
3. *Resource-based view*: Many strategy scholars cherish the belief that distinctive organizational capabilities are an important source of competitive rents (Amit & Schoemaker, 1993; Barney, 1991; Peteraf, 1993). The fact that productive resources are accumulated through path-dependent processes implies that there will be heterogeneity with respect to resource endowments and hence cross-sectional differences in relative productive efficiency across firms (Barney, 1992; Teece, Pisano, & Shuen, 1997). If the relatively efficient firms

manage to protect their advantageous positions through the establishment of barriers against the imitation, substitution, and transfer of their valued resources, such efficiency differences may be sustained over time (Dierickx & Cool, 1989; Rumelt, 1984). I previously hypothesized that firms with favorable resource endowments that are heterogeneous with respect to those of their rivals will be able to realize economic benefits (Hypothesis 3a). Furthermore, I also hypothesized that firms whose valuable resources are imperfectly mobile across industry members and protected by *ex post* and *ex ante* limits to competition will be able to extend their rent-generating potential into the future, thereby realizing strategic benefits (Hypothesis 3b). The survey results supported both hypotheses, the former at the 0.000 level and the latter at the 0.01 level, which provides additional support for the resource-based view as a powerful explanatory framework for developing and sustaining competitive advantage.

4. *Competence trust*: Actors may trust other actors for a variety of reasons, including kinship ties, favorable prior encounters, availability of independent monitoring and sanctioning institutions, and so on and so forth (Axelrod, 1984; Gulati, 1995b; Zucker, 1983). One of the more important sources of trust amongst collective actors such as organizations, however, is the relative level of competence at which they can execute the tasks assigned to them (Barber, 1983; Nootboom, 1998). Highly efficacious organizations are more likely to be trusted and admired by their business partners than their less competent counterparts. In the context of issues management, such high-reliability organizations (Weick, 1987) are likely to generate favorable customer experiences and receive third-party endorsement, while minimizing NGO activism, accidents, and law suits. I therefore hypothesized that there would be a positive association between capability development and corporate reputation (Hypothesis 4a). I also posited that there would be a positive relationship between capability development and issue-specific (i.e., biotechnology) reputation (Hypothesis 4b). The results of the survey study confirmed the former hypothesis, supporting it at the 0.01 level. The second hypothesis was rejected, however, because the positive relationship between capability development and issue-specific reputation was not significant. Apparently, the firms in the Dutch fats and oils industry were unable to establish enough confidence with respect to their capabilities for handling modern biotechnology in the eyes of external beholders. Two interrelated explanations for this finding will be presented in paragraph 8.2.3.

In sum, the survey research has addressed the second research question reported in the first chapter of this book, notably: "Do [the issues management activities that organizations use to manage those forthcoming developments that threaten to affect their ability to meet their objectives] contribute positively to corporate performance?" The present research has demonstrated that such issues

management activities indeed contribute to corporate performance. The findings reveal that stakeholder integration is positively associated with economic benefits, corporate reputation, and issue-specific reputation. Capability development associates positively with economic benefits, strategic benefits, and corporate reputation.

8.2.3 Discussion of the findings

Two of the tested hypotheses were not supported by the data, however. The first of these was Hypothesis 1b: *“The degree to which a firm is involved with stakeholder integration activities will be positively associated with the extent to which it is able to realize strategic benefits.”* In other words, a significant positive association between a firm’s ability to develop trust-based, cooperative relationships with external stakeholders and its ability to lastingly realize more tangible benefits could not be identified. A close inspection of the typology of stakeholder integration mechanisms (cf. Figure 4.1) suggests two complementary explanations for this finding, notably: (1) an inability on behalf of the company to maintain *stakeholder integration structures*, and (2) an inability on behalf of the company to maintain *stakeholder integration processes*.

1. *Stakeholder integration structures*: Many of the benefits of stakeholder integration derive from either co-optation or buffering (cf. chapter 4). The former stakeholder integration mechanism is previously defined as *“the process of absorbing new elements into the leadership or policy-determining structure of an organization as a means of averting threats to its stability or existence”* (Selznick, 1949: 13 [emphasis in original]). The latter mechanism has been described as a firm’s attempts at sealing off its technical core from environmental influences (Thompson, 1967; van den Bosch & van Riel, 1998). Co-optation may neutralize the influence of powerful *direct* stakeholders by endowing them with some discretion over the policy-determining unit of the organization (e.g., by allowing them a position on the supervisory board of the organization [Edelman, 1992]). Alternatively, buffering strategies allow organizations to influence their *indirect* stakeholders through the strategic use of intermediary organizations. Both buffering and co-optation can be costly stakeholder integration tactics, however, because organizations must sometimes let valuable opportunities pass or must somehow expose themselves to new risks when they allow external parties to exert influence over the strategic decisions that they make. New risks emerge and valuable opportunities are foregone, for example, when companies have to dissociate themselves from certain stakeholders in order to satisfy others or when organizations have to make promises to powerful stakeholders of which it is uncertain that they can be kept. The sum of these concessions and opportunity

costs might offer an explanation for the limited value of stakeholder integration in terms of strategic benefits.

2. *Stakeholder integration processes*: Other benefits of stakeholder integration derive from mutual learning and meta-problem solving (cf. chapter 4). The former stakeholder integration mechanism has previously been described as the processes through which symbiotically interdependent organizations discover their mutual feasibility preoccupations (Gray, 1989; Hawley, 1950). The latter mechanism has been described as the processes whereby formally independent organizations combine perspectives and resources for the resolution of boundary-spanning problems (Emery & Trist, 1965; Westley & Vredenburg, 1991). For both of these learning-driven stakeholder integration processes, it seems necessary that the cooperating organizations share at least some common ground in order to facilitate a smooth transfer of knowledge (e.g., see Lane & Lubatkin, 1998; Mowery, Oxley, & Silverman, 1996). It is even more important, however, that there are significant *a priori* dissimilarities between the knowledge stocks of the collaborating organizations, because learning cannot take place between organizations with completely similar resource endowments (Cohen & Levinthal, 1990; Prat, 1996; van Wijk, van den Bosch, & Volberda, 2001). Since interorganizational learning may be depicted as a process along which both organizations absorb relevant parts of partner's extant knowledge base (Khanna, Gulati, & Nohria, 1998), however, a higher degree of isomorphism between the partner organizations will inevitably be the result of all learning processes. This implies that there are diminishing returns to both mutual learning and meta-problem solving (because collaborating organizations tend to become more alike with respect to their knowledge endowments over time), and thus that the strategic benefits of stakeholder integration will reach a saturation point after a certain period of time.

The second hypothesis that was not supported by the data was Hypothesis 4b: "*The degree to which a firm is involved with capability development activities will be positively associated with the extent to which it is able to realize a favorable issue-specific reputation.*" In other words, a significant positive association between a firm's ability to integrate the specialized knowledge of individuals into higher-order organizational knowledge resources and a favorable outside assessment of its ability to handle modern biotechnology efficaciously could not be identified. Two complementary explanations for this phenomenon may be forwarded: (1) lack of third-party endorsement and (2) limited expertise with modern biotechnology.

1. *Lack of third-party endorsement*: A positive corporate reputation may be represented as a vector of primarily favorable cognitive assessments of the qualities of the corporation by outside stakeholder groups (Fombrun, 1996;

Fombrun & van Riel, 1997). Such assessments result from two sources (Kay, 1993): (a) stakeholders' *direct* experiences with the qualities of the company through the consumption of its goods and services and (b) stakeholders' *indirect* experiences with the qualities of the company through the testimonials and other endorsement signals issued by third parties. The latter source is especially important, because the mechanism of third-party endorsement greatly speeds up the dissemination of relevant company-related information in social networks (Larson, 1992; Uzzi, 1997). The problem with modern biotechnology, however, is that the new technology is highly controversial. Credible third parties are often eager not to become associated with the genetic modification of organisms, so organizations face a very small pool of potential external endorsers. In short, the level of controversy surrounding the new technology interferes with the establishment of a favorable issue-specific reputation for modern biotechnology, because very few credible endorsers are willing to risk their own reputations by becoming associated with genetic modification.

2. *Limited expertise with modern biotechnology.* One of the key characteristics of the capability-building process is that it can be rather time-consuming. The development of valuable organizational skills is a path-dependent process, in which companies accumulate valuable experiences over time and integrate these into higher-order knowledge-based resources (Teece, Pisano, & Shuen, 1997). The effects of environmental contingencies will eventually lead to adjustments to the repertoire of a company's skills, either in the form of alterations to existing capabilities or by the development of completely new ones (Eisenhardt & Martin, 2000, Grant, 1996). Inevitably, however, these adjustments will be made with a time lag, because managers will need time to perceive and interpret outside signals, to integrate the required knowledge, and to translate this knowledge into organizational action (van den Bosch & van Wijk, 2001). The crucial role that time plays in the development of organizational capabilities offers an explanation for the fact that a positive association between capability development and issue-specific reputation could not be established within the period of investigation. Products devised with the help of modern biotechnology had only been on the market for three years when this survey was conducted. There is a distinct possibility that this time span was insufficient for the participating organizations to (a) develop a set of relevant genetic modification-related capabilities, and (b) subsequently establish a high degree of competence trust by exposing outside audiences to these capabilities.

8.3 LIMITATIONS

I have reported the results of two complementary empirical studies in this book. The first of these was a detailed case study of the issues management practices of the firms in the Dutch fats and oils sector, resulting in the identification of two issues management strategies that were used by these firms to manage the highly salient strategic issue of genetic modification (i.e., stakeholder integration and capability development). By means of a second study, a large-scale mail survey performed on the same industry, I sought to assess the contribution of these issues management techniques to various aspects of corporate performance. I have tried to design, execute, and report both of these studies with great care. Inevitably, however, I had to make numerous methodological and practical choices in the course of the research process. This paragraph deals with some of the limitations that result from these choices.

8.3.1 Methodological limitations

From the start, the aim of this book has been to assess the contribution of issues management to corporate performance. To this end, I have selected a number of performance indicators (notably: economic and strategic benefits, as well as corporate and biotechnology reputation) as the dependent variables for the present research. Ideally, the scores of the individual respondents on these independent variables should be obtained from high quality external sources, in order to prevent biases in the data. For example, to obtain information about the tangible aspects of corporate performance, researchers often use databases that have been compiled by rating agencies or accountancy firms. Data on the more intangible aspects of performance are often obtained from publishers, who regularly issue and report reputation surveys to boost the sales of their periodicals.

For the present research, however, data could not be obtained from such external sources. The reason for this is that many of the companies in my sample consist of small and medium-sized enterprises. With respect to the dependent variables pertaining to the more tangible aspects of corporate performance (economic and strategic benefits), it should be remarked that the financial disclosure laws of the Netherlands do not apply (or only to a limited extent) to firms of this size. This implies that neither professional third parties nor myself have been able to collect objective financial data for these firms. I therefore had to rely on self-reported (i.e., perception) data, which I collected by using psychometric scales (see Appendix A).

With respect to the dependent variables concerning the more intangible aspects of corporate performance (corporate and biotechnology reputation), no objective data in the form of industry surveys were available. Such surveys

typically focus on the top 500 or 200 firms in a given country, and the present research sample is typically characterized by the inclusion of many firms that do not belong to this “elite” group. I therefore had to rely on self-reported (i.e., perception) data again, using well-established psychometric scales (see Appendix A).

8.3.2 Contextual limitations

To keep the research process within the confines of what was manageable, I have restricted myself to an assessment of the situation in the Netherlands during the 1992 – 2000 period. I have made a longitudinal analysis of the entire Dutch fats and oils industry, including national companies as well as the local operations of foreign multinational enterprises. The upside of this choice, apart from the fact that it was first and foremost a manageable option, was that it enabled me to make a thorough, in-depth analysis of the Dutch situation. This has stimulated the depth and relevance of the analysis, and has led me to some important research findings.

The obvious downside of the choice to confine the analysis to a single country is that it is now somewhat more difficult to make a reliable estimate of the external validity of the present findings. I believe that my findings are at least generalizable across large parts of the European continent, however, for three reasons. First of all, the key players in the Dutch fats and oils industry are large multinational firms like Cargill, ADM, Nestlé, Unilever, and Ahold. These companies have operations all across the European continent, and they are typically the key players in the fats and oils industries of all European countries. Therefore, the same players that inhabit the Dutch playing field also determine the rules of the game in virtually every other European arena. Secondly, the European media are highly integrated. Companies cannot normally expect to follow two entirely different communication strategies in two European countries with respect to genetic modification, and at the same time not to receive any critical questions about that ambiguous policy. Finally, EU regulations apply in the Netherlands like they do throughout large parts of Europe, and the European legislation with respect to novel foods is relatively well-harmonized. Companies have to meet the same legal requirements with respect to genetic modification in the Netherlands as in Britain, France, and Germany, for example. In combination, these three reasons provide for at least a minimum degree of comparability and generalizability across the various Western European countries.

It is more difficult to substantiate the claims of external validity for other regions of the world, however, especially for developing countries. At least three factors limit the generalizability of the present findings across this context: the local responsiveness of multinational enterprises, the relative emphasis on rapid

economic development, and the accessibility of new information and communication technologies.⁴⁰

First of all, many of the multinational enterprises that are responsible for the rapid development and dissemination of the new technology, such as Monsanto, Novartis, and DuPont, are very responsive to local pressures.⁴¹ This implies, for example, that they will commit to two-way symmetrical communication in the Netherlands and in other developed countries, whereas they will adopt a one-way communication mode in many developing economies. In the developing world the biotechnology multinationals are more likely to present the introduction of the new technology unambiguously as a highly desirable development, whereas they will provide a much more balanced assessment in Europe.

Secondly, the attitudes of the developing countries with respect to the new technology sometimes seem altogether different from the attitudes held in more economically developed parts of the world. The countries in the latter part already enjoy a relatively high degree of prosperity, and are therefore more reluctant to trade off even relatively small amounts of risk against additional gains in wealth. Large emerging economies like India and China are much more risk-prone with respect to new technologies that may increase agricultural and technological productivity. Driven by the need to feed many mouths, the national governments of these countries are much more willing than their Western counterparts to embrace the technology as legitimate and desirable (Boeddha, 2000).

A final factor confining the generalizability of the outcomes of the present studies across the context of the emerging economies of the developing world is the limited degree of accessibility of new information and communication technologies in these regions. In the Western world, the new media have become one of the principal drivers behind rapid information transfer, and as such have played an important role in the establishment of the present public attitudes with respect to modern biotechnology. In many emerging economies, there are two new technology accessibility barriers that prevent the rapid dissemination of information concerning modern biotechnology. First of all, the penetration rate of the new media is much lower in emerging economies than it is in the Western world. Secondly, much of the relevant critical information concerning modern biotechnology is only available from these media in languages such as English and German. Both of these factors hamper the rapid dissemination of information across developing economies, and prevent the new media from having a major impact on the formation of local public attitudes.

40 I am grateful to the international students of Leiden University, the Netherlands, who participated in a course on corporate communication, for pointing these limitations out to me.

41 See the Leiden University studies on the introduction of modern biotechnology in developing countries (e.g., see Boeddha, 2000).

A different factor that might limit the external validity of this research in general and its generalizability across other *industry* contexts (as opposed to national contexts) in particular is that I have investigated a developing technology and an associated emerging organizational field. The 1992 – 2000 period covers part of the development trajectory of genetically modified food crops, the legislative phase of the introduction process, and the first four years after the commercialization of the new technology. The introduction process has proven to be very turbulent (and hence interesting from an issues management perspective), but the issue had not reached the end of its life-cycle when this manuscript went in print. Therefore, the issues management processes described in the present volume might apply more to other new and emerging technologies (such as genetic diagnostics and gene therapy, the development and exploitation of alternative energy resources, and sustainable forms of agriculture) than to more mature issues that have reached the final stages of their life-cycles (such as tobacco-advertisements, whale hunting, and car-safety issues).

