

1992

Learning And Collaboration: An Examination Of North American-japanese Joint Ventures

Andrew C. Inkpen

Follow this and additional works at: <https://ir.lib.uwo.ca/digitizedtheses>

Recommended Citation

Inkpen, Andrew C., "Learning And Collaboration: An Examination Of North American-japanese Joint Ventures" (1992). *Digitized Theses*. 2111.

<https://ir.lib.uwo.ca/digitizedtheses/2111>

This Dissertation is brought to you for free and open access by the Digitized Special Collections at Scholarship@Western. It has been accepted for inclusion in Digitized Theses by an authorized administrator of Scholarship@Western. For more information, please contact tadam@uwo.ca, wlsadmin@uwo.ca.

**LEARNING AND COLLABORATION: AN EXAMINATION OF
NORTH AMERICAN - JAPANESE JOINT VENTURES**

by

Andrew C. Inkpen

School of Business Administration

**Submitted in partial fulfilment
of the requirements for the degree of
Doctor of Philosophy**

**Faculty of Graduate Studies
The University of Western Ontario
London, Ontario
April 1992**

© Andrew C. Inkpen 1992



National Library
of Canada

Bibliothèque nationale
du Canada

Canadian Theses Service Service des thèses canadiennes

Ottawa, Canada
K1A 0N4

The author has granted an irrevocable non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of his/her thesis by any means and in any form or format, making this thesis available to interested persons.

The author retains ownership of the copyright in his/her thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without his/her permission.

L'auteur a accordé une licence irrévocable et non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de sa thèse de quelque manière et sous quelque forme que ce soit pour mettre des exemplaires de cette thèse à la disposition des personnes intéressées.

L'auteur conserve la propriété du droit d'auteur qui protège sa thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

ISBN 0-315-75368-4

Canada

ABSTRACT

In an increasingly competitive international environment, with its inevitable complexity and instability, a high capacity for learning may be a crucial requirement for the successful functioning of an organization. This dissertation takes the perspective that international joint ventures create organizational learning opportunities. Three related research questions were asked: 1) To what extent do international joint ventures provide an organizational learning opportunity for joint venture parents? 2) To what extent are learning opportunities exploited? 3) What are the organizational and strategic factors associated with joint ventures that operate as the determinants of the learning process?

The questions were investigated using a field study incorporating multiple methods of data collection and analysis. The empirical base consisted of 40 North American-Japanese joint ventures in the automobile supply industry. This industry provided an interesting setting for the research questions. Ongoing structural changes within the industry have effectively created a learning imperative for North American firms. The study concentrated on the North American parent firms and their recognition and exploitation of joint venture learning opportunities. Controlling for industry, alliance type, and partner nationality allowed for an indepth examination of the contextual environment in which learning occurs.

The study found that consistent with the conceptual arguments of various scholars, joint ventures provide substantial opportunities for firms to gain access to partner skills and more important, to internalize those skills. The parent's motives and objectives for collaboration provided the catalyst for the learning process. The study revealed that learning was an explicit joint venture motive in most cases. Many of the North American parent firms, struggling to compete in an industry in transition, saw their joint ventures as a point of leverage for the development of new skills and capabilities.

Interactions between the partners and the openness of the venture relationship also played an important role in the learning process, as did the strategic interface between the joint venture and the parent firm. A strong relationship was found between joint venture performance and learning. Because unsatisfactory venture performance from the North American parent perspective shifted managerial attention away from the learning task, satisfaction with performance was a precondition for successful learning efforts. Evidence was also found to suggest that the performance-learning relationship is reciprocal, with the learning outcome evaluation influencing joint venture performance assessment.

This study offers several important conclusions and implications. First, this research has implications for resource-based theories of strategy. The failure of many American firms to successfully exploit their joint venture learning opportunities can be traced, in part, to their inability to imitate the strategies of their Japanese partners. The findings support the notion of causal ambiguity and social complexity as impediments to the imitation of successful firm strategies. North American firms tended to focus on the identification and transfer of visible firm differences rather than on developing a fundamental understanding of the link between the Japanese partner's resources and underlying competitive advantage. Also, firms with explicit learning objectives were often implementing their joint venture strategies from a narrow market positioning orientation.

Second, from a learning theory perspective, the framework developed in this study may be adaptable for different types of collaborative relationships and more generally, for other strategic initiatives that create learning opportunities. Also, the study demonstrated how an existing set of managerial beliefs can constrain the learning process. Finally, by identifying barriers to learning a normative model of collaborative learning was developed.

ACKNOWLEDGEMENTS

The support and patience of many people made this thesis possible. My deepest appreciation goes to Peter Killing, my thesis supervisor. Peter introduced me to the research area and provided valuable guidance, insights, and encouragement. His emphasis on interesting research and managerial relevance have contributed greatly to the development of this project.

The Business Policy Group played a major formative role in this thesis and in my development. I especially would like to thank Paul Beamish and Allen Morrison for stimulating me to push my thinking further. From Paul I learned much about the process and realities of research and the field of international business. Allen was a constant source of support throughout my doctoral program and was always willing to listen and share his ideas. The Western Learning Group, and in particular Mary Crossan and Rod White, helped shape many of the conceptual ideas in the thesis.

My fellow doctoral candidates provided a stimulating and supportive environment. In particular, I would like to thank Paul McDonald and his family for their friendship.

I am grateful for financial support from the Centre for International Business Studies, University of Western Ontario. I am also grateful for the time and valuable information provided by the managers who shared their joint venture experiences with me. This research would not have been possible without their cooperation.

Finally, I wish to thank my wife Pat and daughters Carly and Anne. Without their understanding and willingness to tolerate my long hours and frequent travel, this project would not have been possible.

TABLE OF CONTENTS

Certificate of Examination	ii
Abstract	iii
Acknowledgements	v
Table of Contents	vi
List of Tables	ix
List of Figures	xii
List of Appendices	xiii
CHAPTER	
1 - INTRODUCTION AND OVERVIEW	1
The Research Problem	3
Research Questions	5
Conceptual Overview	6
Research Methods	8
Summary	10
Dissertation Organization	11
2 - THEORETICAL BACKGROUND	12
Organizational Motives for the Formation of Joint Ventures	13
Organizational Learning	19
Learning and the Joint Venture Context	30
Scope of the Study	36
Summary	38
3 - CONCEPTUAL FRAMEWORK AND HYPOTHESES	39
Joint Ventures as Interorganizational Relationships	39
Conceptual Framework	42
Learning Efforts and the Learning Outcome	45
The Joint Venture Formation and the Parent Firm	45

The Joint Venture Context	51
Joint Venture Centrality	55
Factors Omitted from the Framework	58
Summary	60
4 - RESEARCH METHODS	61
Data Requirements	61
Data Sources	63
Informant Strategy	71
Researcher Access	75
Analytic Variables and Instrumentation	77
Interview Process	96
Pretest	99
Data Analysis	101
Summary	106
5 - JOINT VENTURE CHARACTERISTICS AND THE LEARNING EXPERIENCE	107
Joint Venture Characteristics	107
The Learning Experience	120
Summary	139
6 - JOINT VENTURE FORMATION AND PARENT FIRM CONTEXT: FINDINGS	140
The American Parent Context	140
Hypothesis Testing	151
Summary	159
7 - THE JOINT VENTURE CONTEXT AND JOINT VENTURE CENTRALITY: FINDINGS	160
The Joint Venture Context	160
Joint Venture Context Hypothesis Testing	168
Joint Venture Centrality	172
Centrality Hypothesis Testing	179
Summary	180

8 - DATA ANALYSIS EXTENSIONS AND INTERPRETATION	181
Summary of Working Hypothesis Testing	181
Joint Venture Performance	184
New Propositions and Revised Framework	191
Multivariate Analysis	195
Summary	205
9 - CONCLUSIONS AND IMPLICATIONS	206
Summary of the Findings	206
Theoretical Contributions	211
Implications for Management	223
Limitations and Directions for Future Research	236
APPENDICES	240
REFERENCES	295
VITA	308

LIST OF TABLES

3-1	Learning Determinants	46
4-1	Participation Characteristics of the Research Sample	76
4-2	Variable Measurement	82
4-3	Composition of the Research Sample	97
4-4	Summary of Data Analysis Stages	101
5-1	Characteristics of Joint Ventures	109
5-2	Joint Venture Role and Joint Venture Customer	114
5-3	American Partner Ownership and Various Characteristics	116
5-4	Joint Venture Customer and Joint Venture Initiation	119
5-5	Learning Efforts by the American Parent	123
5-6	Learning Efforts Variable	123
5-7	Learning Outcome Components	133
5-8	Learning Efforts and Joint Venture Characteristics	137
5-9	Crosstabulation of Learning Outcome by Joint Venture Initiation	138
6-1	Learning Intent	142
6-2	Crosstabulation of Learning Intent by Joint Venture Role	143
6-3	Crosstabulation of Learning Intent by Joint Venture Motive	143
6-4	Descriptive Statistics for Joint Venture Learning Potential	144
6-5	Prior Joint Venture Experience	147

6-6	Crosstabulation of American Partner Joint Venture Experience by Joint Venture Initiation	148
6-7	Crosstabulation of Prior Partner Relationships by American Partner Equity	150
6-8	Hypotheses: The American Partner and the Joint Venture Formation	152
6-9	Descriptive Statistics for Learning Difference	155
6-10	Crosstabulation of American Partner Joint Venture Experience by Learning Outcome	156
7-1	Hypotheses: The Joint Venture Context	169
7-2	Joint Venture Importance and Joint Venture Characteristics	176
7-3	Strategic Integration and Joint Venture Characteristics	178
7-4	Hypotheses: Joint Venture Centrality	179
8-1	Summary of Hypotheses	182
8-2	Joint Venture Performance Categories	184
8-3	Joint Venture Performance Categories and the Learning Variables	190
8-4	Learning Subprocesses	193
8-5	Summary of Correlations	196
8-6	Results of OLS Regression Analysis for Joint Venture Openness	197
8-7	Results of OLS Regression Analysis for Learning Efforts	198
8-8	Results for Logistic Regression Analysis: Centrality and Learning Organizations vs. Non-learning Organizations	199
8-9	Classification Table for Centrality Logistic Regression Model	200
8-10	Results for Integrative Model Logistic Regression Analysis	202
8-11	Classification Table for Integrative Model Logistic Regression Analysis	202

8-12 Results for Integrative Model Logistic Regression Analysis with Performance	203
8-13 Classification Table for Integrative Model Logistic Regression Analysis with Performance	203
9-1 Barriers to Learning	224

LIST OF FIGURES

3-1	Learning and Joint Ventures: Conceptual Framework	43
8-1	Learning Framework	192
8-2	The Learning Outcome and its Relationship with Joint Venture Performance and the Learning Subprocesses	204
9-1	Strategic Perspective and Learning	214
9-2	A Model of the Barriers to Learning	225

LIST OF APPENDICES

APPENDIX

1 - PILOT STUDY	240
2 - RESEARCHER ACCESS	243
3 - QUESTIONNAIRE	246
4 - DATA COLLECTION PROCEDURE	253
Summary of the Interview Procedure	253
Interview Checklist	254
Interview Guide: Parent Manager	255
Interview Guide: Joint Venture Manager	262
5 - DATA REDUCTION: POST INTERVIEW DATA ANALYSIS	269
Summary of the Post-interview Procedure	269
Interview Write-up Guide	270
6 - VIGNETTES	271
Vignette 1 - Joint Venture Formation	271
Vignette 2 - Learning Potential and the Expectation of Visible Differences	273
Vignette 3 - Learning Intent and Learning Outcome	275
Vignette 4 - Learning Intent and Learning Outcome	277
Vignette 5 - Joint Venture Openness	280
Vignette 6 - Strategic Importance (1)	283
Vignette 7 - Strategic Importance (2)	285
Vignette 8 - Strategic Integration	287
Vignette 9 - Performance and Learning (1)	289
Vignette 10 - Performance and Learning (2)	292

The author of this thesis has granted The University of Western Ontario a non-exclusive license to reproduce and distribute copies of this thesis to users of Western Libraries. Copyright remains with the author.

Electronic theses and dissertations available in The University of Western Ontario's institutional repository (Scholarship@Western) are solely for the purpose of private study and research. They may not be copied or reproduced, except as permitted by copyright laws, without written authority of the copyright owner. Any commercial use or publication is strictly prohibited.

The original copyright license attesting to these terms and signed by the author of this thesis may be found in the original print version of the thesis, held by Western Libraries.

The thesis approval page signed by the examining committee may also be found in the original print version of the thesis held in Western Libraries.

Please contact Western Libraries for further information:

E-mail: libadmin@uwo.ca

Telephone: (519) 661-2111 Ext. 84796

Web site: <http://www.lib.uwo.ca/>

CHAPTER 1

INTRODUCTION AND OVERVIEW

Issues of international competitiveness are becoming increasingly critical in the business environment. In this environment, with its inevitable complexity and instability, a high capacity for learning is a crucial requirement for the successful functioning of an organization (Bedeian 1986, 193). Several theorists have suggested recently that strategic alliances and more specifically, joint ventures, represent a potential mechanism for organizational learning (Badaracco 1991; Hamel 1991; Kogut 1988; Powell 1988; Pucik 1991; Westney 1988). Hamel, Doz, and Prahalad (1989, 134) argued that "successful companies view each alliance as a window on their partners' broad capabilities." This dissertation explores organizational learning in the context of international joint ventures, an area that has received limited empirical attention.

Joint ventures have become increasingly popular in recent years and for many firms, have moved to the mainstream of domestic and international corporate activity. For this study, a joint venture is defined as a means of performing activities in combination with one or more firms instead of autonomously. A joint venture occurs when two or more legally distinct firms (the parents) pool a portion of their resources within a separate jointly owned legal organization. This definition excludes other forms of cooperative agreements such as licensing, distribution and supply agreements, research and development partnerships, or technical assistance and management contracts. If the venture is owned by two or more

parents of different nationality it is considered an international joint venture. A joint venture represents a governance mode for international transactions between the polar opposites of arms-length market contracts and those conducted within the multinational enterprise.

A variety of strategic objectives have been suggested to explain firms' motives for the formation of joint ventures (Contractor and Lorange 1988; Harrigan 1985; Hennart 1991, 1988; Oliver 1990; and Porter and Fuller 1986). The objectives include the reduction of risk, economies of scale, access to technology or markets, and the search for legitimacy. In much of the joint venture literature, the focus has been on firms' mutual desire to cooperate as the basis for the joint venture formation. The emphasis is generally on the performance of the joint venture task and the benefits of pooling resources and skills for cooperative results. As Hamel (1991, 100) noted, researchers have placed more emphasis on joint value creation than on individual firm value appropriation through monetary and long-term competitive gains.

The focus of this study is on an alternative to mutual joint venture value creation: organizational learning by internalizing the skills of joint venture partners. Through the execution of the joint venture task, firms may gain access to the embedded knowledge of other organizations and therefore, access to new organizational skills and capabilities. Huber (1991) referred to this as grafting, the process by which organizations internalize knowledge not previously available within the organization. Thus, joint ventures provide an ideal platform for learning. Two or more organizations are brought together because of their differences and complementarity. The differences in partner skills are the fuel for learning.

The NUMMI joint venture between General Motors (GM) and Toyota provides some insights into the joint venture learning process. Learning has been suggested as an important motive for both partners (Badaracco 1991; Keller 1989; Womack 1988). For GM, the joint

venture created the opportunity to learn about Toyota's cost structure and technological manufacturing skills. For Toyota, the joint venture had the potential to provide two things: one, valuable exposure to American labour and management situations and two, an opportunity to evaluate the strength of their competitor's manufacturing technology (Weiss 1987).

Several other prominent joint ventures have been cited by the business press (e.g., Goldenberg 1988) as instrumental organizational learning experiences. These include Nippon-Otis, Fuji-Xerox, and Yokogawa-Hewlett-Packard, joint ventures between major U.S. and Japanese firms. In these three cases, the American firm has been identified as the primary recipient of new organizational knowledge that originated with a Japanese partner. Recently, Stinson (1991) reported on the efforts of North American steelmakers to learn from their Japanese competitors. Stinson suggested that to learn the technology and market skills needed to sell to the Japanese automakers, North American steel makers were forming joint ventures with their Japanese counterparts.

In the examples cited, learning occurred when firms internalized the skills and knowledge of their joint venture partners. Through a collaborative relationship, joint venture parents gained access to the skills of another firm and transferred knowledge from the joint venture to the parent organization.

THE RESEARCH PROBLEM

Organizational learning and the importance of increasing knowledge have long been recognized as having a major impact on a firm's performance. De Geus (1988, 74), for example, suggested that the only competitive advantage the company of the future will have is its managers' ability to learn faster than their competitors. Penrose (1968) argued that a

firm's search for knowledge was a part of the normal thinking of managers and therefore must be incorporated in theoretical explanations of firm behavior. More recently, strategic management scholars have identified learning and the development of organizational capabilities as areas of increasing management concern (Rumelt, Schendel, and Teece 1991).

Accordingly, many organizations faced with the reality of a rapidly changing and more competitive environment must learn new skills. For example, until recently the U.S. Postal Service was United Parcel Service's (UPS) only national U.S. competitor. Now, faced with several national competitors in a low margin industry, UPS must learn about overseas marketing and advertising, areas it has ignored in the past (Vogel 1990). For other organizations, learning represents a deliberate strategic effort. Motorola's success in international markets has been attributed in part to its ability to learn from its Japanese competitors and then use the new knowledge in American-designed products (Henkoff 1989).

This study addresses the problem of learning in organizations by focusing on joint ventures. The research is important for several reasons. First, learning by organizations is viewed as a critical element in the sequence of actions that permits an organization to adapt to its environment (Mintzberg 1990). In this view, strategy is influenced by the quantity and quality of organizational knowledge (Burgelman and Rosenbloom 1989). A joint venture is a strategic initiative that provides access to new knowledge and therefore, may provide the momentum for organizational change.

Second, the organizational learning area has suffered from a paucity of empirical studies. Developing insights into organizational learning from a specific context provides a foundation for further research into the learning process. Understanding learning from different perspectives is a prerequisite to the development of normative findings about the effectiveness and efficiency of the organizational learning process.

Third, given the increasing number of joint ventures and other forms of alliances, further research into how firms can internalize the skills of their partners is both relevant and timely. More important, if alliances are viewed as a race to learn, as Hamel (1991) suggested, the factors that influence the learning process may take precedence over issues of alliance structure and governance.

Finally, in an unpredictable and increasingly global environment, firms may be unable to predict the competency areas that will be required in future competition (Ghoshal 1987). Learning through international joint ventures may increase a firm's diversity and lead to new skills, increasing the probability of future competitive success. Thus, this research is based on the underlying premise that cooperative agreements with international firms provide a mechanism for information and knowledge exchange that may have a lasting impact on firm behavior (Buckley and Casson 1988).

RESEARCH QUESTIONS

Joint ventures often create learning opportunities for the joint venture partners. However, most of the support for the contention that joint ventures facilitate organizational learning is founded on conceptual arguments. Coupled with a lack of empirical research is limited attention to the design and management of existing joint ventures from an interorganizational perspective. Thus, the primary research question was: What are the organizational conditions that play a role in the joint venture learning process? To orient the study, the following specific research questions were addressed:

1. To what extent do international joint ventures provide an organizational learning opportunity for joint venture parents?
2. To what extent are learning opportunities exploited?

3. What are the organizational and strategic factors associated with the joint venture that operate as the determinants of the learning process?

CONCEPTUAL OVERVIEW

Learning is an integral element in the strategic management of an organization. Traditionally, strategy has been viewed as the match between an organization and its environment. However, organization-environment fit is insufficient in itself as an explanatory factor for firm success (Rumelt, Schendel, and Teece 1991). An area that is receiving renewed attention is the influence of firm differences in resources on competitive position. This resource-based view of strategy argues that the origins of competitive advantage are firm resources, which consist of the assets, skills and capabilities, and knowledge controlled by a firm. The configuration and coordination of firm resources determines the degree of non-imitability that is at the heart of competitive advantage. Underlying this perspective is the assumption that the firm should be conceived as a portfolio of core competencies and capabilities.