8.4 AGENDA FOR FUTURE RESEARCH

Before finishing this book with some brief concluding remarks, I will present a concise research agenda consisting of three possible avenues for future research. All three of these potential research projects build on the research findings of the present volume, and may therefore be regarded as logical extensions of the two studies reported in this text. The three future research topics I would like to propose are: (1) *issues management and the sustainable corporate story*, (2) *issues management best practices*, and (3) *comparative research in issues management*.

1. *Issues management and the sustainable corporate story*. Recently, sustainable corporate stories have been suggested as a source of inspiration for all internal and external communication programs of the organization (van Riel, 2000). A sustainable corporate story is an ideal-typical normative description of the organization, “created in an open dialogue with stakeholders the organization depends upon” (van Riel, 2000: 157). As such, the sustainable corporate story is a member of the broader family of narrative approaches to organizations (Boje, 1991; Czarniawska, 1998; Hatch, 1996; Heugens & van Oosterhout, 2001). In issues management terms, issues may be perceived as threats to the attractiveness, sincerity, or coherence of the corporate story, and issues management as a company’s attempts at protecting or restoring these qualities. It is interesting to see that NGOs that object to the policy decisions of an organization often try to respond to the organization’s communications by proposing an alternative (but corrupted) story of the firm. Just like Aristotle in his *Politics* describes the degeneration of the monarchy, aristocracy, and democracy into tyranny, oligarchy, and anarchy respectively, so too can

sustainable corporate stories degenerate into unsustainable ones if the attacks of outside groups are left unattended. In future research it could be investigated (a) what combinations of “sustainable” and “degenerated” corporate stories are conceivable, (b) what tactics NGOs use to attack sustainable corporate stories, and (c) what strategies companies can devise and implement to protect their corporate stories against the influences of NGOs.

2. *Issues management best practices.* In the present research I have used the survey method to assess (a) the extent to which companies have adopted the issues management strategies of stakeholder integration and capability development, and (b) how this may lead to competitive benefits for the adopting organizations. Although a cross-sectional method like survey research is probably the best choice for testing hypotheses of the type that were forwarded in the present research, such methods trade off breadth against depth of observation. In the future, an in-depth case study could be conducted of four to six companies that are leaders in the issues management field, to identify a number of best practices. In effect, this would imply an extension of the work of Oomens and van den Bosch (1999). Research questions that could guide such case study research are: (a) Who is responsible for issues management in the company? (b) How is the issues management process organized and how do various organizational processes influence stakeholder integration and capability development? (c) What types of issues management activities are being used to avert and manage threats and opportunities? (d) How does the organization interact with its most critical stakeholders in times of crisis? (e) What is being done to retain and reuse valuable issues management-related experiences?
3. *Comparative research in issues management.* The present studies focus on the issues management practices of fats and oils companies in the Netherlands only. While this research strategy has certainly helped to confine the present endeavor to manageable proportions and has generated some very insightful findings, an interesting challenge for future research could be to replicate one of the two studies reported in this text (the case study or the survey research) in a completely different national context. Since the findings reported in this text may with some confidence be expected to hold true for other EU economies as well (see paragraph 8.3.2), an interesting option would be to extend the present research to the NAFTA context. Future researchers can follow at least one of the following scenarios: (a) conduct a case study of the issues management practices of the fats and oils industry in one of the NAFTA economies, aimed at identifying the types of issues management tactics it uses to manage the genetic modification issue locally, or (b) replicate the survey research on a sample of one of the NAFTA fats and oils industries to assess whether it uses stakeholder integration and capability development strategies

too, and whether these strategies add to corporate performance in the NAFTA context like they do in the EU context.

8.5 CONCLUSION

In the present volume I have assessed the contribution of strategic issues management to corporate performance. I started by identifying the issues management strategies that the companies in the Dutch fats and oils industry were using to manage the highly salient issue of genetic modification. They turned out to use two complementary strategies. First, they tried to develop trust-based, collaborative relationships with a broad range of external constituencies. Second, they sought to retain their valuable issues management-related experiences by integrating the knowledge of individual experts into higher-order organizational knowledge-based resources. I proceeded by linking these two issues management strategies to various indicators of corporate performance, notably: economic and strategic benefits, and corporate and issue-specific reputation. Stakeholder integration turned out to be positively associated with economic benefits, corporate reputation, and issue-specific reputation. Capability development was positively associated with economic and strategic benefits and corporate reputation. It may therefore be concluded that organizations that are regularly being confronted with forthcoming developments that threaten to impact their ability to meet their objectives are better off when they seek to establish lasting partnerships with the external constituencies they depend upon, and when they cherish and preserve the valuable experiences that they gain in their attempts to manage the very issues that threaten their stability or existence.

References

- [1] Agle, B. R., R. K. Mitchell, and J. A. Sonnenfeld (1999). "Who matters to CEOs? An investigation of stakeholder attributes and salience, corporate performance, and CEO values." *Academy of Management Journal* **42**(5): 507-525.
- [2] Aharoni, Y. (1993). "In search for the unique: Can firm-specific advantages be evaluated?" *Journal of Management Studies* **30**(1): 31-49.
- [3] Ahuja, G. (2000). "Collaboration networks, structural holes, and innovation: A longitudinal study." *Administrative Science Quarterly* **45**(3): 425-457.
- [4] Akin, G. (1987). "Varieties of managerial learning." *Organizational Dynamics*: 36-48.
- [5] Albert, S. and D. A. Whetten (1985). "Organizational identity." *Research in Organizational Behavior* **7**: 263-295.
- [6] Aldrich, H. E. (1979). *Organizations and environments*. Englewood Cliffs, NJ, Prentice-Hall.
- [7] Aldrich, H. E. and C. M. Fiol (1994). "Fools rush in? The institutional context of industry creation." *Academy of Management Review* **19**(4): 645-670.
- [8] Aldrich, H. E. (1999). *Organizations evolving*. London, Sage.

- [9] Althausser, R. P. and T. A. Herberlein (1970). Validity and the multitrait-multimethod matrix. *Sociological Methodology*. E. F. Borgatta and G. W. Bohrnstedt. San Francisco, Jossey-Bass: 151-169.
- [10] Amit, R. and P. J. H. Schoemaker (1993). "Strategic assets and organizational rent." *Strategic Management Journal* **14**(1): 33-46.
- [11] Anand, B. N. and T. Khanna (2000). "Do firms learn to create value? The case of alliances." *Strategic Management Journal* **21**: 295-315.
- [12] Andersen, P. H. and H. B. Sørensen (1999). "Reputational information: Its role in interfirm collaboration." *Corporate reputation review* **2**(3): 215-230.
- [13] Ansoff, H. I. (1965). *Corporate strategy*. London, Penguin.
- [14] Ansoff, H. I. (1975). "Managing strategic surprise by response to weak signals." *California Management Review* **18**(2): 21-33.
- [15] Ansoff, H. I. (1980). "Strategic issue management." *Strategic Management Journal* **1**: 131-148.
- [16] Apel, K.-O. (1972). "The a priori of communication and the foundation of the humanities." *Man and World* **51**: 3-37.
- [17] Argyris, C. (1977). "Double loop learning in organizations." *Harvard Business Review* **55**(5): 115-119.
- [18] Argyris, C. and D. Schon (1978). *Organizational Learning*. Reading, MA, Addison-Wesley.
- [19] Arrington, C. B. and R. N. Sawaya (1984). "Managing public affairs: Issues management in an uncertain environment." *California Management Review* **26**(Summer): 148-160.
- [20] Arthur, W. B. (1989). "Competing technologies, increasing returns, and lock-in by historical events." *The Economic Journal* **99**(394): 116-131.
- [21] Asanuma, B. (1989). "Manufacturer-supplier relationships in Japan and the concept of relation-specific skill." *Journal of the Japanese and international economies* **3**: 1-30.
- [22] Ashford, B. E. and F. Mael (1989). "Social identity theory and the organization." *Academy of Management Review* **14**(1): 20-39.

- [23] Ashford, B. E. and B. W. Gibbs (1990). "The double-edge of organizational legitimation." *Organization Science* 1(2): 177-194.
- [24] Ashford, S. J. and G. Northcraft (1992). "Conveying more (or less) than we realize: The role of impression management in feedback seeking." *Organizational Behavior and Human Decision Processes* 53: 310-334.
- [25] Ashford, B. E. and F. A. Mael (1996). "Organizational identity and strategy as a context for the individual." *Advances in Strategic Management* 13: 19-64.
- [26] Ashford, S. J., N. P. Rothbard, S. K. Piderit, and J. E. Dutton (1998). "Out on a limb: The role of context and impression management in selling gender-equity issues." *Administrative Science Quarterly* 43(1): 23-57.
- [27] Attewell, P. (1992). "Technology diffusion and organizational learning: The case of business computing." *Organization Science* 3(1): 1-19.
- [28] Austen, I. (1996). "And pigs will fly." *Canadian Business* 69(Spring): 58-61.
- [29] Axelrod, R. M. (1984). *The evolution of cooperation*. New York, Basic Books.
- [30] Bandura, A. (1969). *Principles of Behavior Modification*. New York, Holt, Rinehart and Winston.
- [31] Bandura, A. (1977). *Social Learning Theory*. Englewood Cliffs, NJ, Prentice Hall.
- [32] Banks, W. P. and D. Krajicek (1991). "Perception." *Annual Review of Psychology* 42: 305-331.
- [33] Barber, B. (1983). *The logic and limits of trust*. New Brunswick, NJ, Rutgers University Press.
- [34] Barney, J. B. (1986). "Strategic factor markets: Expectations, luck, and business strategy." *Management Science* 32(10): 99-120.
- [35] Barney, J. B. and R. Hoskisson (1989). "Strategic groups: Untested assumptions and research proposals." *Managerial and Decision Economics* 11: 187-198.

- [36] Barney, J. B., A. McWilliams, and T. Turk (1989). "On the relevance of the concept of entry barriers in the theory of competitive advantage." Paper presented at the annual meeting of the *Strategic Management Society*, San Francisco.
- [37] Barney, J. (1991). "Firm resources and sustained competitive advantage." *Journal of Management* 17(1): 99-120.
- [38] Barney, J. B. (1992). Integrating organizational behavior and strategy formulation research: A resource-based analysis. *Advances in Strategic Management*. P. Shrivastava, A. Huff and J. Dutton. Greenwich, JAI Press. 8: 39-62.
- [39] Barringer, B. R. and J. S. Harrison (2000). "Walking a tightrope: Creating value through interorganizational relationships." *Journal of Management* 26: 367-403.
- [40] Bartha, P. F. (1983). "Managing corporate external issues: An analytical framework." *Business Quarterly* 47: 78-90.
- [41] Baysinger, B. and R. Woodman (1982). "Dimensions of the public affairs/government relations function in major American corporations." *Strategic Management Journal* 3(1): 27-41.
- [42] Baysinger, B. (1984). "Domain maintenance as an objective of business political activity: An expanded typology." *Academy of Management Review* 9: 248-258.
- [43] Bazerman, M. H. and F. D. Schoorman (1983). "A limited rationality model of interlocking directorates." *Academy of Management Review* 8(2): 206-217.
- [44] Bentley, S. (1996). "Storm over genetic food." *Marketing Week* 19(26): 7.
- [45] Bentley, S. (1996). "Genetic soya excites wrath of food sector." *Marketing Week* 19(22): 19.
- [46] Bentley, S. (1997). "Monsanto tackles a sceptical public." *Marketing Week* 20(23): 19-20.
- [47] Bentley, S. (1998). "Monsanto warns of high prices for 'natural' foods." *Marketing Week* 21(15): 8.

- [48] Bercovitz, J. E. L., J. M. de Figueiredo, and D. J. Teece (1996). Firm capabilities and managerial decision-making: A theory of innovation biases. *Innovation: Oversights and Foresights*. R. Garud, P. Nayyar and Z. Shapira. Cambridge, Cambridge University Press: 233-259.
- [49] Berger, P. and T. Luckmann (1967). *The Social Construction of Reality*. New York, Doubleday.
- [50] Bergner, D. (1983). International public affairs: A preliminary report by a PAC task force. Perspectives. P. A. Council. Washington, DC, Public Affairs Council.
- [51] Berle, A. A. and G. C. Means (1932). *The modern corporation and private property*. New York, MacMillan.
- [52] Bigelow, B., L. Fahey, and J. F. Mahon (1991). Political strategy and issues evolution: A framework for analysis and action. *Contemporary Issues in Business Ethics and Politics*. K. Paul. Lewiston, NY, Edwin Mellen: 1-26.
- [53] Blumer, H. (1966). The mass, the public, and public opinion. *Reader in public opinion and communication*. B. Berelson and M. Janowitz. New York, Free Press: 43-50.
- [54] Boeddha, S. (2000). "Issue management." *Leiden University working paper*.
- [55] Boje, D. M. (1991). "The storytelling organization: A study of story performance in an office-supply firm." *Administrative Science Quarterly* 36(1): 106-126.
- [56] Bostdorff, D. and S. Vibbert (1994). "Values advocacy: Enhancing organizational images, deflecting public criticism, and grounding future arguments." *Public Relations Review* 20: 141-158.
- [57] Bresser, R. K. and J. E. Harl (1986). "Collective strategy: Vice or virtue?" *Academy of Management Review* 11(2): 408-427.
- [58] Brooks, L. (1978). Nonanalytic concept formation and memory for instances. *Cognition and Categorization*. E. Rosch and B. B. Lloyd. Hillsdale, NJ, Erlbaum: 169-211.
- [59] Brown, J. K. (1979). *This business of issues: Coping with the company's environment*. New York, The Conference Board.

- [60] Brown, A. D. and K. Starkey (2000). "Organizational identity and learning: A psychodynamic perspective." *Academy of Management Review* **25**(1): 102-120.
- [61] Buchholz, R. A. (1986). *Business Environment and Public Policy: Implications for Management and Strategy Formulation*. Englewood Cliffs, NJ, Prentice Hall.
- [62] Buchholz, R. A. (1990). *Essentials of Public Policy for Management*. Englewood Cliffs, NJ, Prentice Hall.
- [63] Buzzell, R. and B. Gale (1987). *The PIMS principles: Linking strategy to performance*. New York: Free Press.
- [64] Campbell, D. T. and D. W. Fiske (1959). "Convergent and discriminant validation by the multitrait-multimethod matrix." *Psychological Bulletin* **56**: 85-105.
- [65] Carmines, E. G. and R. A. Zeller (1994). Reliability and validity assessment. *Basic Measurement*. M. S. Lewis-Beck. Thousand Oaks, CA, Sage: 1-58.
- [66] Carter, S. M. and J. M. Dukerich (1998). "Responses to changes in corporate reputation." *Corporate Reputation Review* **1**(3): 250-270.
- [67] Caves, R. and M. E. Porter (1977). "From entry barriers to mobility barriers." *Quarterly Journal of Economics*: 241-261.
- [68] Chatterjee, S. and B. Price (1991). *Regression Analysis by Example*. New York, Wiley.
- [69] Chemical, R. (2000). "EPA to reevaluate StarLink biotech corn." *Chemical Reporter*(November 6): 7-22.
- [70] Chevalier, M. (1966). *A wider range of perspectives in the bureaucratic structure*. Ottawa, Commission on Bilingualism and Biculturalism.
- [71] Child, J. (1972). "Organizational structure, environment and performance: The role of strategic choice." *Sociology* **6**(1): 1-22.
- [72] Child, J. (1997). "Strategic choice in the analysis of action, structure, organizations and environment: Retrospect and prospect." *Organization Studies* **18**(1): 43-76.