Research in organizational learning revolves around the broad question: How do firms augment their range of skills and capabilities in a changing competitive environment? Strategic initiatives that create organizational actions and strategic choices can provide the basis for developing new skills and capabilities. International joint ventures represent a form of strategic initiative that can be used as a learning vehicle by the joint venture parents.

The Joint Venture Context

The model of inter-partner learning developed by Hamel (1991) provided an important starting point in developing the conceptual framework that guided the research. There are three core concepts in the model: learning intent by the parent firms, the

transparency of the alliance relationship, and the parents' receptivity to learning. This model was extended by incorporating the notion of joint venture learning as a two stage process. The first stage takes place at the joint venture level and involves managers with line responsibilities in the joint venture. These individuals are in a position to recognize differences in partner skills embodied in the joint venture. The nature and extent of interorganizational interactions and the situational factors surrounding the joint venture will influence the learning that occurs at this stage of the learning process.

The knowledge acquired by managers with exposure to joint venture partners provides the input to the second stage: the distribution and interpretation of the joint venture-derived knowledge. A key aspect of this stage is the integration of the new knowledge acquired by the joint venture level managers into the parent's collective knowledge base. Knowledge acquired from a joint venture partner can be used strategically by an organization only to the extent that it is distributed and interpreted within the organization (Hamel 1991; Westney 1988). Thus, the joint venture parent must engage in efforts to transfer partner skill-related knowledge from the joint venture to the parent. These efforts will be closely related to the degree to which the joint venture is strategically integrated with the parent's operations. If efforts to transfer joint venture-derived knowledge are successful, the parent's internalization of joint venture knowledge represents the outcome from the second stage of the learning process.

The two key learning concepts in the conceptual framework are parent firm learning efforts and the learning outcome represented by internalization of partner skills. The factors proposed as determinants of joint venture learning were grouped into three sets of variables: 1) the parent firm's joint venture motives and expectations regarding learning; 2) the nature

of the interactions between the joint venture partners; and 3) the strategic relationship between the joint venture and its parent.

RESEARCH METHODS

A cross-sectional field study incorporating multiple methods of data collection was used. The data for the study were collected from executives involved in joint venture management. Two data collection methods were used: self-administered questionnaires and field interviews. While the use of field interviews limited the sample size, a multimethod research design was chosen for several reasons. First, the use of multiple measurement methods increased the validity of the research model. Second, the two methods allowed descriptive realism to be combined with the data used to test the hypotheses (Brewer and Hunter 1989; Lee 1991). Third, participation rates for other research studies using interview-based approaches have been much higher than those using exclusively mail questionnaire designs.

A sample of North American-Japanese joint ventures located in North America provided the empirical base. A single industry, the automotive supply industry, was used as the source of sample firms. The study achieved a response rate of 82 percent with 40 joint ventures included in the study. Interviews were conducted with 58 senior North American managers involved in joint venture management.

The study concentrated on the North American parent firms and their recognition and exploitation of joint venture learning opportunities. The automotive supply industry provided an interesting setting for the research questions. Ongoing structural changes within the industry have effectively created a "learning imperative" for automotive suppliers, which suggested this industry would be fertile ground for a study of organizational learning. With

the domestic OEMs under pressure from Japanese automakers, North American suppliers have found their traditional customer base shrinking. Consequently, many suppliers have sought access to the transplant market. But, to become transplant suppliers, North American firms must overcome the perception, and perhaps reality, that Japanese suppliers can produce higher quality products at lower prices (Cusumano and Takeishi 1991).

The multimethod research approach allowed substantial flexibility in variable operationalization. Both questionnaire and interview-based measures were used. Interview-based measurement involved an iterative process of working back and forth between the interview write-ups and the classification system. This process yielded site-ordered data (e.g., cases classified as high, medium, or low on some variable), categorical classifications (e.g., Japanese partner customer dominance, shared customer dominance), and cases ranked by summing several data points (e.g., learning efforts was classified according to the presence or absence of various actions). Questionnaire measures relied primarily on seven-point Likert scales. Where possible, checks on construct validity were carried out using the multiple data collection methods. Data outside the bounds of specific measures were also collected. This data, the "thick" description, provides the lens of reality considered essential for the interpretation and understanding of organizational processes.

The data analysis proceeded through several distinct stages: 1) interview data were reduced and classified based on the initial conceptual framework and evolving modifications to the framework; 2) working hypotheses were tested using primarily bivariate analysis of relationships between the contextual and learning variables; 3) new relationships in the data were identified; 4) a revised framework was developed and examined using OLS regression and binomial logistic models; and 5) descriptive examples that supported and extended the hypothesis testing were identified.

SUMMARY

This dissertation addresses an important aspect of joint venture relationships: organizational learning through the internalization of partner skills and capabilities. A joint venture offers a learning alternative that is relatively efficient because assets that would be necessary for an autonomous learning strategy need not be acquired. More important, when knowledge is embedded in another organization, particular problems arise. Embedded knowledge is not available in simple, unitized packages that are purchaseable. For one organization to secure embedded knowledge from another, its personnel must have direct, intimate, and extensive exposure to the social relationships of the other organization (Badaracco 1991, 98). Through the pooling of resources within a jointly managed organization, a joint venture provides extensive exposure to the skills and capabilities of another firm.

Using a multimethod research design, this dissertation explores the question of how firms learn through joint venture relationships. North American-Japanese joint ventures in the North American automotive sector provided the sample of firms. Data was collected via field interviews and questionnaires. The focus of the research was on the learning experiences of the North American firms

Although this study focuses on learning and joint ventures, the implications extend beyond this narrow context. The study adds to the understanding of how organizations internalize knowledge and modify their behavior as a result of exposure to new experiences. As international competition intensifies, learning and change within organizations may become essential for long-term success. A study of how organizations learn through joint ventures should be instructive to other organizations involved in learning activities.

DISSERTATION ORGANIZATION

The following provides a summary of the dissertation organization and the contents of Chapters 2 to 9:

- Chapter 2: Theoretical Background.** This chapter reviews the joint venture and organizational learning literature pertinent to the research questions identified in Chapter 1. From this background, a model of learning in joint ventures is developed. The scope of the study is also discussed to provide a basis for developing the conceptual framework.
- Chapter 3: Conceptual Framework and Hypotheses.** This chapter presents the conceptual framework that guides the study. A set of working hypotheses is developed from the framework.
- Chapter 4: Research Methods.** This chapter discusses the multi-method research methodology used to address the research questions. The chapter discusses the data sources for the study, the informant strategy, researcher access, analytic variables and instrumentation, the interview process, the pretest, and the data analysis stages.
- Chapter 5: Joint Venture Characteristics and the Learning Experience.** This chapter describes the sample joint ventures and explores the learning experiences of the American parents. The chapter prepares the ground for the subsequent findings and analysis chapters.
- Chapter 6: Joint Venture Formation and Parent Firm Context: Findings.** This chapter reports the findings associated with the American partner in the context of the joint venture formation decision.
- Chapter 7: The Joint Venture Context and Joint Venture Centrality: Findings.** This chapter presents findings pertaining to the joint venture context and joint venture centrality.
- Chapter 8: Data Analysis Extensions and Interpretation.** This chapter reviews overall support for the research model and introduces several additional variables. A revised conceptual framework is developed incorporating the findings from the study.
- Chapter 9: Conclusions and Implications.** A discussion of the major findings of the study is presented in this chapter. Also discussed are the limitations of the research, implications for managers involved in joint ventures and other alliances, and directions for further research.

CHAPTER 2

THEORETICAL BACKGROUND

An underlying premise of this dissertation is that joint ventures create learning opportunities for the parent firms. A joint venture provides a means for firms to acquire knowledge external to the firm, thus initiating the organizational learning process. By forming a joint venture, firms may get firsthand access to the organizationally embedded knowledge and skills of other organizations. How and the extent to which firms capitalize on the learning opportunity is the focus of the research.

In this chapter, prior research related to the research questions is reviewed as a basis for developing a conceptual framework. The first section reviews the literature on joint ventures and more specifically, establishes organizational learning as a potential motive and outcome of joint ventures. The second section presents an overview of the organizational learning concept, with the objective of embedding learning within the strategy field. The third section narrows the focus by viewing learning through joint ventures as a two stage process. Finally, the scope of the study is discussed in light of the theoretical background and research questions. The discussion of research scope sets the stage for the development of a conceptual framework, the subject of the next chapter.

ORGANIZATIONAL MOTIVES FOR THE FORMATION OF JOINT VENTURES

A variety of reasons have been suggested to explain firms' motives for forming joint ventures. These reasons are examined in this section by addressing two key questions--what are the strategic objectives in forming a joint venture and why is the joint venture the preferred organizational arrangement? Although the questions are addressed separately, in practice they are intertwined in a firm's decision to form a joint venture.

Strategic Objectives

The overall strategic objective of joint venture parents is the pooling of resources to create value in a way that each of the parents could not achieve by acting alone (Borys and Jemison 1989). Value creation refers to the process of combining the capabilities and resources of the partners to perform a joint task that has the potential to create monetary or other benefits for the partners. Although the perceived value to each of the parents need not be the same, each joint venture parent must gain some benefits for a joint venture to be the preferred option (Porter and Fuller 1986). For example, GM's strategic objectives for its NUMMI joint venture with Toyota may have included access to North American production of high quality small cars for the United States market and access to the Toyota manufacturing technology. Toyota's objectives were very different. As Toyota's first attempt at building cars in North America, the joint venture provided the company with an opportunity to develop an understanding of the North American manufacturing environment. Thus, the parties in a joint venture will not necessarily value a relationship in the same way but will see it as a means to their individual ends.

The strategic objectives of joint ventures are discussed extensively in the joint venture literature (e.g., Contractor and Lorange 1988; Harrigan 1985; Hennart 1991, 1988; Kogut

1988; Koh and Venkatraman 1991; Porter and Fuller 1986). The feature that links the objectives is that they are aimed at improving the firm's strategic positioning *vis-a-vis* rivals (Kogut 1988). The objectives, or benefits of joint ventures, can be broadly classified in several categories. Although discussed individually, firms will often have concurrent strategic objectives in forming a joint venture.

The first objective is to gain economies of scale by pooling economic activities such as raw materials supply, manufacturing, and marketing and distribution. A second objective is to reduce risk and promote stability. Joint ventures may be an attractive option for large, risky projects because neither partner bears the full cost of the venture activity. A third objective, and one that has received little attention, is legitimacy (Oliver 1990). Firms may seek established partners to capitalize on the partner's reputation. This objective may be prevalent in cases where small firms seek cooperative relationships with larger firms. Legitimacy concerns also may exist when firms try to enter international markets. A local partner may provide the necessary legitimacy for firms that are unfamiliar and uncertain about local conditions.

The fourth objective is to gain access to another firm's knowledge or ability to perform an activity where there are asymmetries between firms. Porter and Fuller (1986) referred to this benefit as one of access: firms seek access to such things as distribution channels and specialized know-how. Using joint ventures to enter foreign markets or to bring foreign products to local markets can give the firm access to resources that would not be available if the firm attempted the strategy alone. Firms may pool complementary resources in order to diversify into new product or geographic markets. Firms also may seek new technology in their core business area and therefore use a joint venture to gain access to that knowledge.

Following Koh and Venkatraman (1991), there are several potential costs of joint venture strategies. First, there are the costs of coordinating the often divergent interests of the partners (Porter and Fuller 1986). Second, when proprietary expertise and market access are transferred to partner firms, joint ventures have the potential to create competitors. Third, joint ventures can create an adverse bargaining position when one partner captures a disproportionate share of the value created by a joint venture (Hamel 1991; Koh and Venkatraman 1991).

The Preferred Organizational Arrangement

The four benefits discussed above provide a strategic rationale as to why firms form joint ventures. However, strategic explanations alone are not sufficient to explain the formation of a joint venture because for each of the objectives, alternative organizational arrangements or modes could be chosen to achieve the same objective (Hennart 1988). Therefore, the question of why a joint venture is preferred to another structure, such as a wholly-owned subsidiary or a market-based contract, must be addressed. For example, if a firm is interested in acquiring technology, why might it prefer a joint venture over a licensing agreement? In this section, the question of choice of organizational arrangement is considered while keeping in mind that theories of strategic and structural choice are complementary rather than opposing theories.

The transaction cost explanation for the formation of joint ventures is based on the approach proposed by Williamson (1981, 1975). Williamson's main argument was that hierarchically organized firms will replace the market for transactions in situations where the market for intermediate goods is inefficient. This inefficiency arises when there is uncertainty about the outcome or value of the transactions (i.e., a high degree of asset

specificity) and when there is difficulty in creating the proper performance incentives for each party in the transaction. Williamson proposed that firms choose how to transact with the objective of minimizing transaction and production costs. These arguments are similar to those proposed by Thompson (1967) in explaining organization design. Using the concepts of uncertainty and domain, Thompson argued that organizations attempt to put boundaries around their activities to eliminate uncertainty.

Transaction cost theories of joint ventures must explain why a firm prefers a joint venture over both arms-length transactions and over the options of internal development or mergers and acquisition. Based on the transaction cost perspective, internalization theory proposes that the rational, profit-maximizing multinational corporation (MNC) would tend to use wholly-owned subsidiaries to achieve its international strategic objectives. According to Calvet (1981), organizing within the MNC provides channels for the transfer of knowledge and slows the dissipation of information to competitors.

However, despite the theoretical arguments in favor of the MNC, arguments for the formation of joint ventures as an alternative to the MNC are suggested by several scholars (Beamish and Banks 1987; Contractor 1990; Hennart 1991, 1988). Beamish and Banks (1987) and Contractor (1990) proposed that joint ventures are preferable to MNCs when the transactional difficulties of opportunism, bounded rationality, uncertainty, and small numbers condition can efficiently be dealt with in a joint venture. Specifically, a joint venture can be a more rapid means of establishing a competitive position than through replication or internal development (Porter and Fuller 1986). This implies that joint ventures may be more likely to occur in industries undergoing rapid structural change.

Another situation where joint ventures may be preferable to acquisition occurs when acquiring the desired firm-specific assets also means acquiring other businesses that are

foreign to the buyer (Hennart 1988). Thus, a joint venture can be more economically feasible and involve a less irreversible commitment than acquisition. Because there is no transfer of ownership rights, the relationship may be rescinded at a relatively low cost (Balakrishnan and Koza 1991). Hennart (1988) outlined specific circumstances of narrow imperfect markets that are likely to lead to internalization between parents and joint ventures. These include the markets for some raw materials and components, types of knowledge, loan capital, and distribution. Given the inefficient market for these goods, firms may attempt to bypass the market by forming a cooperative link with another firm.

Transaction cost explanations provide a compelling economic rationale for the formation of joint ventures and in particular, for the superiority of the joint venture mode of organization under specific circumstances. However, besides providing a static perspective of joint ventures, the transaction cost perspective is somewhat restrictive because it neglects more behavioral issues and implies too strongly a tractable economic analysis in understanding cooperative relationships. As Robins (1987, 83) argued, the effort to explain structural change solely on the basis of microeconomic processes obscures the role of historical and social forces that influence the competitive environment. In addition, the emphasis on structural arrangements makes some implicit assumptions that organization design can be equated with structure when in fact, organization design includes variables besides the physical structure. These include the people, task, reward systems, and decision and information processes (Galbraith and Kazanjian 1986).

Organizational Learning as a Joint Venture Motive

Value creation in a joint venture occurs after the venture is formed. Much of the extant joint venture research is concerned with how to manage the *collaborative* process to

maximize value creation. However, researchers have placed more emphasis on joint value creation than on individual firm value appropriation through monetary and long-term competitive gains (Hamel 1991). This dissertation focuses on individual firm value creation via learning, as opposed to considering how partner firms can work together for mutual joint venture value creation.

An organizational learning motive for the formation of joint ventures provides an alternative theory to the transaction cost argument. Coupled with the strategic objective of access to a partner's knowledge and skills, a learning motive represents a logical objective for firms involved in joint ventures. Therefore, although there are strong economic arguments as to why a firm chooses the joint venture mode, organizational reasons cannot be ignored and may help to explain the increased prevalence of joint ventures in the international environment.

Non-economic motives for the formation of joint ventures have been suggested by several theorists (Anderson 1990; Bleeke and Ernst 1991; Hamel 1991, 1990; Kogut 1988; Powell 1988; Westney 1988). Kogut (1988) suggested that joint ventures may be a means for firms to learn or seek to retain their capabilities by acquiring another firm's organizationally embedded knowledge. Gomes-Casseres (1989) supported the learning argument, suggesting that joint ventures may be more appropriate when a firm is attempting to develop new capabilities. Developing new capabilities through a joint venture implies that learning will take place.

Kogut (1991) further developed the learning perspective by suggesting that joint ventures may be investments that provide firms with expansion opportunities. Faced with uncertainty and a desire to learn, firms may prefer a joint venture to acquisition. If one partner has the option to purchase the other's equity in the venture, that partner can utilize

the joint venture as a means of acquiring complex knowledge about the business. Once the party with the option to buy has acquired (i.e., learned) the skills of the partner firm, further investment in the venture might not be warranted. At this point the buy option may be exercised and the joint venture terminated.

Even when there is no explicit purchase option, the success of a joint venture in transferring knowledge may shorten the life of a joint venture by making the partner less essential over time (Kanter 1989). This point draws attention to one of the risks of cooperative strategies: the creation of new competitors. If a firm with a learning focus internalizes the skills of its joint venture partner, the joint venture may become redundant from the perspective of the learning firm. Shan and Hamilton (1991) suggested that learning through cooperative arrangements may help explain the shift of competitive advantage from Western firms to Japanese firms in the production of televisions and semiconductor chips.

In sum, joint ventures create organizational learning opportunities because they bring together firms with different skills and capabilities. Through the execution of the joint venture task and through exposure to the partner organization, joint venture partners have an opportunity to gain access to the dedicated assets and organizationally embedded knowledge of partner firms. Without the joint venture, access to partner assets and knowledge would be difficult to obtain.

ORGANIZATIONAL LEARNING

Although no theory or model of organizational learning has gained widespread acceptance, organizational learning is receiving increasing attention from organizational scholars. Recent literature surveys such as Huber (1991) and Levitt and March (1988) have viewed learning as a fundamental organizational process. In the strategy field, the new

interest in internal organization and the development of organizational capabilities holds substantial theoretical promise for organizational learning perspectives¹. Nelson (1991), for example, argued that a capabilities view of the firm may be the key to understanding how firms develop sustainable, and not easily imitable, competitive advantages.

The central question in strategy is why some firms are more successful than others. Two important related questions are: 1) How do firms accumulate and coordinate organizational knowledge and 2) How do firms augment their range of skills, capabilities, and potential behaviors in a changing competitive environment? It is these related questions that underpin research in the area of organizational learning.

Organizational Learning and Strategy

Learning is an integral element in the strategic management of an organization. Traditionally, strategy has been viewed as the match between an organization and its environment (Hofer and Schendel 1986). Works by Chandler (1962), Lawrence and Lorsch (1967), Miles and Snow (1978), and Thompson (1967) established that an organization must align itself with its environment. However, organization-environment fit is insufficient in itself as an explanatory factor for firm success (Rumelt, Schendel, and Teece 1991). An area that is receiving renewed attention is the influence of firm differences in resources on competitive position. This resource-based view of strategy argues that the origins of competitive advantage are firm resources, which consist of the assets, skills and capabilities,

¹Although a consistency in concepts and terminology has yet to emerge. Terms such as core competencies, distinctive competencies, dynamic capabilities, nonimitable resources, and invisible assets can be found in the literature.

and knowledge controlled by a firm². The configuration and coordination of firm resources determines the degree of non-imitability that is at the heart of competitive advantage.

Porter (1991) identified several different categories of resources. Some resources can be obtained through factor purchases, such as physical capital and access to raw materials. Other resources are the result of a firm's ability to share activities across units. Finally, of interest in this study, some resources (i.e., skills) emerge because of learning through time. Thus, in the resource-based view of strategy, the role of learning becomes central, particularly if the resources of interest are organizational skills that have evolved over time and cannot be "purchased" in the open market.

The development of skills through a learning process involves the interpretation of past experiences and strategy choices as a basis for present actions (Cohen and Sproull 1991; Porter 1991). The interpretation of experiences involves the processing of information and the generation of knowledge. The knowledge generated through a learning process supports a firm's ability to respond to environmental stimuli and understand the consequences of past actions. The outcome of an effective learning process is reflected in an enhancement of an organization's skills and capabilities (Levinthal 1991). An underlying assumption of this perspective of learning is that managers have some understanding of the causal relationships associated with information, action, and outcomes.

Despite the logical notion that learning by organizations is essential to their success, there is a lack of synthesis and cumulative work in the area of organizational learning. Ghoshal (1987) maintained that learning as a strategic objective has not been given adequate

²For a recent overview of the resource-based perspective see Barney 1991.

attention in the strategy literature in general and in the area of global strategies in particular.

Mintzberg (1990, 154), an ardent proponent of strategy as a learning process, argued:

The complex and dynamic nature of the organization's environment, often coupled with the diffusion in the organization of its knowledge base for strategy making, precludes deliberate control; strategy making must above all take the form of a process of learning over time, in which, at the limit, formulation and implementation become indistinguishable. . . . The learning proceeds in emergent fashion through behavior that stimulates thinking retrospectively, so that sense is made of action.

Mintzberg (1990) also suggested that strategic initiatives may be left on their own to develop or flounder or they may be championed by managers higher up in the organization who integrate them with elements of existing strategy. The initiatives create experiences, actions, and strategic choices which provide the basis for learning. The focus of this study is on a particular strategic initiative--the formation of a joint venture. The joint venture experience provides an opportunity to gain exposure to new information that may be relevant to the organization's strategy. A key objective of the study is to determine the extent to which firms explicitly seek to internalize the skills and capabilities of joint venture partners.

Learning and its Process Elements

The perspective in this study is that learning is closely linked with notions of organizational resources and capabilities. In this section, the process by which various elements converge into coherent organizational action is explored, while recognizing that literature in this area is underdeveloped.

The impetus for the learning process is new information³ that, from a strategic perspective, is associated with organizational actions (Duncan and Weiss 1979; Huber 1991;

³Huber (1991) noted that the terms information and knowledge have been used somewhat interchangeably in the organizational learning literature.

Shrivastava 1986). New information originates at the individual level. However, although individuals are the agents of organizational learning, the process involves more than the cumulative learning of individuals. While organizations may not create and store information the same way as individuals, knowledge and skills are embodied in organizational routines, practices, and cultures (Badaracco 1991). As Hedberg (1981, 6) explained with respect to individual versus organizational learning:

Although organizational learning occurs through individuals, it would be a mistake to conclude that organizational learning is nothing but the cumulative result of their members' learning. Organizations do not have brains, but they have cognitive systems and memories. As individuals develop their personalities, personal habits, and beliefs over time, organizations develop world views and ideologies. Members come and go, and leadership changes, but organizations' memories preserve certain behaviors, mental maps, norms, and values over time. . . . They retain the sediments of past learning after the original learners have left.

Similarly, Nelson and Winter (1982, 105), in their seminal work on evolutionary theory, argued:

To view organizational memory as reducible to individual memories is to overlook or undervalue the linking of those individual memories by shared experiences in the past.

Learning begins when an organization interacts with its environment. As interactions occur and organizations encounter new experiences, they are exposed to various sources of information. The consequences of the environment-organization interactions are the inputs for strategic decision-making (Lenz and Engledow 1986). Through an evaluative process, information perceived as potentially useful for the organization may be acquired by individual managers or organizational subunits (Huber 1991). Thus, learning by organizations begins in the minds of its managers. Specifically, the cognitive structures of individual managers provide the grounding for organizational learning (Cohen and Levinthal 1990).

Firms acquire information through a variety of formal and informal activities, identified by Huber (1991) as: congenital learning, experiential learning, vicarious learning, searching, and grafting. The processes, although not mutually exclusive, have different conceptual roots and address different aspects of the overall information acquisition process. Of specific interest in this study is grafting, the subprocess by which organizations increase their store of information by internalizing information not previously available within the organization; for example, through mergers, acquisitions, and joint ventures (Huber 1991).

New information acquired by an organizational subunit has the potential to be shared and distributed within the organization. This involves interpretation, defined by Daft and Weick (1984, 294) as "the process through which information is given meaning." To help explain this cognitive change process, concepts such as frames of reference (Shrivastava and Schneider 1984) and dominant logic (Prahalad and Bettis 1986), have been developed⁴. As individual cognitive structures evolve into shared insights, theories develop about action-outcome relationships between an organization and its environment (Duncan and Weiss 1979).

The outcome of the organizational learning process is considered in detail in the next section. Briefly, when individual learning is integrated into a collective learning base, information and knowledge can be retrieved and translated into organizational action. Action is represented by the internalization of managers' experiences into the activities of organizations (Daft and Weick 1984; Nelson and Winter 1982). Thus, for new information to impact organizations strategically, the information must be translated into behavior or action. The link between organizational information and action and its influence on

⁴There has been only limited empirical investigation of these concepts; consequently, little is known about how organizations and their managers interpret equivocal events.

performance provides the basis for evaluating the effectiveness and "intelligence" of the organizational learning process.

Several points should be noted with respect to the learning process. First, an ideal learning experience occurs when a new organizational experience generates collective learning. In reality, many experiences will not lead to the acquisition of useful knowledge. Or, information will be acquired by individuals or subunits but not distributed within the organization. Also, as with individuals, learning does not always lead to intelligent behavior (Levitt and March 1988). Organizations can incorrectly learn and they can correctly learn that which is incorrect (Huber 1991, 3). March, Sproull, and Tamuz (1991, 6) addressed a similar issue in their discussion of reliable and valid learning:

A reliable learning process is one by which an organization develops common understandings of its experience and makes its interpretations public, stable, and shared. A valid learning process is one by which an organization understands, predicts, and controls its environment. Neither reliability nor validity is assured. Because different people and groups in an organization approach historical experience with different expectations and beliefs, shared understandings cannot be assumed.

Second, there is direct correspondence between the process of information acquisition, distribution, and interpretation and the stages of information processing at the individual level (Ginsberg 1990). Both processes involve information acquisition, sense making, and action.

The Learning Outcome

By viewing joint venture value creation through the lens of a learning perspective, the learning outcome becomes a key variable of interest. The outcome of the learning process is the capacity for organizational action. Thus, when Prahalad and Hamel (1990: 82) refer to "core competencies as the collective learning in the organization," they are referring

to the capacity to make action-based strategic choices. As an organization learns, it strengthens and possibly renews its core competence.

The capacity for action, and the capacity for developing core competence, is a function of an organization's skills and capabilities. But what are skills and how are they generated, changed, and enhanced? The concept of organizational routines may help answer this question. Nelson and Winter (1982) developed the concept of routines as an explanation for the persistent features of surviving organizations. They suggested that routines are embedded in an organization and are reflected in an organization's consistency in behavior.

A review of the literature associated with organizational learning reveals inconsistency in the conceptualization and definition of routines. Various terms have been linked with routines, including policies, techniques, strategy, management practices, programs, conventions, technologies, structure of beliefs, and habituated action patterns. Porter (1991), drawing on his earlier work on the sources of competitive advantage, suggested that routines represent the intermediate link between firm activities and advantage. A firm is a collection of discrete economic activities; Porter (1985) identified generic categories of activities and classified them as either primary or support activities. Understanding how each activity is performed provides an insight into the behavior of costs and the existing and potential sources of competitive advantage.

Groups of interrelated activities become organizational routines, of which Winter (1990) identified three distinguishing features. First, routines involve repetitive patterns of activity. Second, they require investment in routine-specific human and physical capital. Third, they have the property of being easily identifiable as patterns of activities and not plans or recipes. The performance of routines creates assets in the form of skills and knowledge. The linkages across an entire firm are captured by the value chain, which is the

collection of activities that a firm performs to produce, market, deliver, and support its product (Porter 1985).

The concept of routines is important because it suggests that it is not the discrete activities that are critical to firm success but how they are linked together. Over time, routines may become regular and predictable patterns of activity. Thus, Nelson and Winter (1982, 134) argued, "As a first approximation . . . firms may be expected to behave in the future according to the routines they have employed in the past." As routines become practised behaviors, they become the skills and capabilities of a firm and define an organization's capacity for action.

Routines limit and constrain an organization's strategy⁵. However, as Nelson (1991) pointed out, routines do not necessarily imply coherency in firm behavior. Although a firm may have developed a set of practiced routines, strategic choices must still be made. These choices, made under uncertainty about the future, determine how the firm actually competes in the marketplace. For example, a firm may decide to enter a product market for which it has no experience and little knowledge (i.e., no existing routines). Or, established routines may become ineffective when new technologies come into existence. Thus, routines can change, as Winter (1986, 166) discussed:

It is necessary to recognize that routines do change . . . The patterns of change reflect both the character of environmental pressures and the characteristics of organizations and the routines on which those pressures impinge; the problem is to explain and predict the extent and direction of change under various alternative assumptions regarding the pressures, the organizations, and the routines in place.

⁵Along a similar vein, Ghemawat (1991) suggested that strategy reflects irreversible commitments made under conditions of uncertainty.

Within a learning framework, the lessons of experience are accumulated in an organization's routines. New experiences may result in the encoding of new lessons into the organizational routines and hence, the organization learns. Earlier, organizational learning as more than the sum of individual learning was discussed. Viewing organizations as a set of routines supports that argument because the organization is seen as persisting despite the departure and addition of specific individuals. Consequently, organizational learning becomes more theoretically viable when organizations are viewed as a collection of routines.

Organizational Change

Because learning is fundamentally concerned with change, the literature on organizational change was examined. The main concern in the change literature is how organizations adapt and adjust to environmental change. Many of the underlying assumptions about the nature of change are consistent with the concept of learning.

Change in organizations has been studied in many different ways. For example, change has been portrayed as incremental (Quinn 1978), discontinuous (Meyer 1982), evolutionary (Tushman and Romanelli 1985), and isomorphic (DiMaggio and Powell 1983). Meyer, Brooks, and Goes (1990) argued that inconsistencies in the change literature arise from different assumptions about the nature of change and the level at which it occurs. In an attempt to reconcile the diversity of views, they developed a classification of organizational change theories based on the assumption that change occurs in two different modes. One mode is continuous or first-order change that occurs within a stable system that itself remains unchanged. The other mode is discontinuous, or second-order change that transforms fundamental assumptions about the organization. These two modes of change can be studied at either a firm or industry level.

At the level of analysis in this study, the firm, first-order change incorporates theories of adaptation and is reflected in the reactive and proactive managerial actions taken to align the organization with its environment. Theories of adaptation are primarily concerned with incremental change. Mintzberg (1990) gave incrementalism a prominent position in the learning "school" of strategic management. For second-order change, Meyer, Brooks, and Goes (1990) used the term metamorphosis theories to describe firm-level theories. These theories assume that organizations must periodically realign by undergoing rapid, organization-wide transformations (Meyer, Brooks, and Goes 1990, 96). The emphasis is on frame-breaking changes confined within the boundaries of single firms.

In a discussion of changes in strategy, Ginsberg (1988) discussed an additional dimension of change. Change can be conceptualized either as a position that is reflected in the activities of the organization or as a perspective that is reflected in the integrated set of management ideas (similar to the notions of dominant logic and shared schemas). The positional view of change seeks to locate the organization in its external environment by focusing on the organization's activities. A change in perspective can be understood by looking inside the organization's collective mind and frames of reference.

Since this study does not attempt to get "inside the minds of managers," change along the lines of Ginsberg's (1988) notion of positional change is consistent with the objectives of the study. Positional change reflects organizational change initiated and considered important by senior management. Examples of this type of change, called design change by Glick et al. (1990), include major reorganizations or reassignments of people, additions of product lines, changes in relationships with customers, changes in manufacturing technology, and changes in control and communication systems. These are observable changes in the sense that the routines of the organization are directly affected. Other types of change that

are less observable or less associated with discrete activities, such as changes in an organization's philosophy, goals, or culture, are equally important but considerably more complex from a research perspective.

Summary

Mintzberg (1990) argued that learning initiatives can occur at various levels of the organization and may be deliberate or accidental. Change associated with a learning process may be proactive if members of the dominant coalition determine when organizational changes are required and what changes can be undertaken (Duncan and Weiss 1979). That the learning process can be consciously managed, or at least initiated, is an important assumption in this study. Thus, while learning proceeds in an emergent fashion, a joint venture provides a specific initiative that may form the basis for a valuable learning experience. In a sense, managers associated with the initiative may become learning "champions." These managers may choose to deliberately engage in learning efforts as a means of gaining access to the skills of the joint venture partners.

LEARNING AND THE JOINT VENTURE CONTEXT

An important question is what can be learned from a joint venture and how might joint venture-derived knowledge be of strategic use to an organization? There are three broad applications of joint venture-derived knowledge. First, joint venture knowledge might be used in the design and management of other joint ventures and alliances. Second, parent firms may seek access to other firms' knowledge and skills but will not necessarily wish to internalize the knowledge in their own operations. As Hamel (1991) pointed out, knowledge that is embodied only in the specific outputs of the joint venture has no value outside the narrow terms of the agreement. Thus, a strategic objective of access to a partner's

knowledge and skills should not necessarily be equated with a learning objective if new knowledge is to be used solely within the joint venture entity.

Third, and the focus of this research, knowledge from a joint venture can be internalized by the parent company to enhance its own strategy and operations. An assumption associated with this use of information is that the knowledge originated with a joint venture partner⁶. The acquisition of this type of knowledge, called output knowledge by Westney (1988), has been suggested as one of GM's objectives in its joint venture with Toyota (Keller 1989; Womack 1988). GM hoped to learn about the efficient production of small cars and transfer its knowledge to GM plants. The focus on knowledge useful to the parent is consistent with the identification of learning as a possible motive for the formation of joint ventures.

Organizations learn through their experiences with both internal and external environments. Badaracco (1991) identified two ideal types of knowledge that help firms enhance their skills and build sustainable competitive advantages. One type is migratory knowledge, knowledge that can be packaged in a design or a manual and can easily migrate from one firm to another. A second type is knowledge embedded in the routines and activities of organizations. Through a joint venture, the partners may gain access to the organizationally embedded knowledge of other firms. Badaracco (1991, 98) described the joint venture learning challenge:

When knowledge is embedded, particular problems arise. The knowledge is not available in simple, unitized packages that can be bought for cash. For one organization to secure embedded knowledge

⁶Some information may emerge that is new to all joint venture partners and therefore, does not originate with a specific partner. However, if both partners make specific contributions to the joint venture, the information of interest to a "learning" organization will probably be associated with the skills and capabilities of a joint venture partner.

from another, its personnel must have direct, intimate, and extensive exposure to the social relationships of the other organization.

By definition, organizationally embedded knowledge is difficult to codify and those possessing the knowledge cannot transfer it to others without demonstration and involvement (Pucik 1991; Teece 1984). For example, acquiring the rights to a complex product technology does not guarantee that the necessary information and knowledge are acquired because the most valuable asset, the minds of the innovators, do not accompany the technology (Powell 1987). Because a joint venture involves cooperative interaction between the partners, the risk that knowledge will dissipate during the transfer may be less than in the case of market-based or contractual transfers of information.

The parent's motives and objectives for collaboration provide the catalyst for learning to occur. Does the parent have a learning objective? Is the formation of the venture motivated strictly by the prospects of improving market position? Will the venture be integrated with parent strategy? The answers to these questions provide an insight into the parent's calculation of potential learning benefits.

Two Stages

With the venture formation, a firm gains exposure to its joint venture partner and its knowledge base. Information viewed as potentially useful to the parent may be acquired by individuals or subunits involved in the design and management of the joint venture. The newly acquired information must then be distributed and interpreted by parent managers for the parent to maximize its benefit from the learning experience. In other words, individual learning must become collective learning. From this perspective, organizational learning in a joint venture context involves two stages. The two stages are analogous to the innovation

diffusion process that also comprises the gathering and transmitting of information across organizational boundaries (e.g., Tushman 1977; Tushman and Scanlon 1981).

The first stage begins with the formation of the joint venture and partner interactions. The interactions and the managers' exposure to partner knowledge may lead to the recognition of partner skill differences embodied in the joint venture operation. The nature and extent of managerial interactions and the situational factors surrounding the joint venture will influence the learning that occurs at this stage. For instance, the perception that a joint venture partner has inferior technological skills may limit the transfer of technological knowledge.

Using the GM-Toyota joint venture as an example illustrates the first stage in the learning process. Both GM and Toyota provided managers for the NUMMI joint venture. GM rotated its managers through the joint venture and then back to the parent. GM's ability to learn from Toyota initially depended on the extent of the information acquisition by the GM managers with experience in managing the NUMMI venture. According to Keller (1989), the joint venture managers involved in NUMMI learned a great deal and underwent a "transformation" in their thinking about the management philosophy of automobile manufacturing.

Information acquired from outside the organization can be used strategically only to the extent that it is distributed and interpreted within the organization (Aguilar 1967; Jelinek 1979). Thus, the second learning stage involves the integration of information acquired by individual managers into the parent's collective knowledge base. This stage involves interaction between the senior managers of the learning organization; namely, the parent managers involved in joint venture management and those not involved. The input for this

stage is the recognition and interpretation of information associated with skill differences between the partners.

What activities must the parent engage in to facilitate the distribution of joint venture knowledge? Hamel (1990, 84) argued that:

enhancing the organization's receptivity to learning was a function of the actual exposure position of the firm *vis-a-vis* its partner. Exposure position is essentially an issue of access to people and facilities.

Hamel further suggested that firms would be more successful in exploiting alliance learning opportunities if learning was treated as a rigorous discipline with a focus on the learning task. Thus, the learning firm must engage in activities designed to create a learning awareness at both the joint venture and parent levels. The firm must also engage in efforts specifically designed to transfer knowledge from the joint venture to the parent. The parent firm's learning efforts represent the strength or intensity of the learning initiative and provide an indication that the learning process is occurring. In the two stage model, learning efforts is the critical link between the stages and a key factor in increasing the probability of learning awareness and recognition.

As a process element, learning efforts reflects the degree to which the parent is actively trying to internalize the skills and capabilities of its partner. By purposely engaging in these actions, firms greatly increase the probability that their joint ventures will contribute to the parent's knowledge base. Learning efforts can be viewed as both an input and an output of the learning process. As an input, learning efforts provides the mechanism for information to be transferred from the joint venture to the parent. As an output, learning efforts represents an action that creates an understanding of joint venture partner capabilities.

This perspective is similar to Cohen and Levinthal's (1990) conceptual arguments about the R&D process. They argued that investing in R&D contributes to the generation

of a firm's technical knowledge. They observed that R&D creates a capacity to assimilate and exploit new knowledge even though the findings may not lead to specific innovations. Cohen and Levinthal suggested that the knowledge inputs to the innovation process may be as important as the knowledge outputs. Thus, the process involved in generating knowledge may be as important as the outputs from the process because the process ensures that firms develop the deeper understanding necessary to exploit new scientific developments.

Capacity for Learning

Not all efforts to learn will be successful. Some organizations, like individuals, may lack the capacity to learn. One important factor in creating the capacity to learn is the strength of the learning objective. In the joint venture context, how important was learning in the decision to form the joint venture? A second factor is related to the perceived need to learn. Firms in an industry challenged by new competitive threats may have a learning imperative (although weaker firms may be unable to accurately assess the intensity of the competitive threat, which may explain their vulnerable position) Firms in a stable, more secure industry may have a greater sense of confidence and a lower perceived need to learn.

An third factor that should influence a firm's capacity to learn is parent management's attitudes about the strategic importance of the venture. Firms may take active steps to transfer learning from the venture to the parent but without an appreciation for the strategic learning potential, internalization of skills may be less likely to occur. Thus, learning should be recognized as a strategic function and the joint venture as an important learning vehicle.

SCOPE OF THE STUDY

The scope of the research on a process phenomenon such as organizational learning will depend largely on the type of research questions that are addressed (Van de Ven and Huber 1990) and the maturity of the field. If learning is viewed from an input-process-output perspective, there are two broad types of research questions that might be addressed:

1. What are the determinants or critical factors that influence learning?
2. How do individuals and groups in organizations acquire, interpret, and integrate information that leads to organizational learning?