- [73] Churchill, G. A. (1979). "A paradigm for developing better measures of marketing constructs." *Journal of Marketing Research* 16: 64-73.
- [74] Clark, K. B. and T. Fujimoto (1991). *Product Development Performance*. Boston, Harvard Business School Press.
- [75] Cobb, R. W. and C. D. Elder (1972). *Participation in American Politics: The Dynamics of Agenda Building*. Baltimore, John Hopkins University Press.
- [76] Cohen, J. B. and K. Basu (1987). "Alternative models of categorization: Toward a contingent processing framework." *Journal of Consumer Research* 13: 455-472.
- [77] Cohen, W. M. and D. A. Levinthal (1990). "Absorptive capacity: A new perspective on learning and innovation." *Administrative Science Quarterly* 35: 128-152.
- [78] Collins, J. C. and J. I. Porras (1994). *Built to last: Successful habits of visionary companies*. New York, Harper Collins.
- [79] Collis, J. C. (1996). "Building your company's vision." *Harvard Business Review*(September-October): 65-77.
- [80] Commission, E. (1997). *Eurobarometer 46.1: The Europeans and modern biotechnology*. Luxemburg, Office for Official Publications of the European Communities.
- [81] Conner, K. R. (1991). "A historical comparison of resource-based theory and five schools of thought within industrial organization economics: Do we have a new theory of the firm?" *Journal of Management* 17(1): 121-154.
- [82] Conner, K. R. and C. K. Prahalad (1996). "A resource-based theory of the firm: Knowledge versus opportunism." *Organization Science* 7(5): 477-501.
- [83] Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, Sage.
- [84] Cronbach, L. J. (1951). "Coefficient alpha and the internal structure of tests." *Psychometrika* 6: 297-334.
- [85] Cronbach, L. J. and P. E. Meehl (1955). "Construct validity in psychological tests." *Psychological Bulletin* 52: 281-302.

- [86] Crossan, M. M. and A. C. Inkpen (1994). "Promise and reality of learning through alliances." *International Executive* 36: 263-273.
- [87] Cyert, R. M. and J. G. March (1963). *A behavioral theory of the firm*. New Jersey, Prentice-Hall.
- [88] Czarniawska, B. (1998). *Narrating the organization: Dramas of institutional identities*. Chicago, University of Chicago Press.
- [89] D'Aveni, R. (1990). "Top management prestige and organizational bankruptcy." *Organization Science* 4(121-142).
- [90] D'Aveni, R. (1994). *Hypercompetition: Managing the Dynamics of Strategic Maneuvering*. New York, Free Press.
- [91] Daft, R. L. and K. E. Weick (1984). "Toward a model of organizations as interpretation systems." *Academy of Management Review* 9(2): 284-295.
- [92] Danziger, K. (1971). *Socialization*. Harmondsworth, Penguin.
- [93] Darby, I. (1999). "Unilever attacks stores for GM-free marketing." *Marketing*: 3.
- [94] Darby, I. (1999). "Food giants put weight behind GM ingredients." *Marketing*: 1.
- [95] David, P. A. (1994). "Why are institutions the 'carriers of history'? Path dependence and the evolution of conventions, organizations and institutions." *Structural Change and Economic Dynamics*: 205-220.
- [96] Day, G. S. (1994). "The capabilities of market-driven organizations." *Journal of Marketing* 58: 37-52.
- [97] Demsetz, H. (1991). The theory of the firm revisited. *The Nature of the Firm*. O. E. Williamson and S. Winter. New York, Oxford University Press: 159-178.
- [98] Denison, D. R., J. E. Dutton, J. A. Kahn, and S. L. Hart (1996). "Organizational context and the interpretation of strategic issues: A note on CEO's interpretations of foreign investment." *Journal of Management Studies* 33: 453-474.

- [99] Denzin, N. K. (1989). *The research act: A theoretical introduction to sociological methods*. New York, McGraw-Hill.
- [100] Dickie, R. (1984). "Influences of public affairs offices on corporate planning and of corporations on government policy." *Strategic Management Journal* 5(1): 15-34.
- [101] Dierickx, I. and K. Cool (1989). "Asset stock accumulation and sustainability of competitive advantage." *Management Science* 35(12): 1504-1511.
- [102] Dill, W. R. (1958). "Environment as an influence on managerial autonomy." *Administrative Science Quarterly* 2(4): 409-443.
- [103] DiMaggio, P. J. and W. W. Powell (1983). "The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields." *American Sociological Review* 48: 147-160.
- [104] Dominowski, R. L. (1974). How do people discover concepts? *Theories in Cognitive Psychology*. New York, Wiley: 257-288.
- [105] Donaldson, T. and L. E. Preston (1995). "The stakeholder theory of the corporation: Concepts, evidence, and implications." *Academy of Management Review* 20(1): 65-91.
- [106] Dore, R. (1999/1983). Goodwill and the spirit of market capitalism. *Firms, organizations, and contracts*. P. J. Buckley and J. Michie. Oxford, Oxford University Press: 359-382.
- [107] Dowling, J. and J. Pfeffer (1975). "Organizational legitimacy: Social values and organizational behavior." *Pacific Sociological Review* 18(1): 122-136.
- [108] Doz, Y. (1996). "The evolution of cooperation in strategic alliances: Initial conditions or learning processes." *Strategic Management Journal* 17: 55-83.
- [109] Doz, Y. L. and G. Hamel (1998). *Alliance advantage: The art of creating value through partnering*. Boston, Harvard Business School Press.
- [110] Dunbar, R. L. and D. Ahlstrom (1995). "Seeking the institutional balance of power: Avoiding the power of a balanced view." *Academy of Management Review* 20(1): 171-192.

- [111] Dussauge, P., B. Garrette, and W. Mitchell (2000). "Learning from competing partners: Outcomes and durations of scale and link alliances in Europe, North America and Asia." *Strategic Management Journal* **21**: 99-126.
- [112] Dutton, J. E. (1986). "The processing of crisis and non-crisis strategic issues." *Journal of Management Studies* **23**: 501-517.
- [113] Dutton, J. E. (1986). "Understanding strategic agenda building and its implications for managing change." *Scandinavian Journal of Management Studies* **3**(1): 3-24.
- [114] Dutton, J. E. and S. E. Jackson (1987). "Categorizing strategic issues: Links to organizational action." *Academy of Management Review* **12**(1): 76-90.
- [115] Dutton, J. E. and E. Ottensmeyer (1987). "Strategic issues management systems: Forms, functions, and contexts." *Academy of Management Review* **12**(2): 355-365.
- [116] Dutton, J. E. and R. Duncan (1987). "The creation of momentum for change through the process of strategic issue diagnosis." *Strategic Management Journal* **8**: 279-298.
- [117] Dutton, J. E. and J. Webster (1988). "Patterns of interest around issues: The role of uncertainty and feasibility." *Academy of Management Journal* **31**: 663-675.
- [118] Dutton, J. E., E. J. Walton, and E. Abrahamson (1989). "Important dimensions of strategic issues: Separating the wheat from the chaff." *Journal of Management Studies* **26**: 379-396.
- [119] Dutton, J. E. and J. M. Dukerich (1991). "Keeping an eye in the mirror: Image and identity in organizational adaptation." *Academy of Management Journal* **34**: 517-554.
- [120] Dutton, J. E. and S. J. Ashford (1993). "Selling issues to top management." *Academy of Management Review* **18**(3): 397-428.
- [121] Dutton, J. E. (1993). "Interpretations on automatic: A different view of strategic issue diagnosis." *Journal of Management Studies* **30**(3): 339-357.
- [122] Dutton, J. E., J. Dukerich, and C.V. Harquail (1994). "Organizational images and membership commitment." *Administrative Science Quarterly* **39**: 239-263.

- [123] Dutton, J. E., S. J. Ashford, R. M. O'Neill, E. Hayes, and E.E. Wierba (1997). "Reading the wind: How middle managers assess the context for selling issues to top managers." *Strategic Management Journal* **18**(5): 407-425.
- [124] Dyer, J. H. (1996). "Does governance matter? Keiretsu alliances and asset specificity as sources of Japanese competitive advantage." *Organization Science* **7**: 649-666.
- [125] Dyer, J. H. (1996). "Specialized supplier networks as a source of competitive advantage: Evidence from the auto industry." *Strategic Management Journal* **17**: 55-83.
- [126] Dyer, J. H. and H. Singh (1998). "The relational view: Cooperative strategy and sources of interorganizational competitive advantage." *Academy of Management Review* **23**(4): 660-679.
- [127] Dyer, J. H. and K. Nobeoka (2000). "Creating and managing a high-performance knowledge-sharing network: The Toyota case." *Strategic Management Journal* **21**: 345-367.
- [128] Economist (1994). "Chemicals in food: Uncowed." *Economist* **330**(March 26): 32.
- [129] Economist (1997). "The year of the triffids." *Economist* **343**(April 26): 80-82.
- [130] Economist (1997). "Of greens and American beans." *Economist* **342**(January 4): 62.
- [131] Economist (1997). "Labelling the mutant tomato." *Economist* **344**(August 9): 54.
- [132] Economist (1998). "In defence of the demon seed." *Economist* **347**(8072): 13-14.
- [133] Economist (1998). "Food fights." *Economist* **347**(June 13): 79-80.
- [134] Economist (1998). "I'm modified, buy me." *Economist* **346**(January 17): 60.
- [135] Economist (1999). "Seeds of discontent." *Economist* **350**(8107): 75-77.
- [136] Economist (1999). "Genetically modified free trade." *Economist* **350**(February 20): 76.

- [137] Economist (1999). "True grit." *Economist*(August 28): 37-38.
- [138] Economist (1999). "Frankenstein foods." *Economist* **350**(February 20): 17-18.
- [139] Economist (1999). "Keep it plain." *Economist* **350**(February 20): 54.
- [140] Economist (2001). "Genetically modified weaklings." *Economist*(February 10): 91-92.
- [141] Edelman, L. (1992). "Legal ambiguity and symbolic structures: Organizational mediation of civil rights law." *American Journal of Sociology* **97**: 1531-1576.
- [142] Eisenhardt, K. M. (1989). "Agency theory: An assessment and review." *Academy of Management Review* **14**(1): 57-74.
- [143] Eisenhardt, K. M. (1989). "Building theories from case study research." *Academy of Management Review* **14**(4): 532-550.
- [144] Eisenhardt, K. M. (1989). "Making fast strategic decisions in high-velocity environments." *Academy of Management Journal* **32**(3): 543-576.
- [145] Eisenhardt, K. M. and J. A. Martin (2000). "Dynamic capabilities: What are they?" *Strategic Management Journal* **21**: 1105-1121.
- [146] Elsbach, K. D. and R. I. Sutton (1992). "Acquiring organizational legitimacy through illegitimate actions: A marriage of institutional and impression management theories." *Academy of Management Journal* **35**(4): 699-738.
- [147] Elsbach, K. D. (1994). "Managing organizational legitimacy in the California cattle industry: The construction and effectiveness of verbal accounts." *Administrative Science Quarterly* **39**: 57-88.
- [148] Elsbach, K. D. and R. M. Kramer (1996). "Members' responses to organizational identity threats: Encountering and countering the *Business Week* rankings." *Administrative Science Quarterly* **41**: 442-476.
- [149] Emery, F. and E. Trist (1965). "The causal texture of organizational environments." *Human Relations* **18**: 21-35.
- [150] Epstein, E. (1969). *The corporation in American Politics*. Englewood Cliffs, N.J., Prentice-Hall.

- [151] Eyestone, R. (1978). *From Social Issues to Public Policy*. New York, Wiley.
- [152] Fahey, L. and V. K. Narayanan (1986). *Macroenvironmental Analysis for Strategic Management*. St. Paul, West.
- [153] Fairley, P. (1998). "Dow Chemical defends its quieter strategy." *Chemical Week* **160**(21): 16.
- [154] Farkas, D. (1992). "Labels at table, please." *Restaurant Hospitality* **76**(9): 24.
- [155] Feldman, M. (1989). *Order without Design*. Stanford, CA, Stanford University Press.
- [156] Ferguson, T. D., D. L. Deephouse, et al. (2000). "Do strategic groups differ in reputation?" *Strategic Management Journal* **21**: 1195-1214.
- [157] Fiske, S. T. and S. E. Taylor (1984). *Social Cognition*. Reading, MA, Addison Wesley.
- [158] Fombrun, C. J. and E. J. Zajac (1987). "Structural and perceptual influences on intraindustry stratification." *Academy of Management Journal* **30**: 33-50.
- [159] Fombrun, C. J. and M. Shanley (1990). "What's in a name? Reputation-building and corporate strategy." *Academy of Management Journal* **33**: 233-258.
- [160] Fombrun, C. J. (1996). *Reputation: Realizing Value from the Corporate Image*. Cambridge, MA, Harvard Business School Press.
- [161] Fombrun, C. J. and C. B. M. van Riel (1997). "The reputational landscape." *Corporate Reputation Review* **1**(1): 5-13.
- [162] Fombrun, C. J. (1998). "Indices of corporate reputation: An analysis of media rankings and social monitors ratings." *Corporate Reputation Review* **1**(4): 327-340.
- [163] Fombrun, C. J. and V. Rindova (1998). "Reputation Management in global 1000 firms: A benchmarking study." *Corporate Reputation Review* **1**(3): 205-212.
- [164] Foss, N. J. (1996). "Knowledge-based approaches to the theory of the firm: Some critical comments." *Organization Science* **7**: 470-476.

- [165] Franz, N. (2001). "FDA issues biotech policy changes, rejects mandator labeling." *Chemical Week*(January 24): 14.
- [166] Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston, Pitman.
- [167] Freeman, R. E. and W. M. Evan (1990). "Corporate governance: A stakeholder interpretation." *Journal of Behavioral Economics* **19**: 337-259.
- [168] Freeman, R. E. (1999). "Divergent stakeholder theory." *Academy of Management Review* **24**(2): 233-236.
- [169] Friedman, D. E. (1984). *Family-supportive Policies: The Corporate Decision-making Process*. New York, The Conference Board.
- [170] Frooman, J. (1999). "Stakeholder influence strategies." *Academy of Management Review* **24**(2): 191-205.
- [171] Galaskiewicz, J. (1985). "Interorganizational relationships." *Annual Review of Sociology* **11**: 281-304.
- [172] George, J. M. and G. R. Jones (1996). *Understanding and Managing Organizational Behavior*. Reading, MA, Addison-Wesley.
- [173] Giddens, A. (1997). *Sociology*. Cambridge, Polity Press.
- [174] Gioia, D. A. and J. B. Thomas (1996). "Identity, image and issue interpretation: Sensemaking during strategic change in academia." *Administrative Science Quarterly* **40**: 370-403.
- [175] Gioia, D. A. (1998). From individual to organizational identity. *Identity in organizations: Building theory through conversations*. D. A. Whetten and P. C. Godfrey. Thousand Oaks, Sage: 17-31.
- [176] Gioia, D. A., M. Schultz, and K. G. Corley (2000). "Organizational identity, image, and adaptive instability." *Academy of Management Review* **25**(1): 63-81.
- [177] Gist, M. E. (1987). "Self-efficacy: Implications in organizational behavior and human resource management." *Academy of Management Review* **12**: 472-485.
- [178] Glaser, B. and A. Strauss (1967). *The discovery of grounded theory: Strategies of qualitative research*. London, Wiedenfeld and Nicholson.