The first question adopts a macro perspective and focuses on the inputs and outputs of learning. In the joint venture context, the inputs are represented by factors such as parent firm joint venture motives, the context of the joint venture relationship, the nature of the partner interactions, and the integration of the joint venture within the strategy of the parent firm. The second question requires a process theory of organizational learning in which the emphasis is on the parts of the phenomenon under study and the way in which those parts fit within the wider contexts of the real world (Tsoukas 1989).

Both questions are related and both are important in understanding learning and how it contributes to the development of organizational skills and capabilities. However, the questions differ on both theoretical and practical grounds. The first question treats the complex information acquisition and interpretation processes that occur within and between the minds of managers as a "black box." The objective is to explain variation in the output criteria through an examination of the relationships between the input and output variables. The second question requires an indepth understanding of the temporal sequencing of the events that lead to the organizational learning outputs. It also requires that the interaction of different managerial cognitions be considered, a research issue that Mintzberg (1990)

suggested was particularly complex. The first question can be studied using a cross-section of firms while the second question would generally be studied using a few cases and a longitudinal design.

This study focuses on the input-output question and explores the determinants of organizational learning. The occurrence and determinants of organizational learning are emphasized as opposed to the complex underlying processes leading to learning. The formation of a joint venture is treated as the referenced event (Smith and Grimm 1987) or strategic initiative (Mintzberg 1990) that creates the potential learning experience.

Clearly, a research approach focusing on relationships between variables represents a tradeoff in terms of the rich contextual details of the learning process. In particular, ascribing temporal sequence to discrete events becomes difficult. For example, if new information is acquired at lower levels of the organization but is not absorbed and utilized by senior management, this study can only report on the state of various conditions and factors thought to influence the learning process. The approach cannot document the sequence of events that results in the absence or presence of organizational learning. To do so would require an indepth examination of the specific events.

On the other hand, looking at only a few cases cannot answer questions about the occurrence of learning and determinants or variables that support the learning. A nomothetic or variance approach can address this question by looking for covariation between variables. By utilizing several methods (i.e., field study interviews and questionnaires) in the research design, some of the answers to the "black box questions" can be inferred, although not empirically tested. However, the microanalytic aspects of managerial cognitive structures and information interpretation are not addressed.

The study is also restricted to learning from a managerial perspective. Organizational learning is a key dimension in a firm's adaptation, the concept generally used to describe the ongoing relationship between a firm and its environment. Senior management are responsible for the organization-environment alignment. Therefore, although learning in organizations occurs at various levels, the focus in this study is on senior management and the knowledge that arises as an output of joint venture involvement. This focus is consistent with Aguilar's (1967) observation that below the senior management level, participants in strategic decision-making are neither informed of issues pertaining to the whole organization nor involved in their resolution.

SUMMARY

This chapter had several objectives. One was to examine the joint venture literature, with an emphasis on the objectives and benefits of collaboration. The learning explanation for joint venture formation was found to be an under-explored area, possibly because learning represents a unilateral benefit and most joint venture research has focused on mutual benefits. A second objective was to develop a concept of learning grounded in the strategy literature. Learning is viewed as the process by which firms develop and enhance their skills and capabilities. This perspective places the study close to the traditions of evolutionary theory (Nelson and Winter 1982; Tushman and Romanelli 1985; Winter 1986), and to theories of strategic and organizational change (Ginsberg 1988; Van de Ven and Huber 1990).

The third objective was to examine learning in the joint venture context. Limited research has been done in this area. This study developed a two stage perspective of joint venture learning. The concept of learning efforts was introduced as the link between the two stages. Finally, the scope of the research was considered as the basis for developing a conceptual framework, the subject of the next chapter.

CHAPTER 3

CONCEPTUAL FRAMEWORK AND HYPOTHESES

This chapter presents the conceptual framework that guides the research. By expanding on the theoretical background developed in Chapter 2, the framework identifies the variables proposed as determinants of successful joint venture learning experiences. From the framework, a series of working hypotheses is developed as the foundation for the research methods. The chapter begins with an overview of joint ventures as interorganizational relationships. The overview is followed by sections devoted to the specific elements of the conceptual framework.

JOINT VENTURES AS INTERORGANIZATIONAL RELATIONSHIPS

Joint ventures are voluntary interorganizational relationships formed by firms to achieve a strategic objective that would not be attainable by acting autonomously. A key element of any interorganizational relationship is the interaction process between the organizations involved in the relationship. Thus, a social exchange approach with its emphasis on purposeful coordination (Schmidt and Kochan 1977) and interactions provides a useful input for the conceptual framework. Underlying the framework is the notion that in the joint venture context, the interaction and exchange of information between joint venture partners is a necessary condition for organizational learning.

The behavioral factors associated with transactions between two or more parties are the focus of social exchange. In an organizational setting, the exchange perspective is characterized by an emphasis on interfirm interactions and noneconomic outputs from the relationship (Dwyer, Schnurr, and Oh 1987). Organizational learning represents a type of noneconomic output, one that is partially dependent on the nature and type of interactions between the joint venture partners. Therefore, analyzing joint ventures from an exchange perspective focuses attention on the interaction and relationship dimensions of the interorganizational relationship.

An exchange approach is particularly applicable when the joint venture is international because as Toyne (1989) argued, the issues of central importance in international business revolve around exchange relationships and the social actors involved in the exchange. An implicit use of an exchange theoretic perspective can be found in the works of several researchers interested in the performance of joint ventures. For example, Beamish (1988) described process level factors and Chowdhury (1989) examined interfirm-organization determinants of international joint venture successes and failures. However, prior studies of joint ventures generally do not reflect an explicit integration of the work done in the areas of exchange theory and interorganizational relationships.

For this study, joint venture interactions represent a fundamental element in the conceptual framework. Ideally, if one partner is to learn from another, the partners must interact and exchange information. As Westney (1988) argued, learning-oriented cooperative strategies involve a denser and more varied set of interorganizational interactions as compared with output-oriented strategies. Similarly, Duncan and Weiss (1979) emphasized the importance of communication in the organizational learning process.

In a truly cooperative joint venture, extensive communication between the partners is an essential feature of the relationship. The quality of inter-partner communications reflects the formal and informal sharing of meaningful and timely information (Anderson and Narus 1990; Hall et al. 1977). The nature of the communication may range from operational information exchanges necessary to run the joint venture to the sharing of more strategic information. Kanter (1989) identified three levels of information exchange in cooperative relationships. From a strategic perspective, the levels reflect the quality of the information exchanged:

1. Joint planning at the strategic level.
2. Technical data exchange at the professional level.
3. Exchange at the production level.

If partner exchanges are confined to operational information, opportunities for learning may be limited. On the other hand, the partners may actively work together at a strategic level, keeping each other informed about the joint venture's problems and opportunities. When interacting at a strategic level, the partners are more likely to exchange information that is perceived as useful from the parents' perspectives.

In summary, the nature and degree of inter-partner communication and interaction is a key element in joint venture relationships. The interaction processes provide a foundation for developing a conceptual framework of the joint venture learning process. Several variables in the framework, such as trust and relationship openness, are derived from the notion of joint ventures as interorganizational relationships.

CONCEPTUAL FRAMEWORK

In Chapter 2, learning and the joint venture context was discussed to provide a theoretical overview of the research problem. Building on the theoretical discussion and drawing on the pilot study (Appendix 1), a conceptual framework of organizational learning is diagrammed in Figure 3-1. The framework identifies three sets of variables proposed as inputs or determinants of joint venture learning. In the framework, the joint venture parent is the level of analysis.

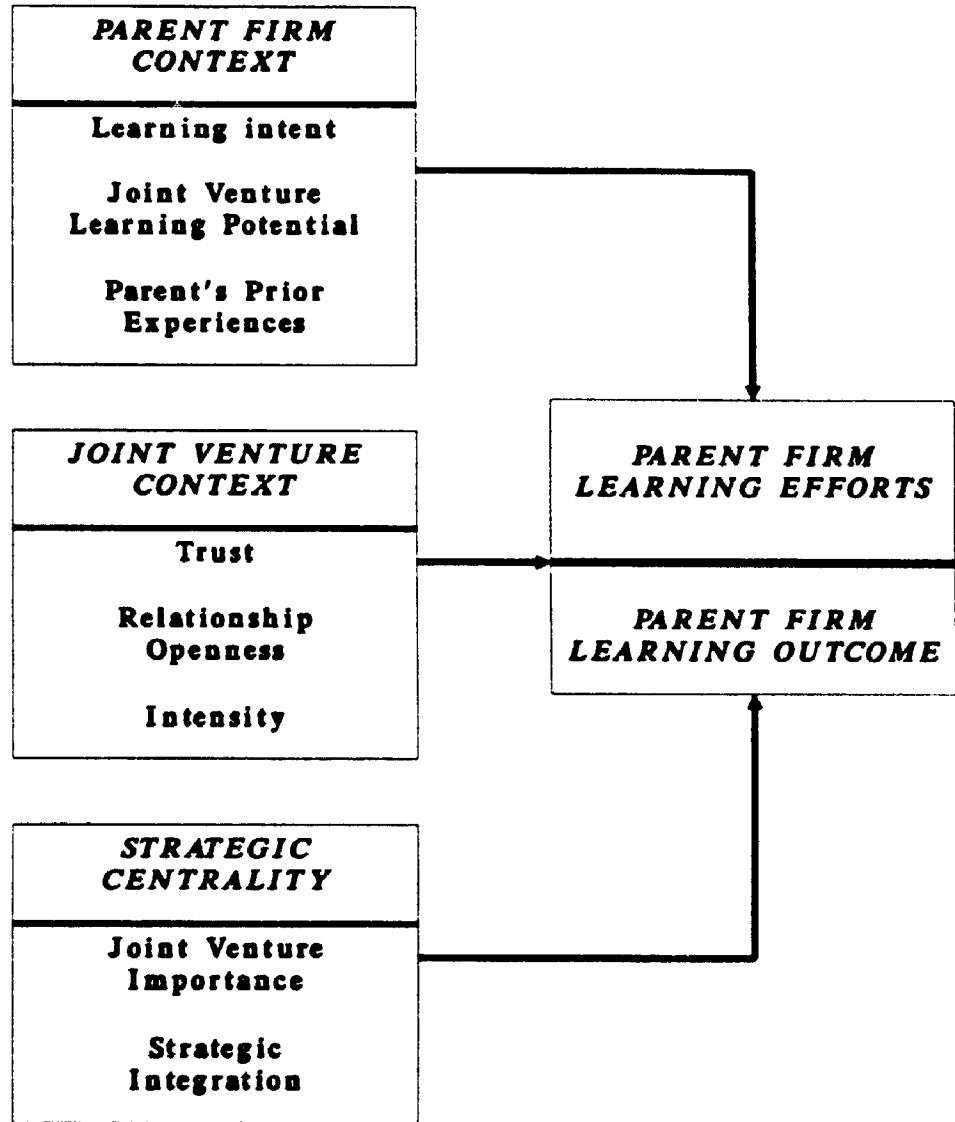
The framework builds on previous work from several areas, including joint ventures, organizational learning, and interorganizational relationships. The determinants of joint venture learning include:

1. The parent firm context, represented by the parent firm's joint venture motives and expectations regarding learning.
2. The context surrounding the interactions between the joint venture partners.
3. The strategic relationship between the joint venture and its parent.

The determinants represent what learning theorists (e.g., Gagne 1985) refer to as conditions for learning. They provide the foundation for developing an understanding of how firms internalize joint venture partner skills. The three sets of variables are drawn from the Chapter 2 discussion of learning as a two stage process, which indicated that both parent level and joint venture level factors are important. The framework incorporates parent and joint venture contextual variables and given the two stages, there must be a link between the stages. The third set of variables captures the link between the venture and its parent.

In developing the conceptual framework, two aspects of joint venture learning were considered critical: the parent firm's learning efforts and the parent's learning outcome. The rationale for the inclusion of these variables was discussed extensively in Chapter 2. Briefly,

FIGURE 3-1
Learning and Joint Ventures: Conceptual Framework



learning efforts by the parent are necessary to capture joint venture-derived knowledge as the basis for skills internalization. The learning outcome is more content-oriented and reflects the consequence of the learning initiative. The inclusion of both variables enriches the framework and provides sufficient depth for a multimethod research design.

In the following sections, the various elements of the conceptual framework are examined. From the framework, a set of working hypotheses is proposed to help focus data gathering, analysis, and subsequent inferences. The hypotheses, presented as associational rather than causal, were derived from the conceptual framework and were grounded wherever possible in previous research. Several, however, were derived from logic and common sense prescriptions in the organizational learning and joint venture literatures. This approach was necessary because in studies based on limited received theory, researchers often work from intuition about which variables are important, how they are related, and how the relationships help to explain a particular phenomenon (Bourgeois 1985).

The conceptual framework and related hypotheses should be viewed as a guide to the research design; testing the hypotheses should not be seen as the sole basis for the execution of the research. Indeed, the reformulation of the hypotheses and the identification of new relationships is an objective, suggesting that the research is both inductive and deductive.

It should also be noted that the conceptual framework, while applicable to any joint venture partner, is developed with the intent of studying only one partner in a joint venture. Therefore, the variables discussed reflect variables associated with the "learning organizations" that generate the data for the study.

LEARNING EFFORTS AND THE LEARNING OUTCOME

The previous chapter dealt with the concepts of learning efforts and learning outcome in detail. In Figure 3-1, learning efforts and the learning outcome are positioned together, suggesting that both can be viewed as dependent on various organizational determinants. The argument presented in Chapter 2 was that learning efforts is an indication of the strength or intensity of the learning occurrence. The learning outcome, on the other hand, provides evidence of the effectiveness of the learning efforts. Since parent efforts are necessary to transfer joint venture knowledge from the venture to the parent, learning efforts should also be a predictor of the learning outcome. Thus,

Hypothesis 1: The greater the parent firm's efforts to learn from its joint venture, the greater the parent's learning outcome.

However, efforts to learn will not necessarily lead to successful learning outcomes, as GM discovered in its joint venture with Toyota. Other factors play a role in the learning process and in particular, influence the type of knowledge available for internalization. These factors are explored in the following sections.

THE JOINT VENTURE FORMATION AND THE PARENT FIRM

This section considers the variables dealing with the parent firm and the factors surrounding the parent's decision to form a joint venture (Table 3-1 summarizes the analytic variables). Joint ventures are formed for a variety of reasons, one of which may be organizational learning. If a learning objective is associated with the formation of a joint venture, a parent firm may enter more actively into the search for information and encode the information more fully than the firm that is less motivated to learn. As Hamel, Doz, and Prahalad (1989, 138) asserted, "It is self-evident: to learn, one must want to learn. . . . Western companies must become more receptive [to the benefits of alliance learning]."

TABLE 3-1
Analytic Variables

Concept	Reference
<i>Parent Firm Context Dimensions</i>	
<i>Learning Intent</i> - the extent to which access to a partner's knowledge for the purpose of learning was a motivation in forming the joint venture.	Anderson 1990; Kogut 1988; Hamel 1991; Powell 1988; Westney 1988.
<i>Learning Potential</i> - the degree to which a parent firm believed there was potential to learn from its partner, based on an assessment of the skills of its partner.	Hakansson & Wootz 1979; Hamel, Doz, & Prahalad 1989; Harrigan 1988; Porter & Fuller 1986; Whetten 1987.
<i>Joint Venture Experience</i> - the parent firm's prior experience with joint ventures.	Harrigan 1985; Cohen & Levinthal 1990; Fichman & Levinthal 1991; Shortell & Zajac 1988; Westney 1988.
<i>Prior Partner Relationships</i> - the parent firm's prior relationships with the joint venture partner.	
<i>Joint Venture Context Dimensions</i>	
<i>Trust</i> - the belief that a partner's word or promise is reliable and that a partner will fulfil its obligations in the joint venture relationship.	Anderson & Narus 1990; Beamish 1988; Blau 1964; Borys & Jemison 1989; Buckley & Casson 1988; Dwyer, Schnurr, & Oh 1987; Geringer 1988; Harrigan 1986; Jarillo 1988.
<i>Relationship Openness</i> - the willingness and ability of the joint venture partners to share information and communicate openly.	Gupta 1987; Hamel 1991; John & Reve 1982; Kanter 1989; Stata 1990.
<i>Intensity</i> - the strength and frequency of the interactions between the joint venture partners.	Aldrich 1979; Beamish 1984; Ghoshal & Bartlett 1988; Johanson & Mattsson 1987; Marrett 1971; Van de Ven 1976.
<i>Joint Venture Centrality Dimensions</i>	
<i>Strategic Importance</i> - the extent to which parent managers perceive that a joint venture linkage is critical to the strategy of the parent organization.	Harrigan 1985, 1990; Shortell & Zajac 1988; Whetten 1982.
<i>Strategic Integration</i> - the degree to which a joint venture is strategically integrated with the parent organization.	Ghoshal & Bartlett 1988; Fiol & Lyles 1985; Hamel 1991; Harrigan 1985; Shortell & Zajac 1988.

When a firm seeks to internalize knowledge from its joint venture, it can be said to have a learning intent. Hamel (1991, 89-90) defined an alliance learning intent as "a firm's initial propensity to view collaboration as an opportunity to learn". Hamel identified several factors contributing to the presence of a learning intent: 1) the parent's view of the alliance as an alternative to competition or as a vehicle for improving competitiveness relative to its partner; 2) the parent's resource position relative to its partner and other firms in the industry; 3) the parent's expected learning benefits; and 4) the parent's preference for balanced versus asymmetric dependence within the alliance.

The fourth factor is especially interesting. A firm's dependence within a collaboration may be potentially costly because dependence may inhibit learning. Specifically, dependency in a core skill area may leave a firm open to a partner intent on "stranding" its partner or thwarting its strategic objectives. Hamel found that Japanese firms often were adverse to the notion of symmetrical dependence and preferred alliances with a clearly disproportionate allocation of power. A balance of power was considered unsuitable because it resulted in indeterminateness and instability in the relationship. This finding is consistent with Killing's (1983) argument that because of the difficulties involved with reconciling the often incompatible objectives of the joint venture partners, dominant control joint ventures are preferable to shared control ventures.

Related to the notion of expected learning benefits is the breadth or strength of the learning intent. A narrow learning intent limited to minor aspects of a partner firm's activities may lead a firm in the wrong direction. In the case of NUMMI, GM has been faulted for trying to learn the wrong things (Keller 1989). GM wanted to learn about technological solutions rather than the more subtle, people-oriented practices that

characterized Toyota's success. Had GM's learning intent encompassed a broader range of activities, the learning efforts may have been substantially different. Thus,

Hypothesis 2: The strength of the parent firm's initial learning intent will positively influence the parent's initiation of learning efforts.

Nevertheless, as the Fuji-Xerox joint venture vividly illustrates, learning may result despite the absence of an initial learning intent (Jacobson and Hillkirk 1986). The Fuji-Xerox joint venture was, for the first ten years of its life, strictly a marketing organization. Its mandate was to sell U.S.-made Xerox copiers in Japan. The joint venture gave Xerox access to Fuji's marketing skills in Japan but from Xerox's perspective, offered little potential for learning. The choice of the joint venture mode was motivated by economic and strategic reasons; organizational learning was a minor or nonexistent Xerox motivation at the outset. However, the joint venture subsequently became a significant learning experience for Xerox, contributing skills necessary to effectively compete with Japanese manufacturers in the low end of the copier market.

Thus, the parent's initial learning intent should influence the initiation of learning efforts but will not necessarily be related to the eventual learning outcome because of an incorrectly specified learning intent, changes in the collaborative structure or objectives, or a limited capacity for learning. A learning intent may emerge as the parent firm becomes more familiar with its partner's operations or as environmental changes stimulate a modification in parent learning objectives.

Hypothesis 2a: The parent firm's initial learning intent will have only a moderate influence on the parent's learning outcome.

A second important factor is the parent firm's perception of its partner's skills and capabilities. This perception will have a potential influence on the learning process because a firm that considers its partner's skills equal or inferior will probably make little effort to

learn from a joint venture relationship. Consequently, the extent to which firms view their partner's skills as similar or symmetrical to their own should be considered. A joint venture relationship is symmetrical in terms of skills when the partners possess similar skills (Harrigan 1988). The stronger the partner's perceived skills are, the greater the need to interact and learn from the partner (Hakansson and Wootz 1979). Thus, learning will be most likely when the skills and capabilities of the partners are asymmetrical.

A parent firm's assessment of the differences in partner skills and capabilities will lead to an initial assessment of learning potential from the joint venture relationship. The strength of the initial assessment of learning potential should be associated with efforts to initiate the learning process. Thus,

Hypothesis 3: The parent firm's learning efforts will be positively associated with the anticipated learning potential associated with the joint venture partner.

However, expectations of skills asymmetry and the assessment of learning potential may be incorrect. For example, Hamel (1991) found that larger firms often incorrectly assumed that they had nothing to learn from smaller alliance partners. Therefore, there may not be a strong relationship between the initial assessment of learning potential and the parent's learning outcome. Or, the evaluation of learning potential may be modified subsequent to the formation of the joint venture.

Hypothesis 3a: The parent firm's learning outcome will not be strongly related with the anticipated learning potential associated with the joint venture partner.

A third proposed parent context factor is the parent's prior experiences. There are two types of experience that merit attention in the joint venture context: the parent's prior experience with joint ventures and with the joint venture partner. Harrigan (1985) argued that there is an experience curve effect associated with the management of joint ventures.

Westney (1988) adopted a similar position in suggesting a learning curve associated with the diffusion of learning within the firm. As firms gain experience in the management of joint ventures, they may become better at utilizing joint ventures as a source of information. Similarly, Cohen and Levinthal (1990) argued that learning may be more difficult in novel domains. Specifically, "a diverse background provides a more robust basis for learning because it increases the prospect that incoming information will relate to what is already known" (Cohen and Levinthal 1990, 131)¹. Thus, a parent's prior joint venture experience may provide a foundation that more effectively enables parent firms to capitalize on joint venture learning opportunities.

Hypothesis 4: Parent firms experienced in joint venture management will have more successful learning experiences than firms which have no experience.

Prior experience with a joint venture partner was also considered important, possibly contributing to higher quality communication and a greater degree of information exchange. A prior relationship between the partners suggests that the firms have overcome initial uncertainties about working together. New joint venture relationships that start with an existing stock of "relationship assets" may begin with a honeymoon period that effectively buffers the firm from early dissolution (Fichman and Levinthal 1991). Referring to Cohen and Levinthal (1990), knowledge associated with the prior relationships may permit the assimilation of new knowledge. If a firm has an established relationship with its joint venture partner, perhaps through licensing or technology sharing agreements, the prior knowledge

¹However, March, Sproull, and Tamuz (1991, 6) described organizational learning as involving a balance between stable, shared knowledge and the exploration of novel ideas. Stable knowledge may interfere with the discovery of contrary experience while novel ideas may interfere with the maintenance and sharing of interpretation.

of the partner's operations may stimulate learning efforts associated with the joint venture.

Thus,

Hypothesis 5: When the joint venture partners have been involved in a prior relationship, parent firms will be more likely to engage in learning efforts than when there is no prior relationship.

THE JOINT VENTURE CONTEXT

The joint venture context dimension captures the situational conditions and characteristics surrounding the joint venture relationship. Although in general, it is expected that similarity between the partners will lead to fewer opportunities for learning, extreme asymmetries may create problems in joint venture management. Whetten (1987) argued that the reality of an asymmetrical relationship may be somewhat different from expectations. First, the more diverse the partners the more difficult the planning and coordination of the joint venture. Second, the different power bases of the partners may make it difficult to establish trust and cooperation.

The need for trust between joint venture partners has been identified as an important element of long-term joint venture relationships (Beamish 1988; Harrigan 1986). In a joint venture, trust reflects the belief that a partner's word or promise is reliable and that a partner will fulfil its obligations in the relationship (Dwyer, Schnurr, and Oh 1987). Breakdowns in the value creation process in joint ventures often stem from problems in managing interdependencies; a lack of trust between partners is one such problem (Borys and Jemison 1989). As Harrigan (1986, 148) asserted, "Managers can be as crafty as they please in writing clauses to protect their firm's technology rights, but the joint venture's success depends on trust."

An atmosphere of trust contributes to the free exchange of information between committed exchange partners since the decision-makers do not feel that they have to protect themselves from the others' opportunistic behavior (Blau 1964; Jarillo 1988). Without trust, information exchanged may be low in accuracy, comprehensiveness, and timeliness (Zand 1972). Therefore, trust is an important aspect of the interaction process between the partners, contributing to both the quality of information exchanged and the intensity of the interactions.

The previous section suggested that a prior relationship between the joint venture partners should lead to higher quality communication between the partners. A related hypothesis involves prior partner relationships and trust in the joint venture relationship.

Hypothesis 6: In cases where the joint venture partners have been involved in prior relationships, trust will be greater than when no prior relationships exist.

Closely related to trust is the notion of openness between the joint venture partners. Firms may be reluctant to share information with their joint venture partners, especially if the partner is perceived as a potential competitor. The willingness to share information in dyadic relationships has been studied from several perspectives. Gupta (1987) examined openness in the relationship between corporate and business unit managers. Openness was defined as "the degree to which relations between business unit managers and their corporate superiors are open and informal and allow for spontaneous and open exchange of information and ideas" (Gupta 1987, 479). John and Reve (1982) incorporated the concept of openness in a study of dyadic relationships in marketing channels. Openness was one of the items used to measure norms of exchange. From an organizational learning perspective, Stata (1990, 70) asserted that openness reflects "a willingness to put all the cards on the table,

eliminate hidden agendas, make our motives, feelings, and biases known, and invite other opinions and points of view."

In Hamel's (1991) study of learning in international alliances, the openness and accessibility of joint venture partners was called transparency. Four determinants of partner transparency were identified:

- 1) The penetrability of the social context surrounding the partner.
- 2) Attitudes towards outsiders, i.e., clarity.
- 3) The extent to which the partner's distinctive skills were encodable and distinct.
- 4) The partner's relative pace of skill-building (Hamel 1991, 94).

Hamel found that some organizations were more penetrable than others and that there were systematic asymmetries in transparency between Western and Japanese partners. Hamel also found that partners employed a variety of measures to limit their transparency. In one case, partner requests for information were processed through a "collaboration" department. Several other firms sought to restrict their transparency by restricting the alliance agreement to a narrow range of products or markets.

In this study, relationship openness reflects the willingness and ability of the joint venture partners to share information and communicate openly. A firm may wish to restrict its flow of knowledge to the joint venture for various reasons, including a desire to maintain its influence over the other partner(s) (Hamel, Doz, and Prahalad 1989). In the case of international joint ventures, openness may be a function of cultural or language differences (Kanter 1989) and access to facilities of the partner (Hamel 1991). Openness also may be closely related to the degree of trust that the partner has in the joint venture relationship because in the absence of trust, the partner is unlikely to share information. Thus,

Hypothesis 7: Openness in the joint venture relationship will be positively associated with the parent firm's learning efforts.

Hypothesis 7a: Openness in the joint venture relationship will have a positive influence on the parent firm's learning outcome.

Hypothesis 8: Trust between the partners and joint venture openness will be positively related.

Although there may be a high degree of openness and trust between joint venture partners, the willingness of the partners to interact and the effort put into the cooperative relationship also should be considered. Willingness and effort are synonymous with the intensity of the interaction process. Therefore, a variable that complements openness and trust is the intensity level of the interactions between the partners.

In the interorganizational literature, intensity has been defined as the amount of investment an organization has in its relations with other organizations (Aldrich 1979). This definition includes both the amount of resources involved and the strength of the interactions. In this study, intensity reflects the volume or strength of interorganizational interactions between the partners in the joint venture relationship. As Aldrich (1979) noted, both the nature of the interactions and the managerial level at which they take place are important considerations.

The intensity of interactions will be influenced by the attitudes of the information senders and acquirers (i.e., the joint venture partners). In terms of providing or sending information, partner firms may be characterized as eager, neutral, or resistant. As acquirers of new information, learning firms may be aggressive, neutral, or uninterested. The attitudes of managers in both partner firms play a role in this exchange process. For example, Japanese firms in joint ventures with North American firms are often characterized as aggressively pursuing learning opportunities while their partners eagerly provide them with information.

Consistent with the focus on a senior management perspective, the intensity with which managers in the partner firms interact is proposed as an important factor in the learning process. The more intensive the joint venture relationship, the more willing partner firms may be to adapt to each other and share information about each other's strategies, needs, and capabilities (Johanson and Mattsson 1987). Thus,

Hypothesis 9: The greater the intensity of partner interactions, the greater the parent firm's learning outcome.

A second hypothesis concerning the intensity of joint venture interactions involves joint venture openness. An open relationship between the partners should contribute to a high degree of partner interaction.

Hypothesis 9a: The intensity of partner interactions will be positively associated with joint venture openness.

JOINT VENTURE CENTRALITY

The third area of the conceptual framework deals with the context surrounding the joint venture's strategic relationship with its parent. This area reflects the joint venture's strategic centrality. The notion of centrality is derived from the earlier discussion of the two stage joint venture learning process. The second stage of the process incorporated the view that knowledge acquired through a joint venture relationship would have to be distributed and interpreted within the firm to maximize its usefulness. Two variables are introduced as factors in the distribution and interpretation of information: 1) the strategic importance of the joint venture to its parent and 2) the extent to which the venture is strategically integrated with the parent organization.

A firm may form a joint venture with a strong motivation to learn and still consider the joint venture relatively unimportant to the firm's strategy. This situation could arise if

an explicit learning intent is related to limited elements of the parent firm's strategy. GM perceived that learning from Toyota would be confined to production skills in the manufacture of small cars. The GM managers involved in NUMMI soon realized that the lessons to be learned could be applied to the entire parent firm. Managers at the GM head office, however, considered the joint venture low in importance relative to the overall strategy of the firm and failed to understand the learning potential of the joint venture (Womack 1988).

Therefore, besides delineating the learning intent, a further question must be asked about the importance of the joint venture to the parent's strategy. The strategic importance of a joint venture represents the extent to which managers perceive that a linkage is critical to the strategy of the parent organization (Harrigan and Newman 1990; Stortell and Zajac 1988). This variable captures the perception of managers and is closely related to motivations for forming the joint venture. Harrigan and Newman (1990, 426-427) discussed strategic importance, using the example of an aluminum firm. An enlarged source of bauxite might be crucial to the expansion strategy of an aluminum firm. A joint venture to open a bauxite mine probably would have high strategic importance. In contrast, a joint venture to explore a coal deposit would have less strategic importance for the aluminum firm seeking expansion in its primary business activity.

Harrigan and Newman (1990) outlined three sources of strategic importance: one, the necessity of the joint venture to the firm's future activities; two, the urgency of forming the venture--some opportunities must be exploited immediately while others offer a longer planning horizon; and three, the extent to which the venture's activities were interdependent with the parent firm's activities. A joint venture perceived as unimportant to the parent organization's strategy will likely yield fewer opportunities for the transfer of joint venture

learning to the parent (Hamel 1991). A joint venture viewed as important may receive more attention from the parent organization, leading to substantial parent-joint venture interaction and a greater commitment of resources to the management of the collaboration. Related to importance is the degree of opposition or resistance to a joint venture. This may play a role in determining how receptive an organization is to new information originating in the joint venture. High resistance may result in the "not-invented-here syndrome" and a resistance to new information (Shortell and Zajac 1988).

Hypothesis 10: The greater the level of strategic importance associated with a joint venture, the greater the level of parent learning efforts.

Hypothesis 10a: The greater the level of strategic importance associated with a joint venture, the greater the parent's learning outcome.

In the joint venture learning framework, the joint venture serves as a conduit for the exchange of important information. To learn through a joint venture relationship, a parent must be involved or integrated with the activities of its joint venture. Thus, the degree to which the joint venture is strategically integrated with the parent organization can impact the exchange of ideas between the joint venture managers and the parent managers (Fiol and Lyles 1985). Hamel (1991) found that firms with a history of cross-functional teamwork and inter-business coordination were more likely to transfer joint venture knowledge to the parent than were firms that emphasized independent business units.

Strategic integration refers to the extent to which the joint venture is integrated with the parent company and shares its overall strategy, goals, and values (Shortell and Zajac 1988). This variable reflects the linkages between the parent and the joint venture senior management. To a large degree, strategic integration is a socialization process and is represented by the transfer of managers between parent and joint venture and through shared teams, task forces, and committees (Ghoshal and Bartlett 1988). In particular, the rotation

of managers through joint venture positions may encourage the "bleedthrough" of ideas (Harrigan 1985).

Hamel (1991, 98) found that "receptivity [to joint venture learning] seemed to thrive as long as top management continued to express an active interest in what was being learned." Harrigan (1985) discussed parent intervention in the decisions and operations of joint ventures and suggested that the strongest integration is necessary when the parent hopes to capture internal benefits involving the activities of its ongoing ventures. New knowledge and skills that are the result of a joint venture's activities constitute one form of internal benefit for the parent. Thus,

Hypothesis 11: The greater the strategic integration between the joint venture and its parent, the greater the parent's learning outcome.

FACTORS OMITTED FROM THE FRAMEWORK

Several contextual factors that may influence the learning process have been omitted from the conceptual framework because of either the increase in complexity that would have resulted with their inclusion or the anticipated difficulties associated with their measurement. Among the factors omitted for complexity and measurement reasons are:

- 1) The strategy of the parent firm - The relationship between the strategy making process and learning was discussed in Chapter 2. Clearly, a firm's strategy influences the learning process. Pfeffer and Salancik (1978), for example, proposed that the necessity for a certain type of information can be considered a function of the organization's strategy. However, decoupling strategy from the learning process in conjunction with the complexity of joint ventures is a very difficult task. Should strategy be measured at the parent level, the joint venture level, or some combination of both? Aspects of parent strategy are discussed in the data analysis sections but a specific strategy variable was not incorporated in the framework.

- 2) **Environmental uncertainty** - The need to acquire new knowledge also may be influenced by external environmental factors and in particular, the uncertainty of the environment (Daft, Sormunen, and Parks 1988; Milliken 1990). An attempt is made to control for environmental uncertainty in the sample selection.
- 3) **The nationality of the partner** - In a joint venture, national culture is an important and complex factor that could influence the joint venture learning process. Hamel (1991), for example, found that Japanese firms often approach alliances with a different learning perspective than Western firms. The cultural factor is also controlled for in the sample selection.
- 4) **Industry preconditions for learning** - The nature of competition in an industry may create a learning imperative, consistent with Hedberg's (1988) statement that learning is triggered by problems. Different industries will create different degrees of learning urgency. This factor is controlled for in the sample selection.
- 5) **Partner Factors** - The framework, while applicable to joint venture partners in general, will be applied to only one side of joint venture relationships. Partner factors such as joint venture objectives and motives, strategic importance, and competitive strategy probably influence the nature of the joint venture relationship. To measure these factors adequately, informants from all joint venture partners would be required. Obtaining data from multiple joint venture parents is beyond the scope of this study.

SUMMARY

The conceptual framework for this dissertation integrated several literatures. The organizational learning literature along with recent strategy literature provided the foundation for the research problem and supported the development of the learning dimensions. The joint venture literature provided the context for the research while the literature on interorganizational relationships helped establish the basis for the interaction aspects of the framework. The interorganizational literature furnished additional support for the framework's contextual dimensions. The various theoretical perspectives were useful in developing a framework of organizational learning and change within a joint venture context. The framework provided the basis for developing a set of working hypotheses and with the hypotheses, represents the research model investigated in this dissertation. The subject of the next chapter discusses the methodology used to investigate the research model.

CHAPTER 4

RESEARCH METHODS

The previous chapter developed a conceptual framework relating the organizational learning process to several sets of organizational factors. Although hypotheses were formulated, they were not intended to put a closure on the types of data and kinds of experiences that would be explored. Accordingly, the goal of the study was both to build and test theories that address the research questions. This section outlines the research methods used in the study. The pilot study interviews described in Appendix I provided the initial input into the development of the methods.

DATA REQUIREMENTS

This study addresses the question of how firms learn through joint venture relationships. The merits of several approaches were considered in evaluating alternative research strategies. A comparative case-based approach would yield indepth data on the process of learning but a small number of cases would provide insufficient evidence of the extent to which joint ventures were used by their parents as learning vehicles. More important, as explained in Chapter 2, questions about learning occurrence and the conditions supporting the learning can best be addressed by looking for covariation between organizational factors and learning variables. However, a mail questionnaire survey, the most efficient method of studying covariation across cases, would not provide the thick

description and anecdotal evidence considered necessary to understand a complex organizational phenomenon like learning.

Thus, this study used a cross-sectional field study incorporating multiple methods of data collection and analysis. The data for the study were collected primarily from two main sources: 1) self-administered questionnaires distributed to senior managers associated with joint venture firms and 2) field interviews with those and other managers. Data also were collected from annual reports and newspaper and magazine articles.

A multimethod research design was chosen for several reasons. First, one method of measurement was not considered appropriate for all the constructs in the research model. For example, information such as the motivations for forming the joint ventures, expectations about partners capabilities, and joint venture stability could be collected most thoroughly using interviews. Conversely, various organizational variables could be measured efficiently with questionnaires.

Second, the two data collection methods allowed descriptive realism to be combined with the data that would be used to test the hypotheses (Brewer and Hunter 1989, Lee 1991). In presenting the results, examples will be used extensively to illustrate the various findings. Generating multiple data-sets about the same research problem allowed flexibility to be incorporated in the research design, particularly with respect to the use of field interviews.

Third, participation rates for other research studies using interview-based approaches have been much higher than those using exclusively mail questionnaire-based research (e.g., Calof 1991; Geringer 1988)¹. It was anticipated that issues of learning associated with

¹Several informants explicitly mentioned that they were surprised I was willing to visit their company. Their prior experience with organizational researchers had been via questionnaire surveys.

parents and their joint ventures would be a sensitive topic for some firms, especially when learning efforts were perceived as unsuccessful. Interview approaches enhance the development of trust between researcher and subject and therefore, increase the likelihood of addressing sensitive topics (Wright, Lane, and Beamish 1988). Finally, the use of multiple measures and methods increased the validity of the research model.

An important tradeoff in field-based interview approaches is the limit on sample size relative to mail questionnaire designs. However, because access to qualitative data was considered an essential element in the study, the limitations on sample size were not considered a serious problem. The key research objectives required an understanding of various organizational processes that could not be captured using a questionnaire exclusively². Thus, it was concluded that a combination of questionnaire and interview methods would allow an efficient and systematic approach to the research problem.

DATA SOURCES

There were two main considerations in identifying an appropriate sample of firms involved in international joint ventures. One, there was limited research in the area of organizational learning in a joint venture context. Consequently, generalization across a variety of organizational forms and contexts was not an objective. Two, selecting a sample that is heterogeneous with respect to characteristics affecting the phenomenon of interest may pose a threat to validity (Cook and Campbell 1979). Therefore, given the complexity of the learning process, macro environmental factors at the industry level that might influence the learning process were controlled in the sample selection.

²See Greenwood, Hinings, and Brown (1990) for a recent study combining a qualitative research design phase with a more structured quantitative procedure.

Based on these two considerations, a single industry was used as the primary source of sample firms. Using a single industry with a homogeneous set of organizations imposes certain constraints; in particular, theory development is restricted to limited domain or middle-range theories (Pinder and Moore 1980) and generalizability is limited to other industries sharing similar structural characteristics. A single industry does, however, provide a greater degree of control over market and environmental peculiarities (Conant, Mokwa, and Varadarajan 1990) and increases the internal validity of the study. Therefore, given the study's objectives and research questions, a single industry was deemed appropriate.

The North American automotive industry at the supplier level and its large number of North American-Japanese joint ventures was selected for this study. The focus was on the North American firms involved in the joint ventures. This automotive supplier industry met two important criteria. First, the industry was undergoing significant structural change. Firms in an industry experiencing structural change may be under pressure to learn new skills and capabilities. Kogut (1988) asserted that organizational learning may explain joint ventures in industries undergoing rapid structural change, whether the result of new technologies or the entry of foreign firms. Therefore, an industry that has experienced major transitions provides a meaningful context for the study of organizational change (Ginsberg 1990) and learning. The second criterion was sufficient joint ventures within the industry to provide an adequate sample.