- [179] Gollner, A. B. (1983). *Social Change and Corporate Strategy: The Expanding Role of Public Affairs*. Stamford, CT, Issue Action Publications.
- [180] Gollner, A. B. (1984). "Public relations/public affairs in the new managerial revolution." *Public Relations Review* 10: 3-10.
- [181] Graham, L. O. (1993). *The best companies for minorities*. New York, Plume.
- [182] Granovetter, M. (1985). "Economic action and social structure: The problem of embeddedness." *American Journal of Sociology* 91(3): 481-510.
- [183] Grant, R. M. (1991). "The resource-based theory of competitive advantage: Implications for strategy formulation." *California Management Review* 33: 114-135.
- [184] Grant, R. M. (1996). "Prospering in dynamically-competitive environments: Organizational capability as knowledge integration." *Organization Science* 7(4): 375-387.
- [185] Grant, R. M. (1996). "Toward a knowledge-based theory of the firm." *Strategic Management Journal* 17(Winter Special Issue): 109-122.
- [186] Gray, B. (1989). *Collaborating: Finding Common Ground for Multiparty Problems*. San Francisco, Jossey-Bass.
- [187] Gray, B. and D. J. Wood (1991). "Towards a comprehensive theory of collaboration." *Journal of Applied Behavioral Science* 27: 139-162.
- [188] Grossman, S. and J. Stiglitz (1980). "On the impossibility of informationally efficient markets." *American Economic Review* 70: 393-408.
- [189] Grunig, J. E. and T. Hunt (1984). *Managing public relations*. New York, Holt, Rinehart and Winston.
- [190] Grunig, J. E. (1989). Publics, audiences and market segments: Models of receivers of campaign messages. *Information Campaigns: Managing the Process of Social Change*. C. T. Salmon. Newbury Park, CA, Sage: 197-226.
- [191] Grunig, J. E. and L. A. Grunig (1992). Models of public relations and communication. *Excellence in Public Relations and Communication Management*. J. E. Grunig. Hillsdale, NJ, Lawrence Erlbaum Associates: 285-325.

- [192] Grunig, J. E. (1992). The effect of worldviews on public relations theory and practice. *Excellence in Public Relations and Communication Management*. J. E. Grunig. Hillsdale, NJ, Lawrence Erlbaum Associates.
- [193] Grunig, J. E. and F. C. Repper (1992). Strategic Management, Publics, and Issues. *Excellence in Public Relations and Communication Management*. J. E. Grunig. Hillsdale, NJ, Lawrence Erlbaum Associates: 117-157.
- [194] Grunig, L. A., J. E. Grunig, and W. P. Ehling (1992). What is an effective organization? *Excellence in Public Relations and Communication Management*. J. E. Grunig. Hillsdale, NJ, Lawrence Erlbaum Associates.
- [195] Gujarati, D. N. (1995). *Basic econometrics*. New York, McGraw-Hill.
- [196] Gulati, R. (1995). "Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances." *Academy of Management Journal* **38**(1): 85-112.
- [197] Gulati, R. (1995). "Social structure and alliance formation patterns: A longitudinal analysis." *Administrative Science Quarterly* **40**: 619-652.
- [198] Gulati, R. (1998). "Alliances and networks." *Strategic Management Journal* **19**(4): 293-319.
- [199] Gulati, R., N. Nohria, and A. Zaheer (2000). "Strategic networks." *Strategic Management Journal* **21**(3): 203-215.
- [200] Hair, J. F., R. E. Anderson, R. L. Tatham, and W. C. Black (1998). *Multivariate data analysis*. Upper Saddle River, NJ, Prentice-Hall.
- [201] Hamel, G., Y. Doz, and C. K. Prahalad (1989). "Collaborate with your competitors - and win." *Harvard Business Review*(January-February): 133-139.
- [202] Hamel, G. (1991). "Competition for competence and inter-partner learning within international strategic alliances." *Strategic Management Journal* **12**(Special Issue): 83-103.
- [203] Hamel, G. and C. K. Prahalad (1994). *Competing for the future*. Boston, MA, Harvard Business Press.

- [204] Hamner, W. C. (1974). Reinforcement theory and contingency management in organizational settings. *Organizational Behavior and Management: A Contingency Approach*. H. Tosi and W. C. Hamner. Chicago, St. Clair Press.
- [205] Hannan, M. T. and J. Freeman (1977). "The population ecology of organizations." *American Journal of Sociology* **82**: 929-964.
- [206] Hannan, M. T. and J. Freeman (1989). *Organizational ecology*. Cambridge, MA: Harvard University Press.
- [207] Harrigan, K. R. (1985). *Strategies for joint ventures*. Lexington, Lexington Books.
- [208] Hart, S. L. (1995). "A natural-resource-based view of the firm." *Academy of Management Review* **20**(4): 986-1014.
- [209] Hart, S. L. (1997). "Beyond greening: Strategies for a sustainable world." *Harvard Business Review* (January-February): 66-76.
- [210] Hatch, M. J. (1996). "The role of the researcher: An analysis of narrative position in organization theory." *Journal of Management Enquiry* **5**(4): 359-374.
- [211] Hawley, A. (1950). *Human ecology*. New York, Ronald Press.
- [212] Hedberg, B. (1981). How organizations learn and unlearn. *Handbook of Organizational Design*. P. C. Nystrom and W. H. Starbuck. Oxford, Oxford University Press. **1**: 3-27.
- [213] Hedlund, G. and U. Zander (1993). "Architectonic and list-like knowledge structuring: A critique of modern concepts of knowledge management." *Working paper, Stockholm School of Economics*.
- [214] Hellriegel, D., J. W. Slocum, and R. W. Woodman (1992). *Organizational Behavior*. St. Paul, West.
- [215] Hennart, J.-F. (1993). "Explaining the swollen middle: Why most transactions are a mix of 'market' and hierarchy'." *Organization Science* **4**(4): 529-547.
- [216] Hess, G. (1999). "Greenpeace leads a lawsuit against Bt-containing crops." *Chemical Market Reporter* **255**(9): 24.

- [217] Heugens, P. P. M. A. R., F. A. J. van den Bosch, and C. B. M. van Riel (1999). Building mutually enforcing relationships: Managing diverging interests through stakeholder integration. *Proceedings of the Tenth Annual Meeting of the International Association for Business and Society*. D. J. Wood and D. Windsor: 429-434.
- [218] Heugens, P. P. M. A. R., S. P. Kaptein, and J. van Oosterhout (2000). *Six moral principles for the governance of stakeholder relations*. Paper presented at the annual Academy of Management meeting, Toronto, Canada.
- [219] Heugens, P. P. M. A. R. (2001). "Intercompany governance: Organizing for compliance in alliances." *Rotterdam School of Management working paper*.
- [220] Heugens, P. P. M. A. R. and J. van Oosterhout (2001). "To boldly go where no man has gone before: Integrating cognitive and physical features in scenarios." *Futures* 33(9): (forthcoming).
- [221] Heugens, P. P. M. A. R. and J. van Oosterhout (2001). "Stakeholder governance: Initial steps towards a contingency theory." Paper presented at the *IABS 12th Annual Meeting*, March 15-18, Sedona, USA.
- [222] Heugens, P. P. M. A. R. (2001). "Ties that grind? An empirical test of a typology of problems in social contracting." *Rotterdam School of Management Working Paper*.
- [223] Heugens, P. P. M. A. R., F. A. J. van den Bosch, and C. B. M. van Riel (2001). "Stakeholder integration: Building mutually enforcing relationships." *Business & Society* 3rd review.
- [224] Heugens, P. P. M. A. R., C. B. M. van Riel, and F. A. J. van den Bosch (2001). "Dancing with the devil: Building dynamic issues management capabilities through knowledge integration." *Long Range Planning*: second review.
- [225] Hilgartner, S. and C. L. Bosk (1988). "The rise and fall of social problems: A public arenas model." *American Journal of Sociology* 94: 53-78.
- [226] Hill, C. W. L. and T. M. Jones (1992). "Stakeholder-agency theory." *Journal of Management Studies* 29: 131-154.
- [227] Hillman, A. J. and M. A. Hitt (1999). "Corporate political strategy formulation: A model of approach, participation, and strategy decisions." *Academy of Management Review* 24(4): 825-842.

- [228] Hillman, A. J. and G. D. Keim (2001). "Shareholder value, stakeholder management, and social issues: What's the bottom line?" *Strategic Management Journal* **22**(2): 125-139.
- [229] Hirschleifer, J. (1980). *Price theory and applications*. Englewood Cliffs, NJ, Prentice Hall.
- [230] Isabella, L. (1990). "Evolving interpretations as a change unfolds: How managers construe key organizational events." *Academy of Management Journal* **33**: 17-41.
- [231] Jacoby, N. (1971). "What is a social problem?" *Center Magazine*(July-August): 35-40.
- [232] Jardine, A. (1999). "Retailers in retreat on Frankenstein foods." *Marketing*: 17.
- [233] Jardine, A. (1999). "Iceland stance on GM foods pulls in shoppers." *Marketing*(March 25): 5.
- [234] Jardine, A. (1999). "GM scare strains retailers." *Marketing*(February 18): 7.
- [235] Jennrich, R. I. (1995). *An Introduction to Computational Statistics: Regression Analysis*. Englewood Cliffs, NJ, Prentice-Hall.
- [236] Jensen, M. C. and W. H. Meckling (1976). "Theory of the firm: Managerial behavior, agency costs and ownership structure." *Journal of Financial Economics* **3**: 305-360.
- [237] Jepperson, R. L. (1991). Institutions, institutional effects, and institutionalism. *The new institutionalism in organizational analysis*. W. W. Powell and P. J. DiMaggio. Chicago, University of Chicago Press: 143-163.
- [238] Jick, T. (1979). "Mixing qualitative and quantitative methods: Triangulation in action." *Administrative Science Quarterly* **24**: 602-611.
- [239] Johnson, J. (1983). "Issues management: What are the issues?" *Business Quarterly* **48**(Fall): 22-31.
- [240] Jones, G. R., R. Kosnik, and J. M. George (1993). Internalization and the firm's growth path: On the psychology of organizational contracting. *Research in Organizational Change and Development*. R. W. Woodman and W. A. Pasmore. Greenwich, CT, JAI Press: 105-135.

- [241] Jones, T. M. (1995). "Instrumental stakeholder theory: A synthesis of ethics and economics." *Academy of Management Review* **20**(2): 404-437.
- [242] Jones, T. M. and A. C. Wicks (1999). "Convergent stakeholder theory." *Academy of Management Review* **24**(2): 206-221.
- [243] Jones, G. H., B. H. Jones, and P. Little (2000). "Reputation as reservoir." *Corporate Reputation Review* **3**(1): 21-29.
- [244] Kale, P., H. Singh, and H. Perlmutter (2000). "Learning and protection of proprietary assets in strategic alliances: Building relational capital." *Strategic Management Journal* **21**: 217-237.
- [245] Kanter, R. M. (1994). "Collaborative advantage: The art of alliances." *Harvard Business Review* **72**(July-August): 96-108.
- [246] Kay, P. (1971). "Taxonomy and semantic contrast." *Language* **47**: 866-887.
- [247] Kay, J. A. (1993). *Foundations of corporate success: How business strategies add value*. Oxford, Oxford University Press.
- [248] Keller, K. L. (1993). "Conceptualizing, measuring, and managing customer-based brand equity." *Journal of Marketing* **57**: 1-22.
- [249] Kenward, M. (1992). "Biotech heads for the big time." *International Management*(December): 48-51.
- [250] Kenward, M. (1994). "Pure genius." *Director* **48**(3): 54-57.
- [251] Khanna, T., R. Gulati, and N. Nohria (1998). "The dynamics of learning alliances: Competition, cooperation, and relative scope." *Strategic Management Journal* **19**: 193-210.
- [252] Kidder, L. and C. M. Judd (1986). *Research methods in social relations*. New York, Holt, Rhinehart & Winston.
- [253] Kingdon, J. W. (1984). *Agendas, Alternatives, and Public Policies*. Boston, MA., Little, Brown, and Company.
- [254] Klein, B. (1980). "Transaction cost determinants of 'unfair' contractual arrangements." *American Economic Review* **70**: 356-362.
- [255] Kochan, T. A. and S. A. Rubinstein (2000). "Toward a stakeholder theory of the firm: The Saturn partnership." *Organization Science* **11**(4): 367-386.

- [256] Kogut, B. (1988). "Joint ventures: Theoretical and empirical perspectives." *Strategic Management Journal* 9: 319-332.
- [257] Kogut, B. and U. Zander (1992). "Knowledge of the firm, combinative capabilities, and the replication of technology." *Organization Science* 3: 383-397.
- [258] Kvale, S. (1989). To validate is to question. *Issues of validity in qualitative research*. S. Kvale. Lund, Studentlitteratur.
- [259] Lado, A. A. and M. C. Wilson (1994). "Human resource systems and sustained competitive advantage: A competency-based perspective." *Academy of Management Review* 19: 699-727.
- [260] Landon, S. and C. E. Smith (1997). "The use of quality and reputation indicators by consumers: The case of Bordeaux wine." *Journal of Consumer Policy* 20: 289-323.
- [261] Lane, P. J. and M. Lubatkin (1998). "Relative absorptive capacity and interorganizational learning." *Strategic Management Journal* 19(5): 461-478.
- [262] Larson, A. (1992). "Network dyads in entrepreneurial settings: A study of the governance of exchange relationships." *Administrative Science Quarterly* 37(1): 76-104.
- [263] Lee, J. (1997). "The rise of 'Franken-foods'?" *Marketing*(October 16): 17.
- [264] Lee, H., K. G. Smith, C. M. Grimm, and A. Schomburg (2000). "Timing, order and durability of new product advantages with imitation." *Strategic Management Journal* 21: 23-30.
- [265] Leiss, W. (1994). Risk communication and public knowledge. *Communication theory today*. D. Crowley and D. Mitchell. Cambridge, Polity Press: 127-139.
- [266] Lenz, R. T. and J. L. Engledow (1986). "Environmental analysis units and strategic decision-making: A field study of selected 'leading-edge' corporations." *Strategic Management Journal* 7: 69-89.
- [267] Leonard-Barton, D. (1995). *Wellsprings of Knowledge: Building and Sustaining the Sources of Innovation*. Boston, Harvard Business School Press.
- [268] Levinson, N. S. and M. Asahi (1996). "Cross-national alliances and interorganizational learning." *Organizational Dynamics* 24: 51-63.