The Automotive Industry

The primary impetus for much of the change in the North American automotive industry was the emergence of the Japanese car producers as leading international competitors. In 1981, there were no Japanese assembly plants in North America. By 1991,

there were nine Japanese-operated assembly plants in the United States and three in Canada. These plants produced 1.78 million units in 1990, more than 20 percent of total North American production (Miller and Winter 1991).

By the end of 1990, the North American Japanese assembly plants, or Japanese original equipment manufacturers (JOEMs), had combined capacity in place or announced to make 2.3 million vehicles per year. The JOEMs, plus imports from all countries, accounted for more than 40 percent of units sold in North America. With the growth in JOEM capacity, some industry observers were projecting that North American automobile capacity could exceed demand by three million units or more during the 1990s (e.g., see Smith 1989).

Industry observers had started referring to the three largest Japanese companies in North America, Honda, Nissan, and Toyota, as the "other Big 3." These companies were steadily becoming full-fledged North American producers capable of designing, engineering, and assembling vehicles entirely in North America. Toyota, for example, had an objective of 75 percent North American content in its cars by 1992. Nissan was in the process of completing a modern engineering center near Detroit that would employ 600 by 1992. Honda was sourcing about 75 percent of its parts and components and 25-30 percent of its tooling and equipment in North America. In 1990 Honda, for the first time, sold more cars in North America built domestically than imported from Japan.

Automotive Suppliers

In the initial years of the automobile industry, carmakers tried to produce as many parts in-house as possible. By the 1950s, outsourcing of parts from independent suppliers had become commonplace. Suppliers were given blueprints and asked to bid on parts

contracts. The lowest bidder generally was awarded the contract, usually for one year (although usually the contract would be extended). By the 1980s, the world's automobile companies were all using outsourcing to some degree. General Motors was the most integrated company with 70 percent of its parts made in-house. Saab, on the other hand, made only 25 percent of its own parts (Womack, Jones, and Roos 1990, 139).

In the 1980s, the North American companies continued to increase their outsourcing. As well, they made substantial cuts in the number of suppliers they dealt with. The supplier-manufacturer relationship began a shift to a structure based on tiers of suppliers. The first tier suppliers dealt directly with the vehicle manufacturers and increasingly, participated jointly in the design of new systems and parts. The first tier suppliers coordinated the operations of many smaller second tier suppliers; the second tier suppliers in turn worked with their sub-suppliers. The advantage of this multi-layer approach, used by the Japanese producers for many years, was that automakers could deal with a limited number of companies and work closely with them in design and engineering.

Besides the trend toward outsourcing and multi-tiered supplier arrangements, several other trends characterized the supplier industry of the late 1980s. One, automakers were pushing their suppliers toward just-in-time (JIT) delivery systems and increased investment in design and engineering capabilities. Two, mergers were becoming prevalent in the supplier sector, largely because of the heavy demands for research and development, new equipment, and employee training. Finally, of direct importance for this research, suppliers were moving away from their traditional focus on home markets toward foreign investment. Specifically, more than 250 Japan-based supplier firms had operations in North America and most had arrived in the 1987-88 period.

Hoffman and Kaplinsky (1988) identified several reasons to explain the movement of Japanese automotive suppliers to North America. First, the JOEMs had very well-established domestic supplier groups used to working in a strict JIT environment. Following the JOEMs to North America "fit the logic of JIT production" (Hoffman and Kaplinsky 1988, 293). Second, the movement helped to offset increasing protectionist sentiment against "screwdriver" assembly plants. Finally, investing in North America was part of the strategic thrust of internationalization for the Japanese automotive suppliers. For many Japanese suppliers, the thrust focused on both JOEMs and domestic automakers (i.e., General Motors, Ford, and Chrysler).

With the domestic OEMs under pressure from Japanese automakers, North American suppliers have found their traditional customer base shrinking. This situation, coupled with increasing foreign investment, had created increasingly difficult competitive conditions for North American automotive suppliers. A senior manager in a U.S. component supplier described the new environmental conditions in the industry:

The next five years are going to be horrible. With the new Japanese companies coming in, with peripheral capacity, and with component integration and the car companies all chasing the same market . . . a lot of suppliers are going to fall out (Smith 1989, 37).

Japanese Joint Ventures

Japanese investment in the North American automotive industry included a large number of Japanese-North American joint ventures. Most of these ventures concentrated on joint manufacturing activities (Womack 1988); few involved basic or applied research or the introduction of new types of products with new technologies. The joint ventures were primarily at the manufacturing end of the research-development-manufacturing continuum and

involved the transfer of management methods from one location to another (Womack 1988, 329).

From a North American perspective, a market access objective was the explanation usually suggested for the large number of automotive supplier joint ventures. North American firms wishing to supply JOEMs faced formidable barriers. They were often unfamiliar with the rigors of Japanese JIT systems, demands for flexible production, and OEM expectations regarding supplier involvement in product development. A further problem was that unlike the North American companies Japanese automakers rarely changed suppliers. For example, Toyota's supplier base had remained almost unchanged since the 1950s. Many Japanese suppliers were partially owned by the automakers and therefore had a stronger relationship than a typical North American supplier-manufacturer relationship. The president of Nissan's U.S. operations explained:

Nissan's mix of U.S. suppliers and Japanese suppliers is not likely to change much. Given our philosophy, once you become our supplier you're our supplier forever on that part, unless you mess up so bad we can't fix you (Miller and Winter 1991, 29).

Given the Japanese practice of close relationships between supplier and assembler, North American firms struggled to penetrate the JOEM systems. One means of overcoming the barrier of the Japanese group system was to form a joint venture with a Japanese firm that had a longstanding relationship with the JOEMs. The joint venture gave the North American supplier access to the Japanese assemblers that would have been difficult to develop without the Japanese connection.

The joint venture also provided the means for an exchange of skills and knowledge between the partners, a factor anticipated to be an important motivating factor in the formation of Japanese-North American joint ventures. In cases where JOEM access was not

a joint venture objective for the North American firm. the exchange of knowledge was potentially the primary motivating factor.

The Japanese joint venture partners also benefited in terms of access to the North American JOEMs. While in many cases the Japanese partners had market access by exporting from Japan, the North American location facilitated better customer service and reduced foreign exchange risk. A link with a North American firm could also help achieve the Japanese firms' goals of selling to the North American OEMs. Like the North American penetration of the JOEM market, Japanese access to the domestic Big 3 had been slower than anticipated.

Sample Selection

The focus of this study was on the North American side of Japanese-North American joint ventures. A sample of 30-35 joint ventures was sought. This number was a function of the resources available for the research and the logistics of conducting the research. The primary emphasis was on single informants (the informant strategy is discussed in detail in the next section) supplemented by multiple informants in a subset of cases. The objective was to conduct 40-45 field interviews and collect questionnaire data from 30-35 joint ventures.

The development of the research sample involved several steps. First, a Toronto-based organization called *Pacific Automotive Cooperation (PAC)* was contacted. *PAC's* mission is to introduce North American and Japanese joint venture partners and to promote Japanese investment and the purchase of Canadian-made parts by Japanese automakers. *PAC* monitors and tracks Japanese automobile-related investment in North America. *PAC* also helps firms learn about Japanese management through workshops on topics such as total

quality control and continuous improvement. *PAC* agreed to supply a list of Japanese auto-related investments in North America. The *PAC* list included both wholly-owned Japanese firms and Japanese-North American joint ventures.

The *PAC* list had several categories of manufacturers: 1) auto parts (components such as brakes, mufflers, seats) and 2) automotive materials (such as glass, paint) and 3) machinery manufacturers. To ensure a large enough sample size and to have a representative sample of firms in the automotive industry, auto parts and materials manufacturer joint ventures were used. Both supplied the auto industry and were under similar types of environmental pressures.

Next, qualifying joint ventures were identified from the *PAC* list. The following attributes were considered essential for the research sample:

- 1) The joint venture had a Japanese and a North American partner³.
- 2) The joint venture was located in Ontario; United States midwest (Ohio, Michigan, Illinois, and Indiana) and United States upper south (Kentucky and Tennessee).
- 3) The start of joint venture operations was no earlier than 1985 and no later than January 1990 (the 1990 start would ensure that all joint ventures had been in operation at least one year before data collection).
- 4) The venture had only two partners⁴; each partner had a joint venture equity interest of at least 20 percent.
- 5) At a minimum, the joint venture was involved in manufacturing.

³Although there were two Canadian partner firms in the sample, for brevity I will use "American" rather than "North American" in future references to the sample of firms.

⁴This criterion was relaxed for two of the cases which had additional Japanese partners for investment purposes only. In all cases, the sample joint ventures had only one North American partner and only one Japanese partner involved in joint venture management.

The restricted scope for joint venture location was chosen primarily for logistical reasons. By selecting joint ventures no older than six years, it was hoped that managers involved in the joint venture formation would still be involved in joint venture management. The start of operations was used instead of the date of joint venture formation because often there is a significant lag between the announcement of venture formation and the start of operation. The number of partners was restricted to two because of the complexity of joint ventures with more than two partners. A minimum ownership criterion of 20 percent was selected as representative of a significant interest in the joint venture management.

After identifying the qualifying joint ventures from the *PAC* list, two other sources were used to ensure completeness. The first was *UMI's Business Dateline* CD-ROM. *Business Dateline* is a comprehensive collection of regional business publications in Canada and the United States. Articles are stored in full text and are accessed using key word searches. The second additional source was *Ward's Auto World*, a monthly publication that incorporates a summary of automotive supplier firm activities (e.g., joint ventures, acquisitions, mergers).

From the three sources, 54 joint ventures meeting the specified criteria were identified. The next sections consider the rationale for selecting and contacting informants.

INFORMANT STRATEGY

This study focused on North American joint venture parent organizations and their learning experiences in a joint venture context. Given that a cross-sectional research approach was selected, two key issues emerged: 1) should single or multiple informants be used? and 2) which informants best represented organizational traits given the specific research questions?

Glick et al. (1990) considered the advantages and disadvantages of multiple informants in organizational research. Using multiple informants allows the validity of data from one informant to be checked against that provided by other informants and facilitates the resolution of discrepancies in informant reports. When employing multiple data collection methods, the use of multiple informants reduces the threat to internal validity due to common methods variance⁵. However, Glick et al. (1990, 304) also identified disadvantages associated with multiple informants, including:

1. Organizations tend to decline to participate when asked to provide seemingly redundant information as a validity check on the most informed informant's report.
2. Informants may be less inclined to participate knowing that they are only one of multiple informants.
3. Informants may withhold information that they view as confidential in the fear that their confidentiality may be breached in interviews with other informants.

In this study, a variant of a key informant strategy was used. For most sample joint ventures, a single informant was used. For a subset of cases, multiple informants were used to ensure that a more complete representation of organizational processes could emerge. The objective of using multiple informants was not to cross-validate informant reports. Instead, the main objective was to supplement the single informant cases with more indepth description in a limited number of cases. Where multiple informants were used, the issue of collecting redundant information was not a problem because the informants were at

⁵Informants may provide responses to the two methods that are cognitively consistent and exhibit a characteristic bias. To the extent that there is a common bias in the responses of the informants, the patterns of relationships in the variables may be influenced by the managers' cognitive maps.

different levels in the organization. The use of multiple informants helped to eliminate single source bias in the predicted relationships and allowed more detailed data to be collected.

A related concern was who should be the informants. Since the research focus was the learning organization, the ideal informants would be managers who could provide the parent organization's perspective and were involved in joint venture management. Several factors important for the subset of cases involving single informants were identified. Ideally, each informant would be:

- 1) Involved in operational and strategic management of the joint venture.
- 2) Familiar with the reasons for the joint venture formation.
- 3) Closely associated with the American parent organization.
- 4) Regularly interacting with the Japanese joint venture management.
- 5) Assigned by the American parent to the joint venture.

The informant best satisfying the criteria was the joint venture president or general manager. Since the joint venture president or general manager could be from the Japanese joint venture partner, the senior American manager in the joint venture was utilized as the key informant. In the majority of cases, this manager was the joint venture president, general manager, or vice president who had been assigned to the joint venture by the American parent.

Since a key objective of the study was to assess learning at the parent level, an argument could be made that parent managers would be more appropriate as informants. There are several reasons why joint venture managers were chosen. One, joint venture president\general managers represent the primary conduit for the transfer of knowledge between the joint venture and the parent. Since joint venture managers are the first to be

"transformed," it would have been difficult to evaluate the presence and extent of learning without interviewing managers at this level. Two, as the managers at the interface between the parent and the joint venture partner, these managers were considered the most knowledgeable about partner relationships. As Geringer and Hebert (1991) concluded from their study of joint venture performance, utilization of the joint venture general manager constituted a reliable source of data. Specifically, they found that the general manager could provide reliable data not only on each parent's satisfaction, but also on how each parent perceived its partner's satisfaction with venture performance. Three, identifying single key informants in the parent organizations who met criteria one through four identified above would have been very difficult. Finally, as the senior American managers in the joint ventures, these managers would likely be knowledgeable about organizational processes (Snow and Hrebiniak 1980; Zajac and Shortell 1989) and could assess the importance of processes from a strategic perspective (Glick et al. 1990).

A further reason for using joint venture managers was that given the sensitivity of the information, these managers were expected to be more cooperative than more senior managers at the American parent level. The data confirmed the expectations concerning information sensitivity. Overall, the joint venture managers were very knowledgeable about the joint ventures and the joint venture-parent relationships. In cases where multiple informants were used, the joint venture managers were generally more cooperative and candid about the joint venture situation⁶.

⁶A possible reason for the greater cooperation at the joint venture level is that many of the joint ventures were performing below expectations. Given that most of the American parents viewed their Japanese joint ventures as strategically important, parent managers may have been reluctant to candidly discuss a poor situation for which they were held accountable.

The second set of informants for cases with multiple informants included American parent managers associated with the joint venture. These managers were less knowledgeable about day-to-day operations but could provide additional insights into areas such as the relationship between the joint venture and the American parent and the original motivations for the joint venture formation. These managers also were more difficult to identify than the joint venture managers and less accessible since they were usually very senior individuals in the parent companies.

RESEARCHER ACCESS

The initial step in gaining access to the research sample was to identify the names of the joint venture and parent company managers who would be contacted (see Appendix 2 for a summary of the pre-interview procedures). Most joint venture addresses and telephone numbers were supplied with the *PAC* list. To identify missing joint venture addresses and telephone numbers, I checked various industry directories such as *Dun and Bradstreet*. I then telephoned the joint ventures and asked for the names of the general manager or president. If that individual was Japanese, I asked for the name of the senior American manager in the joint venture. The parent company managers were identified through telephone calls, various industry directories, and the joint venture manager interviews.

Initial contact with the sample firms was made with a letter of introduction that briefly outlined the proposed research (Appendix 2). Confidentiality of responses was emphasized and participants were promised a summary of the study's results. Except in one case, the joint venture managers were contacted before contacting the parent managers.

Contacting the managers generally took several telephone calls but once contacted, they usually expressed an interest in the research study. After participation in the study was

obtained, the manager was sent a confirmation letter (Appendix 2) with the self-administered questionnaire. The questionnaire was designed to provide background information on the joint venture and to complement the data collected in the interview. Informants were requested to bring the completed questionnaire to the interview. The interview was scheduled for approximately one hour with the expectation that most managers would be willing to extend the interview.

A participation rate of about 65 percent was considered realizable based on the results of other studies using similar methodologies. All 54 companies from the list of automotive parts and material supplier joint ventures were contacted. The participation characteristics are shown in Table 4-1. Of the 54 organizations contacted, three did not qualify for the study (e.g., one firm was a joint venture between an American company and a Japanese-American joint venture). Of the 51 qualifying joint ventures, nine (17.6 percent) refused or were unable to participate. Overall, the study achieved a response rate of 82.4 percent (42 out of 51 qualifying organizations).

TABLE 4-1
Participation Characteristics of the Research Sample

Number of Companies Contacted	54
Number of companies which did not qualify for the study	<u>-3</u>
Number of qualifying companies contacted	51 (100.0%)
Number of companies unable or unwilling to participate	<u>-9</u> (17.6%)
Number of companies participating	<u>42</u> (82.4%)

ANALYTIC VARIABLES AND INSTRUMENTATION

This section discusses the primary analytic variables and their instrumentation. Because the use of a multimethod research design allowed for flexibility in data collection, the data collected were not confined solely to the conceptual model developed prior to data collection. To do so would have been unnecessarily restrictive and would have been inconsistent with the objectives of the field interview approach.

Several points with regard to variable measurement must be emphasized. The first is the non-linear nature of research involving field interviews and qualitative data. While the conceptual framework provided the basis for measurement, it was not possible to understand the richness of organizational processes prior to experiencing them in the field. Thus, there are instances where variable measurement was an iterative process that continued to evolve throughout data collection. This iterative approach is typical of field-based research⁷. In this section, the "evolved" operationalizations are discussed. The later section on data analysis provides a clearer picture of how interview data unfolded into categories and classifications.

The second point is that data outside the bounds of specific measures were also collected. This data, the so-called thick description, provides the lens of reality considered essential for the interpretation and understanding of organizational processes. As data analysis is presented in later chapters, several post hoc analytic concepts that emerged over the course of the data collection are introduced. In the concluding sections of the dissertation, the conceptual framework is integrated with the research findings and a revised model is proposed.

⁷For example, Glick et al. (1989) used a coding scheme that was partially defined a priori and partially developed post hoc.

Finally, concerns of measurement validity were addressed where possible with multiple data gathering techniques. Specifically, the use of interview and questionnaire data allowed the constructs to be tested for construct validity. In all instances, the classification of interview data was done independently of the questionnaire. Because the questionnaire data were not examined until the interview data had been coded and classified, interviews could not be used to confirm questionnaire responses. A potential source of bias may exist if the informant answered interview questions based on responses to the questionnaire questions. To alleviate this problem, similar to Cook and Campbell's (1979) discussion of testing as a threat to internal validity, interview questions were phrased differently from questionnaire questions. In addition, the questionnaires were usually completed several days earlier than the interviews.

The Learning Variables

The joint venture learning process involves the generation and transfer of knowledge emerging from the interactions between the joint venture partners. The two key features of the learning process are the learning efforts of the parent firms and the learning outcome represented by internalization of joint venture partner capabilities. The learning outcome is based on the notion that learning occurs when a firm increases its range of behaviors through the processing and interpreting of information (Huber 1991). While learning and action are not synonymous, it is useful to think that learning will ultimately be reflected in an enhancement of an organization's skills at its current activities.

Unfortunately, this view of learning posed a methodological dilemma: How could aspects of organizational learning be measured when the learning outcome may reside within the minds of an organization's managers? Even if learning is reflected in organizational

change, pretest data suggested that looking for specific changes associated with the acquisition of joint venture-derived information would be difficult because of time lags between information acquisition and its utilization⁸.

The literature on organizational learning provided no simple solution to the dilemma. Most empirical studies incorporating measures of organizational knowledge states are from an economics perspective. These studies often measure knowledge with single variables, usually associated with a firm's R&D spending. As Winter (1987) observed, the theory and evidence from these studies is generally at too aggregate a level to be of use for strategic analysis. Other process-oriented studies (e.g., Burgelman 1983, 1988; Lyles 1988; and Quinn 1980) used longitudinal research designs with indepth interviewing and small samples. While uncovering aspects of the learning phenomenon, these studies have not yet contributed a systematic approach to the measurement of learning. The key contribution of these studies is their emphasis on the process aspects of learning as an alternative to rational choice assumptions of strategic behavior.

Consistent with the multimethod and exploratory nature of this study, several measurement approaches were used. Measures of the efforts to initiate learning and the learning outcome were included in the study. Learning efforts undertaken by the learning organizations was measured using interview data. The learning outcome was more problematic. Because of the time lag problem, interview data were used as the basis for the measurement supplemented by validity tests utilizing questionnaire data.

⁸Along similar lines, Lee and Allen (1982) found considerable time lags associated with the integration of new technical staff and new process and product developments.

Learning Efforts

In the joint venture context, knowledge outputs directly associated with the joint venture experience cannot occur without attention to the process of transferring knowledge from the venture to the parent. Joint venture parents can engage in a variety of actions designed to transfer knowledge from the joint venture to the parent. Therefore, the efforts undertaken to facilitate knowledge transfer provide an indication that the learning process is occurring between a firm and its joint venture. The learning efforts represent the strength or intensity of the learning initiative. As discussed in Chapter 2, an assumption was that by purposefully engaging in these actions, firms greatly increase the probability that their joint ventures will generate new knowledge and contribute to the parent's knowledge base.