- [269] Lippman, S. A. and R. P. Rumelt (1982). "Uncertain imitability: An analysis of interfirm differences in efficiency under competition." *The Bell Journal of Economics* **13**: 418-438.
- [270] Lipskey, M. (1968). "Protest as a political resource." *American Political Science Review* **66**(1144-1158).
- [271] Luoma, P. and J. Goodstein (1999). "Stakeholders and corporate boards: Institutional influences on board composition and structure." *Academy of Management Journal* **42**(5): 553-563.
- [272] Luthans, F. and R. Kreitner (1985). *Organizational Behavior Modification and Beyond*. Glenview, IL, Scott, Foresman.
- [273] Lyles, M. A. (1987). "Defining strategic problems: Subjective criteria of executives." *Organization Studies* **8**: 263-280.
- [274] Maathai, W. (1998). "Let nature's harvest continue: African counter-statement to Monsanto." *Review of African Political Economy* **25**(77): 529-531.
- [275] Maathuis, O. J. M. (1999). *Corporate branding: The value of the corporate brand to customers and managers*. Lochum, Lochumdruk.
- [276] Macneil, I. R. (1980). *The new social contract: An inquiry into modern contractual relations*. New Haven, Yale University Press.
- [277] Mahon, J. and E. Murray (1981). "Strategic planning for regulated companies." *Strategic Management Journal* **2**(3): 251-262.
- [278] Mahon, J. F. (1989). "Corporate political strategy." *Business in the Contemporary World* **2**: 50-62.
- [279] Mahon, J. F. and S. A. Waddock (1992). "Strategic issues management: An integration of issue life cycle perspectives." *Business and Society* **31**: 19-32.
- [280] Mahon, J. F. and R. A. McGowan (1996). *Industry as a Player in the Political and Social Arena*. Westport, CT, Quorum Books.
- [281] Mahoney, J. T. and J. R. Pandian (1992). "The resource-based view within the conversation of strategic management." *Strategic Management Journal* **13**(5): 363-380.
- [282] March, J. G. and H. A. Simon (1958). *Organizations*. New York, Wiley.

- [283] March, J. G. (1988). *Decisions and Organizations*. Oxford, Blackwell.
- [284] March, J. G. and J. P. Olsen (1989). *Rediscovering institutions: The organizational basis of politics*. New York, Free Press.
- [285] March, J. G. (1991). "Exploration and exploitation in organizational learning." *Organization Science* 2: 71-87.
- [286] Marcus, A. A. and R. S. Goodman (1991). "Victims and shareholders: The dilemmas of presenting corporate policy during a crisis." *Academy of Management Journal* 34: 281-305.
- [287] Marens, R. S., A. C. Wicks, and V. L. Huber (1999). "Cooperating with the disempowered: Using ESOPs to forge a stakeholder relationship by anchoring employee trust in workplace participation programs." *Business & Society* 38(1): 51-82.
- [288] Markus, H. and E. Wurf (1987). "The dynamic self-concept: A social psychological perspective." *Annual Review of Psychology* 38: 299-337.
- [289] Mason, R. and I. Mitroff (1981). *Challenging Strategic Planning Assumptions*. New York, Wiley.
- [290] Mason, J. (1996). *Qualitative researching*. London, Sage.
- [291] Matthews, V. (1993). "Strange fruit." *Marketing Week*(January 5): 21-24.
- [292] Mazur, L. (1999). "Globe's Goliaths still need to fear consumer David." *Marketing*(April 1): 22.
- [293] McGuire, J. B., A. Sundgren, and T. Schneeweis (1988). "Corporate social responsibility and firm financial performance." *Academy of Management Journal* 31(4): 854-872.
- [294] Mendenhall, W. and T. Sincich (1996). *A Second Course in Statistics: Regression Analysis*. Upper Saddle River, NJ, Prentice Hall.
- [295] Merchant, H. and D. Schendel (2000). "How do international joint ventures create shareholder value?" *Strategic Management Journal* 21: 723-737.
- [296] Merton, R. K., M. Fiske, and P. L. Kendall (1956). *The focused interview*. Glencoe, IL, Free Press.

- [297] Mervis, C. B. and E. Rosch (1981). "Categorization of natural objects." *Annual Review of Psychology* **32**: 89-115.
- [298] Meyer, J. W. and B. Rowan (1977). "Institutionalized organizations: Formal structure as myth and ceremony." *American Journal of Sociology* **83**(2): 340-363.
- [299] Meyer, J. and B. Rowan (1991). Institutionalized organizations: Formal structure as myth and ceremony. *The new institutionalism in organizational analysis*. W. W. Powell and P. DiMaggio. Chicago, University of Chicago Press: 41-62.
- [300] Miles, M. B. and A. M. Huberman (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, Sage.
- [301] Milgrom, P. and J. Roberts (1986). "Relying on the information of interested parties." *Rand Journal of Economics* **17**: 18-32.
- [302] Miller, D. A. (1986). *Psychographics . . . a study in diversity*. College Park, University of Maryland.
- [303] Miller, C. (1992). "Midwest will be test market in '93 for genetically engineered foods." *Marketing News* **26**(19): 1.
- [304] Milliken, F. J. (1987). "Three types of uncertainty about the environment: State, effect, and response uncertainty." *Academy of Management Review* **12**: 133-143.
- [305] Milliken, F. J. (1990). "Perceiving and interpreting environmental change: An examination of college administrators' interpretation of changing demographics." *Academy of Management Journal* **33**(1): 42-63.
- [306] Mitchell, R. K., B. R. Agle, and D. J. Wood (1997). "Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts." *Academy of Management Review* **22**(4): 853-886.
- [307] Mitnick, B. (1993). *Choosing agency and competition. Corporate political agency*. B. Mitnick. Newbury Park, CA, Sage: 1-12.
- [308] Montgomery, C. A. and B. Wernerfelt (1988). "Diversification, Ricardian rents, and Tobin's q." *Rand Journal of Economics*: 623-632.

- [309] Moore, R. H. (1979). "Planning for emerging issues." *Public Relations Journal* 35: 42-46.
- [310] Morgan (1986). *Images of organization*. London, Sage.
- [311] Morrison, E. W. and F. J. Milliken (2000). "Organizational silence: A barrier to change and development in a pluralistic world." *Academy of Management Review* 25(4): 706-725.
- [312] Mosakowski, E. (1997). "Strategy making under causal ambiguity: Conceptual issues and empirical evidence." *Organization Science* 8(4): 414-442.
- [313] Mowery, D. C., J. E. Oxley, and B. S. Silverman (1996). "Strategic alliances and interfirm knowledge transfer." *Strategic Management Journal* 17(Winter Special Issue): 77-92.
- [314] Nelson, R. R. and S. G. Winter (1973). "Toward an evolutionary theory of economic capabilities." *American Economic Review* 63: 440-449.
- [315] Nicholas, R. (1998). "Test-tube food ads stir up row." *Marketing*: 3.
- [316] Nikiforuk, A. (1997). "The bad seed." *Canadian Business* 70(14): 87-91.
- [317] Nikiforuk, A. (1998). "Incredible edibles." *Canadian Business* 71(12): 18.
- [318] Nishiguchi, T. (1994). *Strategic Industrial Sourcing: The Japanese Advantage*. Oxford, Oxford University Press.
- [319] Nonaka, I., R. Toyama, and N. Konno (2000). "SECI, ba and leadership: A unified model of dynamic knowledge creation." *Long Range Planning* 33(1): 5-34.
- [320] Nooteboom, B. (1999). *Inter-firm alliances: Analysis and design*. London, Routledge.
- [321] North, D. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge, Cambridge University Press.
- [322] Nozick, R. (1974). *Anarchy, state and utopia*. New York, Basic Books.
- [323] Nunnally, J. C. (1978). *Psychometric Theory*. New York, McGraw-Hill.

- [324] O'Reilly, B. (2001). "Reaping a biotech blunder." *Fortune*(February 19): 156-2001.
- [325] Olins, W. (1989). *Corporate identity: Making business strategy visible through design*. London, Thames and Hudson.
- [326] Oliver, C. (1991). "Strategic responses to institutional processes." *Academy of Management Review* **16**: 145-179.
- [327] Oomens, M. J. H. and F. A. J. van den Bosch (1999). "Strategic issue management in major European-based companies." *Long Range Planning* **32**(1): 49-57.
- [328] Ouchi, W. G. (1979). "A conceptual framework for the design of organizational control mechanisms." *Management Science* **25**(9): 833-848.
- [329] Ouchi, W. G. (1980). "Markets, bureaucracies and clans." *Administrative Science Quarterly* **25**: 129-141.
- [330] Pasquero, J. (1991). "Supraorganizational collaboration: The Canadian environmental experiment." *Journal of Applied Behavioral Science* **27**(1): 38-65.
- [331] Patterson, B. (1993). "Crisis impact on reputation management?" *Public Relations Journal* **49**(11): 46-47.
- [332] Patton, M. Q. (1987). *How to use qualitative methods in evaluation*. Newbury Park, CA., Sage.
- [333] Pearson, C. M. and J. A. Clair (1998). "Reframing crisis management." *Academy of Management Review* **23**(1): 59-76.
- [334] Pennings, J. (1981). Strategically interdependent organizations. *Handbook of Organizational Design*. P. C. Nystrom and W. H. Starbuck. Oxford, Oxford University Press. **1**: 433-55.
- [335] Perrow, C. (1984). *Normal accidents: Living with high-risk technologies*. New York, Basic Books.
- [336] Perrow, C. (1986). *Complex organizations: A critical essay*. Glenview, IL, Scott, Foresman and Company.
- [337] Peteraf, M. A. (1993). "The cornerstones of competitive advantage: A resource-based view." *Strategic Management Journal* **14**(3): 179-191.

- [338] Pettigrew, A. and R. Whipp (1991). *Managing change for competitive success*. Oxford, Blackwell.
- [339] Pettit, P. (1996). *The common mind: An essay on psychology, society, and politics*. Oxford, Oxford University Press.
- [340] Pfeffer, J. (1972). "Merger as a response to organizational dependence." *Administrative Science Quarterly* **17**: 382-394.
- [341] Pfeffer, J. (1972). "Size and composition of corporate boards of directors: The organization and its environment." *Administrative Science Quarterly* **17**: 218-228.
- [342] Pfeffer, J. and P. Nowak (1976). "Joint ventures and interorganizational interdependence." *Administrative Science Quarterly* **21**: 398-418.
- [343] Pfeffer, J. and G. Salancik (1978). *The external control of organizations: A resource dependence perspective*. New York, Harper and Row.
- [344] Pfeffer, J. (1981). Management as symbolic action: The creation and maintenance of organizational paradigms. *Research in Organizational Behavior*. L. L. Cummings and B. M. Staw. Greenwich, CT, JAI. **3**: 1-52.
- [345] Pfeffer, J. (1987). A resource dependence perspective on intercorporate relations. *Intercorporate relations: The structural analysis of business*. M. S. Mizruchi and M. Schwartz. Cambridge, Cambridge University Press: 25-55.
- [346] Pfeffer, J. (1994). "Competitive advantage through people." *California Management Review* **36**(2): 9-28.
- [347] Pisano, G. (1988). *Innovation through markets, hierarchies, and joint ventures*. Berkely, University of California.
- [348] Pittman, R. (1976). "The effects of industry concern in three 1971 U.S. Senate campaigns." *Public Choice* **23**: 71-80.
- [349] Polanyi, M. (1967). *The Tacit Dimension*. Garden City, Doubleday Anchor.
- [350] Popper, K. R. (1934/1972). *The logic of scientific discovery*. London, Hutchinson.
- [351] Porter, M. E. (1985). *Competitive Advantage*. New York, Free Press.

- [352] Porter, M. E. (1996). "What is strategy?" *Harvard Business Review* **74**(November-December): 65-76.
- [353] Post, J. E. (1978). *Corporate Behavior and Social Change*. Reston, VA, Reston.
- [354] Powell, D. (1991). *The new institutionalism in organizational analysis*. Chicago, University of Chicago Press.
- [355] Powell, W. W., K. Koput, and L. Smith-Doerr (1996). "Interorganizational collaboration and the locus of innovation: Networks of learning in biotechnology." *Administrative Science Quarterly* **41**: 116-145.
- [356] Powell, W. W. (1996). "Inter-organizational collaboration in the biotechnology industry." *Journal of Institutional and Theoretical Economics* **152**: 197-225.
- [357] Powell, D. and W. Leiss (1997). *Mad cows and mother's milk: The perils of poor risk communication*. Montreal, McGill-Queen's University Press.
- [358] Powell, W. W. (1998). "Learning from collaboration: Knowledge and networks in the biotechnology and pharmaceutical industries." *California Management Review* **40**(3): 228-240.
- [359] Prat, A. (1996). "Shared knowledge versus diversified knowledge in teams." *Journal of the Japanese and International Economies* **10**(2): 181-195.
- [360] Progressive Grocer (1993). "Consumer reaction: Favorable with reservations." *Progressive Grocer* **72**(2): 86.
- [361] Progressive Grocer (1996). "But is it safe?" *Progressive Grocer* **75**(7): 86.
- [362] Public Affairs Research Group (1981). *Public Affairs Offices and Their Functions*. Boston, Boston University.
- [363] Punch, K. F. (1998). *Introduction to social research: Quantitative and qualitative approaches*. London, Sage.
- [364] Quinn, D. and T. M. Jones (1995). "An agent morality view of business policy." *Academy of Management Review* **20**: 22-42.
- [365] Rao, H. and K. Sivakumar (1999). "Institutional sources of boundary-spanning structures: The establishment of investor relations departments in the Fortune 500 industrials." *Organization Science* **10**(1): 27-42.

- [366] Reed, R. and R. J. DeFillippi (1990). "Causal ambiguity, barriers to imitation, and sustainable competitive advantage." *Academy of Management Review* **15**: 88-102.
- [367] Ring, P. S. and A. H. van de Ven (1992). "Structuring cooperative relationships between organizations." *Strategic Management Journal* **13**: 483-498.
- [368] Ring, P. S. and A. H. van de Ven (1994). "Developmental processes of cooperative interorganizational relationships." *Academy of Management Review* **19**(1): 90-118.
- [369] Robbins, S. P. (2000). *Essentials of Organizational Behavior*. Upper Saddle River, NJ, Prentice Hall.
- [370] Roberts, M. (1994). "A consumer view of biotechnology." *Consumer Policy Review* **4**(2): 99.
- [371] Rogerson, W. P. (1987). "The dissipation of profits by brand name investment and entry when price guarantees quality." *Journal of Political Economy* **95**: 797-809.
- [372] Rosch, E. and C. Mervis (1975). "Family resemblances: Studies in the internal structure of categories." *Cognitive Psychology* **7**: 573-605.
- [373] Rosch, E. (1975). "Cognitive representations of semantic categories." *Journal of Experimental Psychology* **104**: 192-233.
- [374] Rosch, E. (1978). Principles of categorization. *Cognition and Categorization*. E. Rosch and B. Lloyd. Hillsdale, NJ, Erlbaum: 27-47.
- [375] Rotman, D. (1993). "Arghem producers sow plans for a rich harvest." *Chemical Week* **153**(6): 33.
- [376] Rowley, T. J. (1997). "Moving beyond dyadic ties: A network theory of stakeholder influences." *Academy of Management Review* **22**(4): 887-910.
- [377] Rowley, T., D. Behrens, and D. Krackhardt (2000). "Redundant governance structures: An analysis of structural and relational embeddedness in the steel and semiconductor industries." *Strategic Management Journal* **21**: 369-385.

- [378] Rumelt, R. P. (1984). Towards a strategic theory of the firm. *Competitive Strategic Management*. R. B. Lamb. Englewood Cliffs, NJ, Prentice-Hall: 556-571.
- [379] Rumelt, R. P. (1987). Theory, strategy, and entrepreneurship. *The Competitive Challenge*. D. J. Teece. Cambridge, MA, Ballinger: 137-158.
- [380] Rumelt, R. P., D. Schendel, and D. J. Teece (1991). "Strategic management and economics." *Strategic Management Journal* 12: 5-29.
- [381] Russo, M. V. and P. A. Fouts (1997). "A resource-based perspective on corporate environmental performance and profitability." *Academy of Management Journal* 40(3): 534-559.
- [382] Ryberg, R. J. (1982). Defining the social issue concept. *1982 Proceedings*. R. W. Griffin. Dallas, Academy of Management, Southwest Division: 230-234.
- [383] Sanchez, R., A. Heene, and H. D. Thomas (1996). Introduction: Towards the theory and practice of competence-based competition. *Dynamics of Competence-based Competition: Theory and Practice in the New Strategic Management*. R. Sanchez, A. Heene and H. Thomas. Oxford, Elsevier Science: 1-35.
- [384] Sanchez, R. and A. Heene (1997). Competence-based strategic management: Concepts and issues for theory, research, and practice. *Competence-based Strategic Management*. A. Heene and R. Sanchez. Chichester, Wiley: 3-42.
- [385] Sandberg, J. (2000). "Understanding human competence at work: An interpretative approach." *Academy of Management Journal* 43(1): 9-25.
- [386] Schatzman, L. and A. Strauss (1973). *Field research*. Englewood Cliffs, NJ, Prentice Hall.
- [387] Schechter, M. (1993). "Brave new foods." *Restaurant Hospitality* 77(2): 82.
- [388] Schlenker, B. R. (1980). *Impression management: The self-concept, social identity, and interpersonal relations*. Monterey, CA, Brooks/Cole.
- [389] Schoorman, F. D., M. H. Bazerman, and R. S. Atkin (1981). "Interlocking directorates: A strategy for reducing environmental uncertainty." *Academy of Management Review* 6(2): 243-251.

- [390] Schumann, D., J. Hathcote, and S. West (1991). "Corporate advertising in America: A review of published studies on use, measurement, and effectiveness." *Journal of Advertising* **20**(3): 35-56.
- [391] Schwenk, C. R. (1984). "Cognitive simplification processes in strategic decision-making." *Strategic Management Journal* **5**: 111-128.
- [392] Scott, J. (1990). *A matter of record: Documentary sources in social research*. Cambridge, Polity.
- [393] Scott, A. (1998). "Europe spells relief L-A-B-E-L-I-N-G." *Chemical Week* **160**(5): 29.
- [394] Scott, W. R. (1998). *Organizations: Rational, natural, and open systems*. New York, Prentice Hall.
- [395] Scott, A. (1999). "Food retailers bow to health concerns." *Chemical Week* **161**(10): 14.
- [396] Selznick, P. (1949). *TVA and the grass roots*. Berkeley, University of California Press.
- [397] Shaffer, B. and A. J. Hillman (2000). "The development of business-government strategies by diversified firms." *Strategic Management Journal* **21**: 175-190.
- [398] Shan, W., G. Walker, and B. Kogut (1994). "Interfirm cooperation and startup innovation in the biotechnology industry." *Strategic Management Journal* **15**: 387-394.
- [399] Shapiro, C. (1983). "Premiums for high quality products as returns to reputations." *Quarterly Journal of Economics* **98**: 659-679.
- [400] Shapiro, R. B. (1999). "How genetic engineering will save our planet." *The Futurist* **33**(4): 28-29.
- [401] Sharma, S. and H. Vredenburg (1998). "Proactive corporate environmental strategy and the development of competitively valuable organizational capabilities." *Strategic Management Journal* **19**(8): 729-753.
- [402] Sharma, S. (Forthcoming). "Environmental Management." *Academy of Management Journal*.

- [403] Simon, H. A. (1998). *Administrative behavior*. New York, Free Press.
- [404] Simonin, B. L. (1999). "Ambiguity and the process of knowledge transfer in strategic alliances." *Strategic Management Journal* **20**: 595-623.
- [405] Skinner, B. F. (1969). *Contingencies of Reinforcement*. New York, Appleton-Century-Crofts.
- [406] Skinner, B. F. (1974). *About Behaviorism*. New York, Knopf.
- [407] Slocum, J. W. and D. Lei (1992). "Global strategy, competence building, and alliances." *California Management Review* **92**(35): 81-97.
- [408] Smidts, A., C. B. M. Van Riel, and A. Pruyn (2001). "Perceived organizational prestige and organizational identification." *Academy of Management Journal* (forthcoming).
- [409] Sobol, M. G., G. E. Farrelly, and J. S. Taper (1992). *Shaping the corporate image: An analytical guide for executive decision makers*. New York, Quorum Books.
- [410] Sorge, A. (1997). Vertical integration into electronics: Transaction costs and organizational domain. *State, market, and organizational form*. A. Bugra and B. Usdiken. Berlin, Walter de Gruyter: 173-201.
- [411] Spender, J.-C. (1992). "Limits to learning from the West: How Western management advice may prove limited in Eastern Europe." *International Executive* **34**(5): 389-410.
- [412] Stake, R. (1995). *The art of case study research*. Thousand Oaks, Sage.
- [413] Starbuck, W. H. (1983). "Organizations as action generators." *American Sociological Review* **48**: 91-102.
- [414] Starbuck, W. H. and F. Milliken (1988). Executives' perceptual filters: What they notice and how they make sense. *The Executive Effect: Concepts and Methods of Studying Top Managers*. D. Hambrick. Greenwich, CT, Jai Press: 35-65.
- [415] Starling, G. (1980). *The Changing Environment of Business*. Boston, Kent.
- [416] Staw, B. M. and L. D. Epstein (2000). "What bandwagons bring, Effects of popular management techniques on corporate performance, reputation, and CEO pay." *Administrative Science Quarterly* **45**(3): 523-556.

- [417] Steckmest, F. W. (1982). Corporate performance. *The Public Affairs Handbook*. J. Nagelschmidt. Washington, Fraser & Associates.
- [418] Stiglitz, J. E. (1989). Imperfect information in the product market. *Handbook of Industrial Organization*. R. Schmalensee and R. Willig. Amsterdam, North-Holland Press: 769-847.
- [419] Stringer, J. (1996). "First biotech harvest raises tension." *Chemical Week* **158**(39): 20.
- [420] Stuart, T. E. (2000). "Interorganizational alliances and the performance of firms: A study of growth and innovation rates in a high technology industry." *Strategic Management Journal* **21**: 791-811.
- [421] Suchman, M. C. (1995). "Managing legitimacy: Strategic and institutional approaches." *Academy of Management Review* **20**: 571-610.
- [422] Sullivan, J. L. and S. Feldman (1994). Multiple indicators: An introduction. *Basic Measurement*. M. S. Lewis-Beck. Thousand Oaks, CA, Sage: 59-137.
- [423] Sutton, R. and A. Callahan (1987). "The stigma of bankruptcy: Spoiled organizational image and its management." *Academy of Management Journal* **30**(3): 405-436.
- [424] Sveiby, K. E. (1997). *The new organizational wealth*. San Francisco, Berrett-Koehler.
- [425] Sze, M. C. and P. Van Arnum (1998). "Getting food output through genetically engineered crops." *Chemical Market Reporter* **253**(25): 3-4.
- [426] Szulanski, G. (1996). "Exploring internal stickiness: Impediments to the transfer of best practice within the firm." *Strategic Management Journal* **17**: 27-43.
- [427] Tedeschi, J. and V. Melburg (1984). Impression management and influence in the organization. *Research in the Sociology of Organizations*. S. Bacharach and E. Lawler. Greenwich, CT., JAI Press. **3**: 31-58.
- [428] Teece, D. J. (1984). "Economic analysis and strategic management." *California Management Review* **26**(3): 87-110.

- [429] Teece, D. J. (1986). Firm boundaries, technological innovation, and strategic management. *The Economics of Strategic Planning*. J. G. Thomas. Lexington, MA, Lexington: 187-199.
- [430] Teece, D. J. (1987). Profiting from technological innovation: Implications for integration, collaboration, licensing and public policy. *The Competitive Challenge: Strategies for Industrial Innovation and Renewal*. D. J. Teece. Cambridge, MA, Ballinger: 185-219.
- [431] Teece, D. J. (1988). Technological change and the nature of the firm. *Technical Change and Economic Theory*. G. Dosi, C. Freeman, R. Nelson, G. Silverberg and L. Soete. New York, Pinter Publishers: 256-281.
- [432] Teece, D. J., G. Pisano, and A. Shuen (1997). "Dynamic capabilities and strategic management." *Strategic Management Journal* **18**(7): 509-533.
- [433] Tellis, G. J. and B. Wernerfelt (1987). "Competitive price and quality under asymmetric information." *Marketing Science* **6**: 240-253.
- [434] Telser, L. G. (1980). "A theory of self-enforcing agreements." *Journal of Business* **53**: 27-44.
- [435] Thompson, J. D. (1967). *Organizations in action: Social science bases of administrative theory*. New York, McGraw-Hill.
- [436] Tiemessen, I., H. W. Lane, Crossan, M. M., and A. C. Inkpen (1997). Knowledge management in international joint ventures. *Cooperative Strategies, North American Perspectives*. P. Beamish and J. Killings. San Francisco, CA, New Lexington Press: 370-399.
- [437] Time (1994). "Fried gene tomatoes." *Time* **143**(22): 54-55.
- [438] Tsai, W. (2000). "Social capital, strategic relatedness and the formation of intraorganizational linkages." *Strategic Management Journal* **21**: 925-939.
- [439] Turban, D. B. (1996). "Corporate social performance and organizational attractiveness to prospective employees." *Academy of Management Journal* **40**(3): 658-672.
- [440] Tyebjee, T. (1988). "A typology of joint ventures: Japanese strategies in the United States." *California Management Review* **31**(1): 75-86.

- [441] Uzzi, B. (1996). "The sources and consequences of embeddedness for the economic performance of organizations: The network effect." *American Sociological Review* **61**(August): 674-698.
- [442] Uzzi, B. (1997). "Social structure and competition in interfirm networks: The paradox of embeddedness." *Administrative Science Quarterly* **42**(1): 35-67.
- [443] van den Bosch, F. A. J. and C. B. M. van Riel (1998). "Buffering and bridging as environmental strategies of firms." *Business Strategy and the Environment* **7**: 24-31.
- [444] van den Bosch, F. A. J., P. P. M. A. R. Heugens, and C. B. M. van Riel (1998). *De introductie van GMO-Soja in Nederland: Beschrijving en analyse van de communicatie en de strategie van het margarine, vetten, en olien-cluster in de periode 1992-1998*. Rotterdam, Corporate Communication Centre.
- [445] van den Bosch, F. A. J. and R. van Wijk (2001). "Creation of managerial capabilities through managerial knowledge integration: A competence-based perspective." *Erasmus University Rotterdam working paper*.
- [446] van den Bosch, F. A. J., H. W. Volberda, and M. de Boer (1999). "Coevolution of firm absorptive capacity and knowledge environment: Organizational forms." *Organization Science* **10**(5): 551-68.
- [447] van Rekom, J. (1998). *Corporate identity: Development of the concept and a measurement instrument*. Erasmus University Rotterdam, Unpublished doctoral dissertation.
- [448] van Riel, C. B. M. (1994). *Balanceren tussen variëteit en uniformiteit in het corporate communication beleid*. Houten, Bohn Stafleu van Loghum.
- [449] van Riel, C. B. M. (1996). *Identiteit en imago: Grondslagen van corporate communication*. Schoonhoven, Academic Service.
- [450] van Riel, C. B. M. and F. A. J. v. d. Bosch (1997). "Increasing effectiveness of managing strategic issues affecting a firm's reputation." *Corporate Reputation Review* **1**(1): 135-140.
- [451] van Riel, C. B. M. (2000). Corporate communication orchestrated by a sustainable corporate story. *The expressive organization: Linking identity, reputation, and the corporate brand*. M. Schultz, M. J. Hatch and M. H. Larsen. Oxford, Oxford University Press: 157-181.

- [452] van Wijk, R., F. A. J. van den Bosch, and H. W. Volberda (2001). "Absorptive capacity, knowledge flows, and innovation: An empirical study of their relationship." *Erasmus University Rotterdam working paper*.
- [453] Wally, S. and A. E. Hurley (1998). "The torch stops here: Olympic sponsorship and corporate reputation." *Corporate Reputation Review* 1(4): 343-355.
- [454] Walsh, J. (1999). "Brave new farm." *Time* 153(1): 86-88.
- [455] Wartick, S. L. and P. L. Cochran (1985). "The evolution of the corporate social performance model." *Academy of Management Review* 10(4): 758-769.
- [456] Wartick, S. L. (1988). "How issues management contributes to corporate performance." *Business Forum* 13(Spring): 16-22.
- [457] Wartick, S. L. and J. F. Mahon (1994). "Toward a substantive definition of the corporate issue construct: A review and synthesis of the literature." *Business and Society* 33(3): 293-311.
- [458] Wartick, S. L. and D. J. Wood (1998). *International Business and Society*. Malden, MA, Blackwell Publishers.
- [459] Weber, M. (1978). *Selections in translation*. Cambridge, Cambridge University Press.
- [460] Weick, K. E. (1979). *The Social Psychology of Organizing*. Reading, MA, Addison-Wesley.
- [461] Weick, K. E. (1987). "Organizational culture as a source of high reliability." *California Management Review* 29(Winter): 116-136.
- [462] Weidenbaum, M. (1980). "Public policy: No longer a spectator sport for business." *Journal of Business Strategy* 3(4): 46-53.
- [463] Weigelt, K. and C. Camerer (1988). "Reputation and corporate strategy: A review of recent theory and applications." *Strategic Management Journal* 9: 443-454.
- [464] Weiss, J. A. (1989). "The powers of problem definition: The case of government paperwork." *Policy Sciences* 22: 97-121.

- [465] Weiss, H. M. (1990). Learning theory and industrial and organizational psychology. *Handbook of Industrial and Organizational Psychology*. M. D. Dunnette and L. M. Hough. Palo Alto, CA, Consulting Psychologists Press: 171-221.
- [466] Wernerfelt, B. (1984). "A resource-based view of the firm." *Strategic Management Journal* 5(2): 171-180.
- [467] Wernerfelt, B. (1989). "From critical resources to corporate strategy." *Journal of General Management* 14: 4-12.
- [468] Werts, C. E. and R. N. Linn (1970). "Cautions in applying various procedures for determining the reliability and validity of multi-item scales." *American Sociological Review* 35: 757-759.
- [469] Westley, F. and H. Vredenburg (1991). "Strategic bridging: The collaboration between environmentalists and businesses in the making of green products." *Journal of Applied Behavioral Science* 27: 65-90.
- [470] Westley, F. and H. Vredenburg (1997). "Interorganizational collaboration and the preservation of global biodiversity." *Organization Science* 8(4): 381-403.
- [471] White, H. C. (1981). "Where do markets come from?" *American Journal of Sociology* 87: 517-547.
- [472] Wilcox, D. L., P. H. Ault, et al. (1995). *Public relations: Strategies and tactics*. New York, Harper Collins.
- [473] Williamson, O. E. (1975). *Markets and hierarchies: Analysis and antitrust implications*. New York, Free Press.
- [474] Williamson, O. E. (1983). "Credible commitments: Using hostages to support exchange." *American Economic Review* 73: 519-535.
- [475] Williamson, O. E. (1985). *The economic institutions of capitalism: Firms, markets, relational contracting*. New York, Free Press.
- [476] Williamson, O. E. (1991). "Comparative economic organization: The analysis of discrete structural alternatives." *Administrative Science Quarterly* 36: 269-296.