Based on the interview data, the efforts used by the American parent to transfer joint venture knowledge were examined. Since the knowledge is assumed to originate within the Japanese partner, the objective was to find evidence that the American partner was using the joint venture relationship as a learning experience. Various actions by joint venture parents facilitate learning. Several of these actions were identified from the joint venture literature and others from the pilot and pretest interview data. For each learning action, a case was scored as either 1 (occurring) or 0 (not occurring). The actions, summed to yield a score ranging from 0 to 5, included:

- 1) Rotation of American parent personnel to the joint venture and back to the parent with the intention of transferring knowledge.
- 2) Regular visits and tours by parent company executives.
- 3) Information sharing between the joint venture and the American parent.
- 4) Senior American parent management involvement in joint venture activities.

5) Utilization of the joint venture relationship to develop closer ties between the American parent and the Japanese parent.

The five actions were used as indicators of the American partner's learning efforts (see Table 4-2 for a summary of the variables). The first three actions may reflect an explicit attempt by the parent to transfer knowledge⁹. Although the latter two may not necessarily be put into place with an explicit learning objective, they reflect critical parent activities that should improve the potential for a transfer of knowledge. For the fourth action, it is recognized that while operating employees play a vital role in acquiring knowledge senior management must be involved in and committed to the learning process if the parent is to internalize a partner's skills (Hamel, Doz, and Prahalad 1989). The fifth action, utilization of the venture relationship to develop closer ties with the partner, reflects a firm's efforts to get access to the partner's operations.

It is important to note that each learning action is scored as one. Since the various actions probably influence the learning process differently, the relative learning impact of each action may be an important factor. For instance, rotation of personnel may be a more effective learning action than visits and tours by parent managers. However, given the nature of the learning process and the complexity of the learning outcome, it was not possible to determine the learning effectiveness of the various actions.

As a test of the convergent validity of the learning efforts measure, the scores were correlated with questionnaire responses to the question "Please indicate the extent to which the North American partner aggressively tries to learn from its joint venture partner" (7-point scale ranging from "not at all" to "to a great extent"; see Appendix 3 for the complete

⁹The actions may also be motivated by control, as opposed to learning objectives.

TABLE 4-2
Variable Measurement

Learning Variables

Learning Efforts	the actions taken by the American parent to facilitate the transfer of knowledge between the joint venture and the parent; 5 dichotomous items summed to yield a score ranging from 1-5.
Learning Outcome	the extent to which the American parent recognizes the learning opportunity and has internalized joint venture-derived knowledge; interview data classification; 3 categories: non-learning organizations, moderate learning organizations, and learning organizations.

Parent Firm Context Variables

Learning Intent	the presence of a learning intent when the joint venture was formed; interview data classification; 9 categories incorporating process technology, product technology, and management know-how; collapsed to 3 categories for analysis.
Joint Venture Learning Potential	the degree to which the American partner believed there was a potential to learn from its joint venture partner when the joint venture was formed; questionnaire measure; 9 areas of competency; 5-point scales summed.
Prior experience	1) the American partner's prior experience with joint ventures; dichotomous variable: no experience, experience. 2) prior relationships with the joint venture partner, dichotomous variable: no relationship, prior relationship.

Joint Venture Context Variables

Trust	trust between the joint venture partners; questionnaire measure; 3 items, Alpha = .84.
Openness	the openness in the relationship between the partners; questionnaire measure 3 items; Alpha = .83.

TABLE 4-2-Continued

Intensity	the frequency and volume of interactions between managers from the partner organizations; questionnaire measure; 7 items indicating frequency of communication between partner managers.
<i>Joint Venture Centrality</i>	
Strategic Integration	the strategic relationship between the joint venture and the American parent; questionnaire measure; 5 items; Alpha = .65.
Strategic Importance	the strategic importance of the joint venture; questionnaire measure; 1 item.

questionnaire). As expected, the Spearman rank-order correlation¹⁰ between learning efforts and the questionnaire response was positive and significant ($r = .58, p < .001$).

Learning Outcome

As opposed to learning efforts, which indicates the strength of the learning initiative, the learning outcome measure provides an indication of the effectiveness of the learning initiative. However, given the lag between knowledge acquisition and organizational change, the two variables overlap conceptually because both address the question of learning occurrence. Learning outcome differs in that it explicitly focuses on the parent's recognition of the learning opportunity.

Interview data were used as the primary measure of learning outcome. The method of classification or coding relied on detailed accounts by managers about their businesses (Hallen, Johanson, & Seyed-Mohamed 1991 used this approach to measure firm adaptation). Organizations were classified into three categories or ranks: non-learning organizations,

¹⁰Unless otherwise indicated, correlations are Spearman rank-order correlations.

moderate learning organizations, and learning organizations. The classification process took place throughout the data collection, and the American parent firms were classified on the basis of informant reports on the extent to which the parent company was using the joint venture as a learning opportunity. Unlike learning efforts, identifying specific actions was not the objective. Instead, informants were asked questions such as (see Appendix 4 for the complete set of questions):

- 1) What do you think is different in terms of the Japanese partner's organization and management?
- 2) Are those differences applicable in the parent organizations?
- 3) Do parent managers recognize the differences between the joint venture and the parent?
- 4) Has the parent made any specific changes because of the joint venture experience?
- 5) Does the American parent have a learning focus in its management of the joint venture?

Specific reference to learning is unusual in organizational learning research. Rarely have informants been asked explicitly about learning in their organizations (see Boal and Bryson 1987 for an exception). For this study, drawing on the pilot and pretest interviews and Hamel's (1991) study, several expectations were present:

- 1) Learning would be an explicit joint venture objective in many cases.
- 2) Joint venture managers would be expected to act as the learning interface between the parent and the joint venture.
- 3) Given the context of the research, learning would be a familiar concept to the informants.

As a test of the convergent validity of the learning outcome measure, the questionnaire included questions concerning the extent to which the American parent had learned from its involvement in the joint venture in the areas of general management,

marketing-selling, distribution, product R&D, engineering, production-operations, and human resource management (5-point scales ranging from "not at all" to "to a great extent"). These areas were based on the set of distinctive competence areas developed by Snow and Hrebiniak (1980). The responses were summed and divided by 7 to yield a measure of learning outcome. The correlation between the interview learning classification and the questionnaire measure of learning outcome was positive and significant ($r = .37, p < .05$).

As a second test of convergent validity, informants were asked to indicate the usefulness of the joint venture as a learning experience for the North American parent (7-point scale ranging from "strongly disagree" to "strongly agree"). As anticipated, responses to this question correlated positively with the interview learning classification ($r = .46, p < .01$).

Parent Firm Context Variables

The parent firm context variables capture the variables pertaining to the parent's initial joint venture involvement. They include the learning intent of the American partner, the learning potential anticipated from the joint venture experience, and the prior experience of the parent firm.

The assumption was that the learning intent would be established prior to an assessment of the joint venture learning potential. An argument could be made that learning potential precedes the learning intent and that in the absence of learning potential, there will be no learning intent. However, the pretest indicated that the learning intent was generally formed in the absence of specific expectations about skill differences between the partners. Thus, judgements about learning potential were probably made subsequent to the establishment of a learning intent.

Learning Intent

Kogut (1988) observed that only a few studies have addressed the frequency and motivation for the formation of joint ventures. Of those, secondary data have generally been used. For instance, Osborn and Baughn (1990) suggested that the selection of a governance form for multinational alliances was influenced by technological factors and parent size. However, because secondary data were used, the motives in forming alliances were based on announced intentions and not organizational data.

Since questions of intent deal with the joint venture formation, informants may be inaccurate in their reconstruction of the past. For example, the actual outcome of the learning process may be attributed to a strong initial learning intent when in fact there was none. Conversely, a strong learning intent may be ignored in situations where learning did not occur. To help control for this type of attributional bias, Huber and Power (1985) emphasized the need to probe informants to ensure accurate recollections.

Thus, learning intent was measured using interview data. Questions were asked about the reasons for the formation of the joint venture and the extent to which initial motives changed after the joint venture was formed. Following the data and the strategy literature (e.g., Porter 1985; Burgelman and Rosenbloom 1989), three intent categories were used: management know-how learning intent, process technology learning intent, and product technology learning intent. Consistent with the literature, managers tended to classify American firms' learning intent as involving either management know-how or technology¹¹.

¹¹Hamel (1991) made a distinction between technology and competence. The terms management know-how and technology were considered preferable because the competences usually encompasses technological areas.

A management know-how learning intent involved areas such as marketing and distribution and meeting the needs of a different customer base such as JOEMs; human resource management and alternative work systems; the management of quality; the management of product changeovers; and the development of a strong supplier-manufacturer relationship for joint product design.

Some of the management learning intent areas are technology related. In making the classifications, an attempt was made to incorporate the tacitness of the knowledge and the ease of transfer between firms. While a corporate focus on quality is directly associated with the manufacturing process, a philosophy that revolves around customer satisfaction and quality cannot be transferred without direct experience with the partner organization.

For the process and product technology distinction, Porter (1985) argued that firms often incorrectly assume that process technological change is exclusively cost-oriented and product technological change is differentiation oriented. Consistent with Porter's argument and the data, a process technology intent focused on expertise\skills related to manufacturing and the transformation processes. Some of the implications of process technology learning are faster response time to customer orders, reduced labor output, simplified manufacturing, and improved logistical requirements. To determine the extent of a process learning intent, I asked questions such as:

- Was the American partner seeking to change the way it produced its existing product line?
- Did the American partner view aspects of the Japanese partner's manufacturing process technology as different from its own?
- Did the American partner view the Japanese partner as superior in its manufacturing process technology?
- Did the joint venture "clone" the Japanese partner's manufacturing process in the joint venture?

A product technology intent focused on technology related to the enhancement of product quality and features for existing target segments. It also included the improvement or change of product design to target additional product segments. Questions included:

- Was the American partner seeking access to the product line of its partner for the development of new products or the modification of existing products?
- Was the Japanese partner's product line viewed as superior to its own?

Based on the interview data, the cases were classified as one of:

- 1) No learning intent
- 2) Process Technology learning intent
- 3) Product Technology learning intent
- 4) Management learning intent
- 5) Process and product technology learning intent
- 6) Process technology and management learning intent
- 7) Product technology and management learning intent
- 8) Product technology, process technology, and management learning intent

As a test of the convergent validity of the learning intent classifications, the questionnaire included the question "How much do you agree with the following statement: One of the North American partner's objectives in forming the joint venture was to learn something, e.g., an unfamiliar market, technology, or management technique?" (7-point scale, ranging from "strongly disagree" to "strongly agree"). After collapsing the learning intent classifications into three categories (no intent, moderate intent, strong intent), the measure correlated positively with the questionnaire responses ($r = .30, p < .05$).

Further examination of the data identified two significant outliers. For both cases, learning intent was classified as "no intent" and the informant recorded a score of 6 on the 7-point scale. Both joint ventures were outside the parent's main product lines and both operated very autonomously from the American parent. The interviews indicated that the

joint ventures were formed largely because the parent wished to be in a new business but did not have the necessary capital or technology. The parent wished to "learn" a new business but did not seek a transfer of knowledge from the joint venture to the parent. After eliminating the outliers, the correlation was .39 ($p < .01$).

Joint Venture Learning Potential

To measure the learning potential associated with the skills or competencies of the Japanese partner, the questionnaire considered the degree to which the North American partner believed there was a potential to learn from its joint venture partner when the venture was formed. The measure was based on the competency areas used to measure learning outcome. Informants indicated learning potential for seven areas on a 5-point scale ranging from "low potential" to "high potential". The scale also incorporated a "not applicable" category. The objective of this measure was to assess the partner's skills in terms of the potential for learning. The measure provides an indicator of the perceived symmetry between the partners' skills at the time the joint venture was formed.

Prior Experience

Two aspects of prior experience were measured: 1) prior experience with joint ventures and 2) prior relationships with the joint venture partner. Based on data collected on the type of joint venture experience for the American parents, the parents were classified as either experienced or not experienced in joint ventures. Previous participation in either domestic or international joint ventures resulted in a classification of joint venture-experienced. Otherwise, the parent was classified as not experienced. For partner relationship experience, managers were questioned about the type and extent of prior relationships between the joint venture partners. Because of the various types of previous

relationships, a dichotomous (yes-no) variable was used to classify the American parents.

Joint Venture Context Variables

Variables associated with the joint venture context reflect dimensions of the joint venture activities. These variables capture the situational conditions and characteristics surrounding the joint venture relationship. The variables include trust, openness, and intensity.

Trust

The trust measure drew on Anderson and Narus' (1990) study of marketing channel partnerships and Beamish's (1988) study of joint ventures in less-developed countries. The measure has three items; an example from the scale is "The North American partner can rely on its joint venture partner to abide by the joint venture management agreement" (7-point scales). The Cronbach's alpha for the scale was .84. A potential limitation of the trust measure is its focus on trust as a current state rather than trust at the time of joint venture formation.

Partner Openness

Partner openness was measured using a new scale developed for this research. The scale has three items including "The Japanese partner willingly shares information" and "The relationship between the partners is open and informal" (7-point scales). The Cronbach's alpha for the scale was .83.

Intensity

The intensity of partner interactions is concerned with frequency and volume, that is, how much effort the partners put into their cooperative relationship. Ideally, this measure

should capture the frequency of specific exchanges between the partners. The major drawback in measuring an exchange process is trying to delineate the various communication points in the joint venture relationship.

Data collected at the individual level provide the best available evidence of interorganizational processes (Hage 1967). Therefore, since it was not possible to identify or contact all interacting managers in the joint venture relationships, an individual measure considered representative of the intensity of the partner interactions was used. Although the measure reflects the nature of the interactions between only one manager in the joint venture, this manager is the senior American joint venture manager. Therefore, the measure should represent the overall interactions between the partners, at least at the operational level. The measure is based on questionnaire responses to the question "How often do you communicate with the following individuals?" The individuals were:

- The Japanese managers in the joint venture: General management, marketing-sales manufacturing, finance
- Joint venture board members from the Japanese partner who are not managers in the joint venture.
- Individuals working with the Japanese partner who are not joint venture board members.

The question had five categories: daily communication, weekly, monthly, quarterly, rarely\never plus a not-applicable section. Daily communication was scored 5, weekly 4, and so on. An average within-joint venture score was computed using the four joint venture manager categories. This average score was added to the other two outside-joint venture communication points to yield a measure of interaction frequency. A potential problem with the measure is that equal weighting is given to the various communication points. However, that should not be a serious problem if the measure is treated as a ranking measure rather than an interval measure.

Joint Venture Centrality Variables

Strategic Integration

The strategic integration variable measures the strategic relationship between a firm and its joint venture. Following the discussion by Shortell and Zajac (1988), a five item scale was developed to measure strategic integration. The emphasis was on the parent's role in the decision-making processes of the joint venture. If the parent plays a minor role, the strategic integration of the joint venture with its parent will be minimal. Examples of the scale items are "the joint venture board provides the only way for senior managers to become involved in joint venture activities," reverse coded and "Please indicate the extent to which you involve managers from the head office of the North American parent in joint venture decisions" (7-point scales, ranging from "not at all" to "to a great extent"). The Cronbach's alpha for the scale was .65.

This measure is also similar to the measure of project commitment used by Beamish (1984) in a study of joint ventures in developing countries. Beamish examined two types of commitment: commitment to a course of action and commitment to the particular project. The project commitment measure dealt with a parent firm's readiness and willingness to provide resources and capabilities to the joint venture. If a joint venture is strategically integrated with its parent, the parent is probably prepared to contribute resources to the joint venture.

To test the convergent validity of the strategic integration measure, the joint ventures were classified into low, medium, and high integration categories. As previously discussed, I ensured that codings of interview data were done independently of the questionnaire data. The classification was based on information concerning:

- Product symmetry between the joint venture and the American parent

- Cooperation in R&D between the joint venture and the parent
- Cooperation in customer relationship management
- Joint venture and parent sharing of top management (e.g., the joint venture president was also a senior executive with the parent and physically spent time in both offices)
- Integration of the joint venture and parent product lines
- Extensive communication between the joint venture and the parent

The correlation between strategic integration and the coded interview measure was .58 ($p < .001$). As a test of construct validity, a measure of communication intensity between the joint venture and its American parent was developed using an approach similar to the intensity measure. The measure reflects the frequency of communication between joint venture managers and parent managers. As anticipated, the correlation between strategic integration and intensity of communication between joint venture and parent managers was positive and significant ($r = .59, p < .001$).

Strategic Importance

The importance of a joint venture will influence the extent that senior managers become aware of and interested in the learning that occurs at lower levels in the organization. It is unlikely that a learning intent will be realized in an unimportant joint venture. A key aspect of importance that should influence the recognition of lower level learning is the degree to which the joint venture is a necessary element in the parent's strategy.

The questionnaire was used to measure joint venture importance. The measure draws on Harrigan and Newman's (1990) notion of strategic necessity and is based on the extent to which the North American partner views this joint venture as important. For comparative purposes, the questionnaire also asks informants to evaluate the importance of the joint venture to the Japanese partner.

Other Variables

Joint venture performance was measured from the perspective of the American parent. In designing the performance measures, longevity and stability were not considered useful indicators of joint venture performance (Anderson 1990; Geringer and Hebert 1991). Individual outcomes, especially in a learning context, may be a more appropriate than mutual assessments of satisfaction. In addition, the Japanese partners' evaluation of joint venture performance involved a variety of considerations beyond the scope of this study and often beyond the understanding of the informants¹². Thus, given the widely disparate expectations of the partners, a measure of mutual joint venture performance was considered to be of limited usefulness.

The questionnaire measure followed Geringer and Hebert's (1991) recommendations concerning the validity of subjective questionnaire measures of joint venture performance. Geringer and Hebert found strong support for using subjective measures of joint venture performance. The items in the measure were adapted from studies by Geringer and Hebert (1991) and Fornell, Lorange, and Roos (1991). The questionnaire measure included four items including "the extent to which the North American partner is satisfied with the performance of the joint venture" and "the extent to which the joint venture has met the objectives for which it was established" (7-point scales). The Cronbach's alpha for the measure was .85.

Based on the interview data and questions about the American parent's overall satisfaction with joint venture performance, the joint ventures were classified into three

¹²Various managers commented that they were uncertain about the Japanese partner's joint venture goals and methods of joint venture performance evaluation. This issue is discussed in more detail in Chapter 9.

categories of parent satisfaction: failure, moderate success, and success. The failure joint ventures were those that had been, or would likely be, terminated because of unsuccessful working relationships. Specifically, I looked for cases of early or unplanned terminations that occurred because of serious problems in the working relationship between the partners. The emphasis was not just on termination. There had to be problems associated with the relationship because as joint venture researchers have argued (e.g., Anderson 1990; Hamel 1991), success of a joint venture should not be judged solely on the basis of longevity. In all but one case, termination or likely termination represented a failure situation. In the non-failure termination case, the joint venture was terminated following the takeover of the American firm and a decision to sell the joint venture interest.

Moderately successful joint ventures were still in existence but there was evidence of serious partner conflict. In particular, I looked for dissatisfaction with the joint venture financial performance since financial performance seemed to be the key determinant of satisfaction for the American partner. Since market access was the American partner's primary formation motive in the majority of cases and the Japanese partner generally exercised control over manufacturing, I also looked for evidence of conflict in these two key areas. The joint ventures classified as successes were those with no outward signs of obvious partner conflicts. Plans for further partner commitments such as joint venture expansions or the formation of additional joint ventures provided evidence of a good working relationship. While the successful joint ventures were not devoid of conflict, they appeared to be functioning as going concerns and the American partner was not considering termination.

A subset of the cases were reviewed by another rater; the review led to only one change in the categorical performance measurement. As evidence of convergent validity, the correlation between the questionnaire measure and the interview measure (treating the

interview measure as a ranking variable) was .75 ($p < .001$). As a further test of the convergent validity of the questionnaire and interview performance measures, the joint ventures were classified based on joint venture equity stability. Three categories were used: no change in equity, change in equity, and termination. The correlation between stability and the questionnaire measure was .49 ($p < .001$) and between stability and the interview measure was .66 ($p < .001$).