- [477] Winter, S. G. (1995). Four Rs of profitability: Rents, resources, routines, and replication. *Resource-based and Evolutionary Theories of the Firm*. C. A. Montgomery. Boston, Kluwer Academic Press: 147-178.
- [478] Winter, M. and U. Steger (1998). *Managing outside pressure: Strategies for preventing corporate disasters*. Chichester, John Wiley and Sons.
- [479] Winter, S. G. (2000). "The satisficing principle in capability learning." *Strategic Management Journal* **21**: 981-996.
- [480] Wood, R. and A. Bandura (1989). "Social Cognitive Theory of Organizational Management." *Academy of Management Review* **13**: 361-384.
- [481] Wood, D. J. (1991). "Corporate social performance revisited." *Academy of Management Review* **16**(4): 691-718.
- [482] Wood, D. J. and B. Gray (1991). "Toward a comprehensive theory of collaboration." *Journal of Applied Behavioral Science* **27**(2): 139-162.
- [483] Wood, D. J. (1994). *Business and Society*. New York, HarperCollins.
- [484] Yeoh, P.-L. and K. Roth (1999). "An empirical analysis of sustained advantage in the U.S. pharmaceutical industry: Impact of firm resources and capabilities." *Strategic Management Journal* **20**(7): 637-653.
- [485] Yin, R. K. (1994). *Case study research: Design and methods*. Thousand Oaks, Sage.
- [486] Zajac, E. J. and C. P. Olsen (1993). "From transactional cost to transactional value analysis: Implications for the study of interorganizational strategies." *Journal of Management Studies* **30**(1): 131-145.
- [487] Zald, M. N. (1978). "On the social control of industries." *Social Forces* **57**: 79-102.
- [488] Zollo, M. and S. Winter (1999). "From organizational routines to dynamic capabilities." *Working paper WP 99-07* University of Pennsylvania (Philadelphia, PA).
- [489] Zucker, L. G. (1983). Organizations as institutions. *Research in the Sociology of Organizations*. S. B. Bacharach. Greenwich, CT, JAI Press. **2**: 1-47.

Appendix A

Measurement Instrument

**EXPERIENCES OF DUTCH MANAGERS WITH
PLANT GENETIC MODIFICATION**



Questionnaire

December 1999

Corporate Communication Centre

Rotterdam School of Management

Erasmus University Rotterdam

INTRODUCTION

This questionnaire deals with the strategies your company uses to manage the issue of plant genetic modification. You will be asked to answer a number of multiple choice questions. An overview of the possible answers is provided below.

- 1 = I completely disagree
- 2 = I disagree
- 3 = I slightly disagree
- 4 = I am neutral
- 5 = I slightly agree
- 6 = I agree
- 7 = I completely agree

It will take you about 20 minutes to complete this questionnaire. Before you start, please pay attention to the following:

- You will be asked to answer questions about your organization.
- Please provide the most appropriate answer to each question.
- Please answer all questions!
- You may provide only a single answer per question.
- Your answers will be processed confidentially.
- You may indicate that you would like to receive a summary of the research results on a separate answering form.

PART 1	MODERN BIOTECHNOLOGY
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We are interested in the extent to which certain food crops are important to your company. Four propositions are provided below. Can you please indicate the extent to which you agree or disagree with them?

	Dis- agree	Agree
1. <u>Soy (products)</u> is/are highly important for our company.	1 2 3 4 5 6 7	
2. <u>Corn (products)</u> is/are highly important for our company.	1 2 3 4 5 6 7	
3. <u>Potato (products)</u> is/are highly important for our company.	1 2 3 4 5 6 7	
4. <u>Sugar beet (products)</u> is/are highly important for our company.	1 2 3 4 5 6 7	

We are also interested in the extent to which certain risks associated with modern biotechnology are important to your company. Three propositions are provided below. Can you please indicate the extent to which you agree or disagree with them?

	Dis- agree	Agree
5. The effects of modern biotechnology on <u>human health</u> matter a lot to our company.	1 2 3 4 5 6 7	
6. The effects of modern biotechnology on the <u>natural environment</u> matter a lot to our company.	1 2 3 4 5 6 7	
7. <u>Ethical concerns</u> about modern biotechnology matter a lot to our company.	1 2 3 4 5 6 7	

PART 2	RESOURCE DEPENDENCIES
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Resource dependence may be described as the extent to which your (a) suppliers and (b) buyers have power over your firm. Six propositions are provided below. Can you please indicate the extent to which you agree or disagree with them?

- | | Dis-
agree | Agree |
|--|---------------|-------|
| 1. The products we supply are <u>irreplaceable</u> in today's markets. | 1 2 3 4 5 6 7 | |
| 2. Our suppliers have the ability to <u>force</u> us to comply with their demands. | 1 2 3 4 5 6 7 | |
| 3. <u>Good substitutes</u> are available for many of the products we manufacture. | 1 2 3 4 5 6 7 | |
| 4. We have the ability to <u>force</u> our suppliers to comply with our demands. | 1 2 3 4 5 6 7 | |
| 5. Our products represent a greater amount of <u>value-added</u> to our buyers than those of our competitors do. | 1 2 3 4 5 6 7 | |
| 6. The <u>competition</u> amongst our suppliers is fierce. | 1 2 3 4 5 6 7 | |

PART 3 STAKEHOLDERS

Stakeholders are third parties that may exert economical or political influence on your company. Please indicate on a scale of 1 through 10 how powerful, urgent, and legitimate you think these parties are.

Power is the extent to which a stakeholder can force you to comply with its demands (1 = Powerless, 10 = Very powerful).

Urgency is the extent to which the demands of a stakeholder command your direct attention (1 = Not at all, 10 = Absolutely).

Legitimacy is the extent to which the demands of a stakeholder are justified (1 = Not at all, 10 = Absolutely).

		<u>Power</u> (1-10)	<u>Urgency</u> (1-10)	<u>Legitimacy</u> (1-10)
1.	Buyers			
2.	Suppliers			
3.	Competitors			
4.	Financiers			
5.	Dutch government			
6.	European government			
7.	Political parties			
8.	Consumer organizations			
9.	Environmentalists			
10. <i>(report yourself)</i>			

We are also interested in the relationships you may have developed with these stakeholders. Eight propositions are provided below. Can you please indicate the extent to which you agree or disagree with them?

	Dis- agree	Agree
11. Our stakeholders are always <u>even-handed</u> in their negotiations with us.	1 2 3 4 5 6 7	
12. We can achieve better results by <u>cooperating closely</u> with our stakeholders.	1 2 3 4 5 6 7	
13. Based on our prior experiences, we fully expect our stakeholders to live up to their <u>promises</u> .	1 2 3 4 5 6 7	
14. We often gain <u>new insights</u> by cooperating closely with our stakeholders.	1 2 3 4 5 6 7	
15. Our stakeholders are <u>trustworthy</u> .	1 2 3 4 5 6 7	
16. We are involved in an <u>ongoing dialogue</u> with our stakeholders.	1 2 3 4 5 6 7	
17. <u>We</u> think it is important to engage in trust-based cooperative relationships with stakeholders	1 2 3 4 5 6 7	
18. <u>Stakeholders</u> think it is important to engage in trust-based cooperative relationships with us.	1 2 3 4 5 6 7	

PART 4 CAPABILITIES

Capabilities contribute to the development of beneficial working relations between your company and its stakeholders. Eight propositions are provided below. Can you please indicate the extent to which you agree or disagree with them?

		Dis- agree	Agree
1.	We are able to <u>translate</u> the potential risks of modern biotechnology into terminology that is understandable to our stakeholders.	1 2 3 4 5 6 7	
2.	We have developed a <u>mature relationship</u> with the press, based on straightforwardness and respect.	1 2 3 4 5 6 7	
3.	We are able to establish an <u>open dialogue</u> with our stakeholders.	1 2 3 4 5 6 7	
4.	We understand in which respects our opinion on modern biotechnology <u>differs</u> from that of our stakeholders.	1 2 3 4 5 6 7	
5.	We <u>listen</u> very well to what our stakeholders have to say.	1 2 3 4 5 6 7	
6.	We understand what drives our stakeholders because we continuously <u>think along with them</u> .	1 2 3 4 5 6 7	
7.	We integrate the opinions of our stakeholders into our <u>decisions</u> .	1 2 3 4 5 6 7	
8.	We largely outsource the maintenance of stakeholder relations to industry-level <u>representative organizations</u> .	1 2 3 4 5 6 7	

We are also interested in the specific characteristics of the issues management capabilities of your company. Ten propositions are provided below. Can you please indicate the extent to which you agree or disagree with them?

	Dis- agree	Agree
9. Our capabilities take a <u>long period of time</u> to build up.	1 2 3 4 5 6 7	
10. Competitors can not build up these capabilities <u>faster</u> through a greater application of resources.	1 2 3 4 5 6 7	
11. Our capabilities can not easily be <u>identified or imitated</u> by competitors.	1 2 3 4 5 6 7	
12. Our capabilities span (provide benefits) to several <u>functional areas/departments</u> .	1 2 3 4 5 6 7	
13. Our capabilities span (provide benefits) to <u>different levels</u> within the company.	1 2 3 4 5 6 7	
14. Our capabilities lack a <u>clearly identified owner</u> within the company, i.e. an employee cannot leave with organizational reputation, knowledge, relationships, <i>et cetera</i> .	1 2 3 4 5 6 7	
15. Our capabilities act as triggers for <u>collective learning</u> within the company.	1 2 3 4 5 6 7	
16. Our capabilities act as triggers for <u>innovation</u> in the company.	1 2 3 4 5 6 7	
17. Our capabilities act as triggers for <u>collaborative problem solving</u> with stakeholders.	1 2 3 4 5 6 7	
18. Our capabilities <u>combine</u> with other assets to generate benefits for the company, e.g. improved reputation combines with an established retail network.	1 2 3 4 5 6 7	

PART 5	COMPANY BENEFITS
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We are interested in the competitive position of your company relative to its rivals. Fourteen propositions are provided below. Can you please indicate the extent to which you agree or disagree with them?

		Dis- agree					Agree	
1.	Our <u>costs</u> of regulatory compliance have been reduced.	1	2	3	4	5	6	7
2.	We have increased our <u>production efficiency</u> .	1	2	3	4	5	6	7
3.	We have increased our knowledge about <u>effective</u> ways of managing operations.	1	2	3	4	5	6	7
4.	We have improved the <u>quality</u> of our products.	1	2	3	4	5	6	7
5.	Our employees have learned to apply modern biotechnology <u>safely</u> .	1	2	3	4	5	6	7
6.	We have improved our <u>reputation</u> through the application of modern biotechnology.	1	2	3	4	5	6	7
7.	Our <u>profitability</u> has increased.	1	2	3	4	5	6	7
8.	We are able to <u>anticipate</u> on future legislation.	1	2	3	4	5	6	7
9.	We are able to secure the long-term <u>efficiency</u> of our production process.	1	2	3	4	5	6	7
10.	In the future we will be able to manage our operations more <u>effectively</u> .	1	2	3	4	5	6	7
11.	In the future we will be able to use modern biotechnology for improving the <u>quality</u> of our products.	1	2	3	4	5	6	7

		Dis-						Agree	
		agree	1	2	3	4	5	6	7
12.	The modern biotechnology issue triggers <u>continuous learning</u> among our employees.		1	2	3	4	5	6	7
13.	In the future our <u>reputation</u> in the area of modern biotechnology will improve.		1	2	3	4	5	6	7
14.	The introduction of modern biotechnology will improve our future <u>profitability</u> .		1	2	3	4	5	6	7

PART 6	PERCEIVED EXTERNAL PRESTIGE
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Perceived External Prestige relates to the overall assessment of your company by outsiders. Six propositions are provided below. Can you please indicate the extent to which you agree or disagree with them?

		Dis- agree	Agree
1.	Our company has a <u>good reputation</u> in the outside world.	1 2 3 4 5 6 7	
2.	Our customers are generally satisfied with our <u>products</u> .	1 2 3 4 5 6 7	
3.	Our company is seen as a good <u>employer</u> .	1 2 3 4 5 6 7	
4.	Our company is seen as <u>financially solid</u> .	1 2 3 4 5 6 7	
5.	In comparison with other companies <u>in our industry</u> , our company is seen as a positive role model.	1 2 3 4 5 6 7	
6.	In comparison with other companies <u>in general</u> , our company is seen as a positive role model.	1 2 3 4 5 6 7	

The following six propositions relate to the perceived external prestige of your company in the area of modern biotechnology. Can you please indicate the extent to which you agree or disagree with them?

		Dis- agree						Agree
7.	In the area of modern biotechnology our company has a <u>good reputation</u> in the outside world.	1	2	3	4	5	6	7
8.	Our customers are generally satisfied with our modern biotechnology-based <u>products</u> .	1	2	3	4	5	6	7
9.	Our involvement with modern biotechnology is detrimental to our image as an <u>employer</u> .	1	2	3	4	5	6	7
10.	Our involvement with modern biotechnology is detrimental to our <u>financial</u> image.	1	2	3	4	5	6	7
11.	In comparison with other companies <u>in our industry</u> , our company is seen as a positive role model in the area of modern biotechnology.	1	2	3	4	5	6	7
12.	In comparison with other companies <u>in general</u> , our company is seen as a positive role model in the area of modern biotechnology.	1	2	3	4	5	6	7

PART 7	COMMUNICATION
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We are interested in the communication strategies your company uses to inform specific stakeholders. Six propositions are provided below. Can you please indicate the extent to which you agree or disagree with them?

		Dis-agree	Agree
1.	Our buyers <u>know how we feel</u> about modern biotechnology.	1	2 3 4 5 6 7
2.	Our buyers <u>disapprove of</u> the use of modern biotechnology.	1	2 3 4 5 6 7
3.	Our buyers often ask us <u>not</u> to provide them with modern biotechnology-based products.	1	2 3 4 5 6 7
4.	Our suppliers <u>know how we feel</u> about modern biotechnology.	1	2 3 4 5 6 7
5.	Our suppliers have <u>no objections</u> against the use of modern biotechnology.	1	2 3 4 5 6 7
6.	Our suppliers ask for <u>our understanding</u> with respect to their modern biotechnology policy.	1	2 3 4 5 6 7
7.	We deem it important to inform our <u>buyers</u> about our modern biotechnology policy.	1	2 3 4 5 6 7
8.	We deem it important to inform our <u>suppliers</u> about our modern biotechnology policy.	1	2 3 4 5 6 7

PART 8	GEOGRAPHICAL MARKETS
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We are interested in the geographical markets your organization serves. Ten propositions are provided below. Can you please indicate the extent to which you agree or disagree with them?

- | | Dis-
agree | Agree |
|---|---------------|-------|
| 1. <u>The Netherlands</u> are an important market for us. | 1 2 3 4 5 6 7 | |
| 2. <u>Scandinavia</u> is an important market for us. | 1 2 3 4 5 6 7 | |
| 3. <u>Germany, Switzerland and Austria</u> are important markets for us. | 1 2 3 4 5 6 7 | |
| 4. <u>The United States, Canada, the United Kingdom, Ireland, and Australia</u> are important markets for us. | 1 2 3 4 5 6 7 | |
| 5. <u>France, Belgium, Luxembourg, Spain, Italy and Portugal</u> are important markets for us. | 1 2 3 4 5 6 7 | |
| 6. <u>Latin America</u> is an important market for us. | 1 2 3 4 5 6 7 | |
| 7. <u>The Far East</u> is an important market for us. | 1 2 3 4 5 6 7 | |
| 8. <u>Japan</u> is an important market for us. | 1 2 3 4 5 6 7 | |
| 9. <u>Greece and Turkey</u> are important markets for us. | 1 2 3 4 5 6 7 | |
| 10. <u>The Arab world</u> is an important market for us. | 1 2 3 4 5 6 7 | |

PART 9 BACKGROUND INFORMATION

At this stage we would like to remind you that your answers will be processed confidentially.

1. In what sector do you work?

Sector	(Mark)
Biotechnology company	
Agricultural company	
Trading company	
Processing company	
Food producing company	
Retail company	
Representative organization	
Other, notably:	

2. How many people does your organization employ?

Number of employees	(Mark)
1 – 10	
11 – 50	
51 – 100	
101 – 250	
251 – 500	
501 – 1000	
1000 – 5000	
> 5000	

3. What is the annual turnover of your company (in millions of guilders)?

Annual turnover (in millions of guilders)	(Mark)
< 0,5	
0,5 – 1	
1 – 5	
5 – 10	
10 – 100	
100 – 1000	
1000 – 5000	
> 5000	

4. What is your job level?

Job level	(Mark)
Board of directors	
Senior management	
Staff function	
Middle management	
Line/operational management	
Other, notably:	

5. What description suits your job best?

Job description	(Mark)
General management	
Communication management	
Human resource management	
Marketing management	
Strategic management	
Financial management	
Research and development management	
Production management	
Other, notably:	

6. Since when do you work for your current employer?

19 (Report year of hiring)

7. What is your age?

Age	(Mark)
< 26	
26 – 30	
31 – 35	
36 – 40	
41 – 45	
46 – 50	
51 – 55	
56 – 60	
> 60	

8. What is your gender? (*Circle the appropriate answer*)

Male / Female

Final remark: It is very important that you answer all questions. Please verify that you have not skipped any questions.

Thank you very much for your cooperation! If you want to receive a summary of the results of this study, please fill out the accompanying request form, and send it back to Rotterdam in the enclosed stamped envelope, together with the survey booklet.

Appendix B

A direct test of Proposition 1

The central theoretical claim of this book has been that the attainment of competitive advantage through strategic issues management requires a simultaneous adoption of outside-in and inside-out oriented issues management activities. The primary inside-out oriented issues management strategy described in the present volume is capability development, the integration of the valuable issues management-related experiences of individuals into higher-order organizational knowledge-based resources. It must be remembered, however, that these valuable experiences do not arise in a vacuum. They are only accumulated when employees are directly being exposed to externally oriented issues management experiences, such as buffering and co-opting the external stakeholders of the company, or the establishment of cooperative schemes with such outside parties, aimed at mutual learning or meta-problem solving.

Furthermore, the primary outside-in oriented issues management strategy described in the present volume is stakeholder integration, the development of trust-based, collaborative relationships between a firm and its external stakeholders. It must not be forgotten, however, that the development of such relationships can be a difficult task, because many stakeholders will be very reluctant to engage in extensive interorganizational collaboration with commercial organizations. Especially stakeholders whose interests or value and belief systems are not naturally congruent with those of the organization will have second thoughts. Successful stakeholder integration therefore requires prior investments in issues management-related capabilities like corporate silence, advocacy, dialogue, and crisis communication.

These apparent interdependencies between inside-oriented and outside-oriented issues management techniques have previously urged me to formulate the following theoretical proposition (see chapter three of the present volume):

Proposition 1: Effective strategic issues management consists of both stakeholder integration and capability development activities.

This proposition offers interesting avenues for future research. Both the assertion that firms can only accumulate valuable capabilities if they have some prior experience with the management of external dependencies and the claim that firms can only integrate with stakeholders if they first invest in the development of issues management capabilities suggest order effects.

To test these claims would require the collection of new longitudinal data, so that it would be possible to test (a) the relationship between stakeholder integration activities at t_1 and capability development efforts at t_2 , as well as (b) the relationship between capability development activities at t_1 and stakeholder integration activities at t_2 . Because I wanted to provide some preliminary insights into these relationships, I have explored Proposition 1 by testing the combined effect of stakeholder integration and capability development on the various indicators of performance described in this text. The results are on display in Table B1.

Table B1: Regression results for Proposition 1

	EB - β (st. er.)	Sig.	SB - β (st. er.)	Sig.	CR - β (st. er.)	Sig.	BR - β (st. er.)	Sig.
R ²	0.243		0.238		0.287		0.182	
(Adj.)	(0.211)		(0.206)		(0.257)		(0.148)	
F	7.699		7.478		9.613		5.262	
(Sig.)	(0.000)		(0.000)		(0.000)		(0.000)	
Consta	9.135	0.000	6.545	0.013	22.554	0.000	7.287	0.008
nt	(2.252)		(2.596)		(2.049)		(2.736)	
SIM	1.159	0.000	0.852	0.000	1.168	0.000	0.795	0.000
	(0.175)		(0.202)		(0.160)		(0.213)	
Size	- 0.135	0.146	0.372	0.001	0.118	0.169	0.276	0.015
	(0.092)		(0.107)		(0.085)		(0.112)	
Bio	- 1.345	0.385	0.600	0.737	- 1.077	0.444	- 2.416	0.199
	(1.544)		(1.780)		(1.404)		(1.876)	
Agri.	- 1.085	0.568	4.571	0.038	1.499	0.386	- 1.032	0.653
	(1.896)		(2.185)		(1.724)		(2.294)	
Trade	- 1.592	0.292	0.531	0.760	0.939	0.494	- 3.192	0.082
	(1.508)		(1.738)		(1.371)		(1.825)	
Proc.	- 1.073	0.472	- 0.839	0.625	0.134	0.921	- 3.025	0.096
	(1.488)		(1.715)		(1.353)		(1.809)	
Food	- 2.226	0.129	- 2.755	0.103	- 1.560	0.242	- 4.598	0.010
	(1.459)		(1.682)		(1.330)		(1.766)	
Retail	5.518	0.035	-2.082	0.488	2.837	0.232	- 0.191	0.952
	(2.601)		(2.998)		(2.366)		(0.231)	

To produce these results, I first of all had to create the variable Strategic Issues Management (SIM). I started by standardizing the variables Stakeholder Integration (SI) and Capability Development (CD) by dividing the scores obtained on these variables by the number of items on the scale I used to measure them (six and seven respectively). Next, I calculated the SIM variable by adding up the standardized scores for SI and CD (I did not multiply SI and CD to avoid non-linearity problems). As a second step in the procedure, I used the new SIM variable as the explanatory variable in four regression analyses, with economic benefits, strategic benefits, corporate reputation, and biotechnology reputation as the respective dependent variables (each time controlling for company size and industry). The results were satisfying (see the numbers printed in bold in Table 8.1.). The SIM variable turned out to be a very strong predictor for all four types of competitive benefits. In all four regression analyses, the predicted relationship was supported at the 0.000 level of significance. In other words, there is strong preliminary evidence for the complementarity of inside- and outside-oriented issues management activities.

Samenvatting

Organisaties worden voortdurend geconfronteerd met kritische gebeurtenissen die hun maatschappelijke legitimiteit kunnen aantasten. Wanneer ondernemingen publiekelijk worden geassocieerd met activiteiten als vervuiling, discriminatie van bepaalde groepen medewerkers, omkoping, monopolistische prijszetting, of het in gevaar brengen van de veiligheid van consumenten, lopen zij het risico uit hun maatschappelijke functie ontheven te worden. Organisaties hoeven dergelijke bedreigingen echter niet passief te ondergaan. Managers blijken vaak in staat communicatieve en strategische reacties te ontwikkelen, die hun organisaties beschermen tegen publiekelijke beschuldigingen en die het positieve imago veilig kunnen stellen. Wanneer managers dergelijke geïsoleerde ad hoc reacties op externe bedreigingen trachten om te zetten in een meer geïntegreerde en pro-actieve bedrijfsvoering, kunnen we spreken van een issues management strategie. In dit boek tracht ik aan te tonen dat dergelijke issues management strategieën een positieve bijdrage kunnen leveren aan zowel de financiële prestaties van ondernemingen als aan hun bedrijfsreputatie.

Ik heb mij in mijn onderzoek gericht op het issue van genetische modificatie. Meer in het bijzonder heb ik onderzocht hoe de verschillende ondernemingen in de Nederlandse voedingsmiddelenketen zijn omgegaan met de

maatschappelijke druk rond de introductie van consumentenproducten die vervaardigd zijn op basis van genetisch gemodificeerde soja of maïs. Om tenminste drie samenhangende redenen is de introductie van dergelijke producten maatschappelijk gezien een heet hangijzer. In de eerste plaats gaat het om heel veel verschillende producten. Meer dan zestig procent van alle voorverpakte levensmiddelen die te koop zijn in de supermarkt bevat op dit moment al genetisch gemodificeerde ingrediënten. Genetische modificatie is alleen al daarom niet langer een technologie van de toekomst, maar in letterlijke zin een hedendaagse technologie. Naast de schaal van de introductie speelt in de tweede plaats ook mee dat er een aantal potentiële gevaren aan de nieuwe technologie kleven, alsmede een aantal ethische bezwaren. Niemand kan op dit moment voorspellen wat in de komende decennia de invloed van genetische modificatie zal zijn op het economische, sociale, en ecologische landschap van grote delen van de wereld. Een derde reden is dat de consument nooit is gevraagd naar zijn mening omtrent moderne biotechnologie. De beslissing om deze nieuwe technologie te gaan commercialiseren is genomen in de bestuurskamers van een kleine groep hoofdzakelijk Noord-Amerikaanse ondernemingen, en niet door de politieke vertegenwoordigers van alle consumenten die nu dagelijks met gentechnologie geconfronteerd worden.

Voor de Nederlandse levensmiddelenbranche is moderne biotechnologie een zeer duidelijke bedreiging. Nederland kent een relatief groot aantal handelsondernemingen en voedselproducenten, alsmede een aantal grote internationaal opererende retailers. Voor al deze ondernemingen geldt dat zij aan de ene kant te maken hebben met biotechnologiebedrijven, zaadhandelaren en agrarische ondernemingen die het hen onmogelijk maken om in grote hoeveelheden ongemodificeerde ingrediënten aan te schaffen, terwijl zij aan de andere kant geconfronteerd worden met consumenten die veelal afwijzend staan tegenover moderne biotechnologie. Juist voor deze groep ondernemingen is issues management dan ook een kerntaak. Zonder een adequaat management van

kritische afhankelijkheden en gebeurtenissen lopen deze ondernemingen het risico imagoschade op te lopen en hun winstgevendheid te zien afnemen.

Een groot probleem, zowel voor managers als onderzoekers, is echter dat er in de literatuur een veelheid aan issues management technieken beschreven wordt. Het is daarom voor de praktiserende manager zeker niet in een oogopslag duidelijk wat op een bepaald moment de meest geëigende issues management techniek is voor zijn of haar bedrijf. Tegelijkertijd is het ook voor de onderzoeker niet gemakkelijk om vast te stellen welke issues management technieken de bedrijven die hij of zij onderzoekt nu eigenlijk gebruiken. Voor dit proefschrift heb ik daarom allereerst onderzocht welke issues management technieken Nederlandse ondernemingen nu eigenlijk gebruiken bij hun pogingen om de introductie van moderne biotechnologie in goede banen te leiden. Ik heb dat gedaan door middel van een zogenaamde gevalstudie of case studie. Een dergelijke studie is een kwalitatief onderzoek, waarbij het accent veeleer ligt op het bouwen dan op het testen van theorie. Als belangrijkste databronnen heb ik voor deze studie gebruik gemaakt interviews, archiefmateriaal, ronde tafelgesprekken, audiovisueel materiaal, en achtergrondinformatie uit kranten en tijdschriften.

De case studie toonde aan dat Nederlandse ondernemingen gebruik maken van een tweetal complementaire issues management strategieën. In de eerste plaats maken zij gebruik van wat men een extraverte issues management strategie zou kunnen noemen. De ondernemingen in mijn onderzoekssteekproef hebben van begin af aan geprobeerd om de meningen van kritische externe partijen, de zogenaamde stakeholders, mee te nemen in hun besluitvorming. Deze strategie wordt ook wel stakeholder integratie genoemd. De verschillende manifestaties van dit fenomeen worden besproken in het vierde hoofdstuk van dit boek. In de tweede plaats maken ondernemingen ook gebruik van meer introverte issues management benaderingen. Het accent ligt dan veel meer op de codificatie van issues management-gerelateerde ervaringen, om zo waardevolle

vaardigheden te creëren die in een later stadium weer toegepast kunnen worden op nieuwe issues. De verschillende verschijningsvormen die deze issues management vaardigheden kunnen aannemen worden beschreven in het vijfde hoofdstuk van deze dissertatie.

Het identificeren van issues management technieken is een belangrijk begin wanneer men wil vaststellen wat de toegevoegde waarde van issues management is. Een tweede stap in dit proces is echter het identificeren van indicatoren waarin die toegevoegde waarde uitgedrukt zou kunnen worden. In dit proefschrift beschrijf ik een viertal van dergelijke indicatoren. In de eerste plaats beschrijf ik een tweetal indicatoren waarin de toegevoegde waarde van issues management in financiële zin tot uitdrukking zou moeten komen. De eerste indicator heb ik economische meeropbrengsten genoemd, terwijl ik de tweede heb aangeduid met strategische meeropbrengsten. In het eerste geval gaat het om korte termijn pecuniaire winsten, terwijl het in het tweede geval gaat om verbeteringen in de concurrentiepositie van een onderneming op de lange termijn. Tevens beschrijf ik een tweetal indicatoren die betrekking hebben op de reputatie van ondernemingen. In de eerste plaats gebruik ik de algemene ondernemingsreputatie, een brede evaluatie van het prestige van een onderneming ten opzichte van haar directe concurrenten. In de tweede plaats maak ik gebruik van de ondernemingsreputatie op het gebied van moderne biotechnologie, een veel specifiekere evaluatie van het externe prestige van een onderneming.

De twee issues management technieken alsmede de vier prestatie-indicatoren heb ik vervolgens geoperationaliseerd in de vorm van een vragenlijst (zie Appendix A). In het kader van een tweede studie - een kwantitatief survey - heb ik deze vragenlijst opgestuurd naar alle ondernemingen (551) die in Nederland betrokken zijn bij de introductie van moderne biotechnologie (hetzij in actieve dan wel in passieve zin). Uiteindelijk heb ik bruikbare resultaten mogen ontvangen van 212 ondernemingen (38%). Door middel van diverse kwantitatieve

analyses heb ik vervolgens met deze tweede studie kunnen aantonen dat de twee voornoemde issues management technieken (stakeholder integratie en het bouwen van waardevolle vaardigheden) inderdaad bijdragen aan de prestaties van ondernemingen (zie hoofdstukken zes en zeven). Ondernemingen hebben zowel in financiële termen als in termen van reputatie baat bij het inzetten van issues management technieken. Het onderzoek toont echter aan dat de meer extraverte stakeholder integratie benadering een grotere invloed heeft op de reputatie van de onderneming, terwijl de meer introverte vaardigheden benadering een grotere invloed heeft op de financiële prestaties van de onderneming. De conclusie van dit proefschrift is dan ook dat de inzet van issues management technieken weldegelijk gevolgen heeft voor de prestaties van ondernemingen.

Curriculum Vitae

Pursey P. M. A. R. Heugens (1973) received his M.Sc. degree in strategic management (with honors) from the Rotterdam School of Management, Erasmus University Rotterdam. His master thesis, 'competence-based positioning,' won the 1997 Hewlett Packard strategy award. Pursey Heugens is currently an assistant professor of strategic management at the John Molson School of Business of Concordia University. His research focuses on the management and governance of interorganizational relationships, with specific emphases on (a) corporate communication, (b) intercorporate governance, and (c) contractarian theories. His latest book, *Institutionalized Sociality* (with Hans van Oosterhout and Jack Vromen), deals with the application of social contract theories in the business context, and will be published with Edward Elgar in the spring of 2002. His research is forthcoming in journals like *Business & Society*, *Journal of Public Affairs*, *Corporate Reputation Review*, *Management & Organisatie*, and *Futures*. He is a member of the Academy of Management, the Strategic Management Society, and the International Association for Business and Society, where he currently serves on the Internationalization Committee.

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