Besides the measurement of specific variables, data was collected for joint venture size, age, ownership, initiation of the joint venture, the joint venture and American partner geographic proximity, joint venture product engineering content, OEM tiers supplied, and managerial control.

INTERVIEW PROCESS

Interviews were carried out with managers from 42 joint ventures (Table 4-3). Two joint ventures were subsequently eliminated from the research sample because of incomplete data. Interviews were conducted with 51 joint venture managers and seven parent managers. Of the 51 joint venture manager interviews, six managers were both senior American managers involved in day-to-day joint venture management and American parent managers; that is, they divided their time between the joint venture and the American parent. Because of their dual role, these managers were in an excellent position to provide the perspective sought in the research study. Thus, including the seven parent managers contacted separately, a total of 13 parent managers were interviewed.

The interviews were conducted from November 1990 to May 1991. Except for one case, interviews were conducted in-person in the informants' offices. The exception was a telephone interview. While one hour of the managers' time was requested in the contact

letters, total interview time per scheduled interview ranged from one hour to more than four hours, with an average of two hours. All followup interviews were done by telephone. Followup interviews were necessary for approximately one third of the cases and were used to obtain both missing and additional data.

TABLE 4-3
Composition of the Research Sample

Number of qualifying joint venture managers interviewed	40
Number of non-qualifying joint venture managers interviewed	<u>2</u>
Number of joint ventures that agreed to participate	42
Number of additional interviews carried out in the joint ventures	<u>9</u>
Total number of joint venture manager interviews*	51
Number of American parent managers interviewed	<u>7</u>
Total number of managers interviewed	<u>58</u>

*This number includes managers in a dual joint venture\parent role

The interviews began with an overview of the study's objectives and the expected use of the information. The confidential nature of the study was stressed and a summary report of the results was promised for all participants. Informants were then asked if they had completed the questionnaire; with the exception of three cases, the questionnaires were completed prior to the interview. As indicated earlier, no attempt was made to confirm the questionnaire responses during the interview. The interview data were analyzed separately from the questionnaire data to allow for construct validity tests.

The interviews followed a semistructured or focused format based on an interview guide. Merton, Fiske, and Kendall (1956, 3-4) described the semistructured interview:

First of all, the persons interviewed are known to have been involved in a particular situation. . . . Secondly, the hypothetically significant elements, patterns, processes and total structure of this situation have been provisionally analyzed by the social scientist. . . . On the basis of this analysis, he takes the third step of developing an interview guide, setting forth the major areas of inquiry. . . . Finally, the interview is focused on the subjective experiences of persons exposed to the pre-analyzed situation in efforts to ascertain their definition of the situation.

A semistructured approach was used for several reasons. First, using a core of structured questions made it possible to branch off to explore specific topics in greater depth (Geringer 1988, 42). Since the interviews were of varying lengths, the semistructured approach provided the flexibility necessary to manage the interview process. Second, the semistructured approach eased the problem of interview control. A problem in interviewing senior managers, besides accessibility, is that managers at this level often have a desire to control the interview. Individuals at senior levels in organizations desire a more active interplay with the interviewer; they respond well to inquiries related to broad areas of content and to a high proportion of intelligent, provocative, open-ended questions (Marshall and Rossman 1989, 94-95). Finally, the semistructured approach helped establish trust and overcome issues of confidentiality¹³.

Two interview guides were utilized, one for the parent managers and one for the joint venture managers (Appendix 4). There was little substantive difference in the two guides. The interviews began with the joint venture formation process and then proceeded through

¹³Many American parents viewed their Japanese joint ventures as a panacea for a host of problems. Since the joint ventures were often performing worse than expected, many informants were concerned about confidentiality.

the various interview guide sections. Sequencing the questions chronologically helped informants recall key events and provided a logical flow to the interview questions.

The interviews incorporated predominantly open-ended questions, although in certain areas questions required specific responses. The use of open-ended questions allowed theory development to be grounded in the experiences and terminology of organizational participants (recommended by Beyer and Trice 1982). A disadvantage of open-ended questions is that managers' terminology may be imprecise across the cases (Glick et. al. 1990). As a result, the interpretation and coding of the responses may depend to some degree on the verbal skills of the managers. To minimize this and other problems with the use of interview-based data: 1) interviews were explicitly focused on areas emerging from the conceptual framework; 2) joint ventures selected for the sample were operational for a maximum of six years, decreasing potential problems associated with memory decay; and 3) key informants were senior managers who, because of their positions, were closely involved in the events they described.

The interviews also incorporated information on company history, background of the informant, current strategy of the joint venture and direction for the future, and the state of the automotive industry as it related to the joint venture. Obtaining background information was very important in developing an understanding of the environmental context in which the joint ventures operated.

PRETEST

A pretest was conducted to refine the research design prior to initiating the main study. The pretest addressed such issues as question clarity, appropriateness of response formats, ease of completing the questionnaire, reactions to the interview protocol, and the length of the interview.

Phase one of the pretest involved reactions from doctoral students and faculty interested in the research questions. Phase two provided the opportunity to "purify" the measures (Churchill 1979) and test the interview format. This phase involved an initial group of organizations from the list of 54 automotive joint ventures. Given the relatively small number of firms qualifying for the research sample and the desire to stay within the automotive industry for the pretest, pretest firms were to be included in the main sample (if possible). The respondents in this phase of the pretest were contacted using the same format intended for the main sample.

Five organizations were contacted and all agreed to participate. The informants were asked for their comments on the interview format, questionnaire questions, and overall research process. The informant managers provided several suggestions that were incorporated into the data collection approach. As well, this phase allowed the interview format to be tested and provided a grounding in the important environmental conditions affecting the automotive industry. A knowledge of these environmental conditions increased the efficiency of subsequent interviews, reducing the time spent on questions concerning the state of the industry.

Of the five firms contacted for the pretest, four were subsequently included in the main sample. Because modifications were made to the data collection approach after this initial round of interviewing, these managers were contacted again by telephone and were sent revised questionnaire questions. This procedure ensured that the pretest data, with modification, could be included in the main sample.

DATA ANALYSIS

This section discusses in detail the data classification and analysis procedures. Table 4-4 presents a summary of the data analysis stages. The data analysis began with the various activities designed to move from raw interview data to verification and interpretation. The first analysis stage was data reduction, which refers to:

. . . the process of selecting, focusing, simplifying, abstracting, and transforming the raw data in field notes. Data reduction is a form of analysis that sharpens, sorts, focuses, discards and organizes data in such a way that final conclusions can be drawn and verified (Miles and Huberman 1984, 21).

TABLE 4-4
Summary of Data Analysis Stages

Stage	Analytic Output
1. Collection of raw interview data	Hand written field notes.
2. Raw data reduction: interview write-ups	Interview notes summarized and classified based on 1) the initial conceptual framework and 2) evolving modifications to the framework.
3. Memoing	Write-ups of ideas about sites; preliminary identification of patterns; summaries of unique or surprising site attributes; ideas on data analysis.
4. Data classification and site ordering	Ordering of variables identified in the conceptual framework; the development of indigenous and analyst-constructed typologies; data display in an SPSS matrix.
5. Pattern searching	Preliminary explanations and conclusion about data relationships.
6. Statistical analysis	Primarily correlational analysis.

Data reduction began immediately following the interview and helped bring the raw data into a manageable form. Interview notes were reviewed for omission, clarity problems, etc. (Appendix 5 summarizes the data reduction procedures). Within a 24-hour period, the detailed interview write-ups were completed. The interview write-ups summarized the interviews in a consistent and logical manner. The main objective of the write-ups was a "product intelligible to anyone, not just the fieldworker" (Miles and Huberman 1984, 50). In doing the write-ups, the recommendations of Yin (1984) and Bourgeois and Eisenhardt (1988) were followed:

- 1) All data should be included in the write-up even if it is outside the interview guide.
- 2) The researcher's impressions should be added separate from the informant's.
- 3) The researcher should ask him or herself open-ended questions such as "what did I learn?" and "how does this compare to the prior interview?"

The write-ups were based on a classification scheme approximating the main analytic concepts (Appendix 5). The write-ups also incorporated information on company history, background of the informant, etc. and data from several other sources such as company documents (e.g., organization charts, promotional literature), business press articles, and annual reports. The write-up classification scheme was developed during the pretest phase and was further refined over the course of the field work. As the classification scheme changed, revisions were made to earlier interview write-ups. By the end of the fieldwork, all the interviews were written-up using a similar format. This consistency in format greatly simplified the cross-site data analysis.

While doing the write-ups, any missing data were carefully noted for later followup. Given the semistructured format of the interviews, there were occasions when questions were unintentionally omitted. Since the write-ups were based on a consistent format, missing or

incomplete data could easily be detected. A followup telephone call was necessary for those cases with missing data.

An analysis activity that occurred throughout the research project was the development of analytic memoranda. This process, called "memoing" by Glaser (1978), involved the recording of conceptual and analytic impressions as they occurred. The impressions reflected several different themes including the preliminary identification of patterns, summaries of unique or surprising site attributes, and ideas on data analysis. Included in the interview write-ups was a separate section called "researcher's general impressions" (Bourgeois and Eisenhardt 1988). In this section, emerging thoughts about the conceptual framework were summarized as they related to the particular interview site and also unique ideas about the site. While this process continued through data collection, the point Glaser (1978) called "saturation" (the point at which few new concepts or ideas emerged) was eventually approached. At the completion of field work, the researcher impression sections were sorted based on topical areas. Within each topical area, the memo was summarized and cross-referenced to the specific interview that generated the memo. The sorted memos were a key input into the pattern searching stage of the data analysis.

The next stage in the analysis of the interview data involved the development of the data classification scheme¹⁴. This aspect of the analysis is fundamental to qualitative data analysis, as Schatzman and Strauss (1973, 110) emphasized:

Probably the most fundamental operation in the analysis of qualitative data is that of discovering significant classes of things, persons and events and the properties which characterize them.

¹⁴For other examples of interview data classification strategies, see Beamish 1984; Calof 1991; Grinyer and McKiernan 1990; Simons 1991.

The conceptual framework provided the logical starting point for data classification. Concepts such as firm learning intent and strategic integration were identified in the conceptual framework and the classifications bases were developed in the operationalization section. Using *SPSS*, a data matrix was constructed to aid in the classification and ordering of the variables. This matrix facilitated a systematic ordering process that could easily be reviewed and changed, if necessary. In all cases, site ordering was done independent of the questionnaire.

The classification scheme also went beyond the *a priori* conceptual framework. An objective of qualitative research is the discovery of new categories of data that emerge out of the data rather than having been decided prior to data collection and analysis (Patton 1987). These categories may be either "indigenous typologies" (Patton 1987, 150), those consistent with the informant's view of the world, or "analyst-constructed typologies." In both cases, the objective is to search for categories that are internally consistent but distinct from one another (Marshall and Rossman 1989).

Both indigenous and analyst-constructed typologies were used. For example, cases were classified according to customer (i.e., single JOEM customer, multiple JOEM customers, etc.) and the partner that initiated the joint venture. These simple classifications were consistent with the managers' perspectives. However, most typologies were of the analyst-constructed type, such as joint venture management style, customer dominance, and strategic integration.

The data classification and development of typologies involved an iterative process of working back and forth between the interview write-ups and the classification system. When modifications occurred, initial cases were re-analyzed and if necessary, additional data were sought from managers via followup interviews. The outcome of the data classification

process included site-ordered data (e.g., cases classified as high, medium, or low on some variable), categorical classifications (e.g., Japanese partner customer dominance, shared customer dominance), and cases ranked by summing several data points (e.g., learning efforts was classified according to the presence or absence of five actions).

In conjunction with the data classification process, the categorized data, write-ups, and memo summaries were examined for emerging patterns, themes, and processes that might account for the frequency and absence or presence of data categories. For example, a pattern that emerged early in the study was the relationship between joint venture performance and the learning efforts of the American parent. To guard against the risk of converting interview data into numbers and then ignoring the original words that created the numbers (Miles and Huberman 1984), short vignettes (Appendix 6) and specific examples were generated.

Because of the number of cases and the exploratory nature of the research, the hypotheses were tested using primarily a bivariate approach involving tests of association rather than causality. Both parametric and nonparametric methods were used to test the hypotheses. For tests of association, Spearman rank correlations¹⁵ were used and where possible, Pearson product moment correlations with one-tailed tests of significance. For categorical data, crosstabulations and the Pearson chi-square test of independence were used. For tests of means differences between groups, t-tests were used. In examining differences

¹⁵There is no definitive statement on the use of parametric vs. non-parametric statistical tests. Parametric tests are often used when variables are ordinal on the basis that the sample size is sufficiently large. A rule of thumb suggested is that 30 or more cases is a large enough sample size for parametric statistics.

between multiple independent samples, one-way analysis of variance was used. In all analyses, missing values were excluded on an analysis-by-analysis basis.

Following the bivariate analysis, multivariate procedures were carried out. Both ordinary least squares regression and logistic regression were used to provide additional insight into the observed relationships.

SUMMARY

This chapter discussed the research methodology used in the study. A multimethod research approach incorporating field interviews and questionnaires. Interviews were conducted in-person using a semistructured approach. A variant of a key informant strategy was used in the study. The main set of cases used a single informant while a subset of cases used multiple informants. The field interviews and the resulting qualitative data provided a rich insight into the research questions that would not have been possible using a non-interactive methodology.

The sample consisted of 40 Japanese-North American joint ventures in the automobile industry. The study concentrated on the North American parent firms and their recognition and exploitation of joint venture learning opportunities. The automotive supply industry provided an interesting setting for the research questions. Ongoing structural changes within the industry have effectively created a "learning imperative" for automotive suppliers.

The data analysis proceeded through several stages, beginning with the reduction and classification of interview data. There were several objectives in the data analysis: 1) to test the working hypotheses using primarily bivariate analysis; 2) to identify descriptive examples that supported and extended the hypothesis testing; and 3) to uncover new relationships in the data.

CHAPTER 5

JOINT VENTURE CHARACTERISTICS AND THE LEARNING EXPERIENCE

This chapter describes the sample joint ventures and explores the learning experiences of the American parents. The chapter prepares the ground for Chapters 6 and 7, which present the findings involving the dimensions of parent firm context, joint venture context, and strategic centrality. Chapter 8 reviews the overall support for the research model and proposes a revised conceptual framework.

This chapter has two main sections. The first section examines the characteristics of the joint ventures in the study. The second section explores the notion of joint ventures as learning experiences and provides an overview of the important patterns and relationships associated with the observed learning experiences. The focus of this section is on the first two research questions: 1) To what extent do joint ventures provide a learning opportunity? and 2) To what extent are learning opportunities exploited?

JOINT VENTURE CHARACTERISTICS

The sample joint ventures were suppliers to the automotive industry and more than 80 percent were tier one suppliers (see Table 5-1 for a summary of joint venture characteristics)¹. Almost all the joint ventures were exclusively suppliers to the automotive

¹See page 66 for a discussion of supplier tiers. If a joint venture was a tier two supplier, its customer classification was based on the relationship between the tier one supplier and the OEM.

industry; only one had less than 50 percent of its sales to automotive customers. More than three-quarters of the ventures were manufacturers of parts and components while the remainder produced materials such as paint, steel, glass, and chemicals. The mean number of employees was 206 and 15 joint ventures had between 150 and 300 employees.

The American joint venture parents were almost equally split between single business firms and divisions of diversified firms. There were 22 single business parents and 18 diversified parents in the sample. In all but two cases, the joint ventures were startup or greenfield organizations. A joint venture was classified as a greenfield venture if an organization was created where none existed before (Lewis 1990). One of the non-greenfield ventures was formed when the American parent spun off a small downstream operation. In the other non-greenfield case, the American partner contributed an existing plant and domestic customer product line to the joint venture (see Vignette 4, Appendix 6). The product line was subsequently expanded and a JOEM customer base developed through the efforts of the Japanese partner.

Most joint ventures comprised single plants geographically separated from the American parents' facilities. An important factor contributing to the geographical separation was that generally, both partners wanted a union-free company. The American partners were usually unionized and located in heavily unionized areas. By establishing the joint ventures in smaller, less industrialized areas, the partners usually could operate a union-free organization.

In almost all cases, new plant and equipment was built or acquired specifically for the joint ventures. In four cases, the joint ventures acquired existing, unused plants from their American partners. In two cases, the joint ventures had separate production lines but leased space within existing American partner facilities and in one case, the joint venture

used American partner production lines exclusively (although a new plant was planned). In the fourth case, the joint venture bought land from the American partner and constructed a new plant on the site of an old plant. In several additional cases, the joint ventures began operations using American partner facilities and later, constructed new plants.

TABLE 5-1
Characteristics of Joint Ventures

Characteristics	Number of Cases	Percent	Characteristics	Number of Cases	Percent
<i>American Partner</i>					
<i>Equity:</i>			<i>JV Motive:</i>		
20-30%	4	10.0%	Access to JOEMs	29	72.5%
31-40%	5	12.5%	Access to capital and technology	4	10.0%
41-48%	3	7.5%	Access to technology	5	12.5%
49%	3	7.5%	Risk sharing	1	2.5%
50%	17	42.5%	Japanese alliance	1	2.5%
51%	4	10.0%			
60%	4	10.0%			
<i>Tiers Supplied:</i>			<i>JV Initiated By:</i>		
Tier 1	33	82.5%	American partner	12	30.0%
Tier 2	4	10.0%	Japanese partner	15	37.5%
Tier 1 & Tier 2	3	7.5%	Both partners	13	32.5%
<i>JV Product</i>			<i>JV OEM</i>		
<i>Engineering Content:</i>			<i>Customers:</i>		
Low	12	30.0%	Single JOEM	11	27.5%
Modest	17	42.5%	Multiple JOEMs	13	32.5%
Substantial	11	27.5%	Domestic\JOEMs	11	27.5%
			Domestic OEMs	5	12.5%
<i>Number of Years Operational:</i>					
1 year	2	5.0%			
2 years	5	12.5%			
3	14	35.0%			
4	12	30.0%			
5	5	12.5%			
6	2	5.0%			

As an introductory illustration, Vignette 1² (Appendix 6) outlines a company's initial involvement in a Japanese joint venture. The American partner had sought access to the JOEM market segment but had made little progress. A joint venture was seen as an opportunity to gain access to a growing segment of the automotive market.

Joint Venture Motive

The cases were classified according to the American partner's motive in forming the joint venture (Table 5-1). In making this classification, it was recognized that multiple motivating factors often existed, including an organizational learning intent. Thus, the motive represents the American partner's *primary* motivating factor.

The primary motive for almost three-quarters of the cases was access to the JOEM market. All but five joint ventures supplied JOEMs and 11 supplied a single JOEM (Table 5-1). The prevalent opinion of managers involved with JOEM customers was that American firm access to the JOEM market would not have been possible without a Japanese connection. A Japanese joint venture partner was viewed as the most effective and timely means of acquiring the connection. The issue of JOEM access is raised at several points in this study because of its influence on various other joint venture factors.

Four American firms sought access to manufacturing technology and the capital necessary to implement the technology. In three of the four cases, the Japanese partner possessed proprietary, leading-edge technology. In the fourth case, the technology was not proprietary but was outside the American partner's product line focus. Access to capital was critical in all four cases because without an infusion of capital from the joint venture partner,

²All names of individuals and joint venture partner companies in the vignettes are disguised.

the American firm would have been unable to invest in the technology even if it was purchaseable.

In five cases, the primary motive was access to technology that would allow the American partner to broaden its product line and give the Japanese partner entry to the North American market. Unlike the previous four cases, access to Japanese capital was not an important factor in the joint venture formation. In other words, the American firms were not faced with capital shortages but needed access to a specific technology possessed by their Japanese partners. In four of the five cases, the joint venture gave the American partner entry into a related product line. The Japanese firm was already competing in that product line and therefore, was experienced in the manufacturing processes and product technologies. As an American parent executive commented, "We had the market access through our own plants and the administration talent to run the business. We did not have the manufacturing expertise." The fifth case was slightly different in that the American firm wanted access to two very specific manufacturing processes in which the Japanese partner was a world leader. Access to the technology would allow the American firm, through its joint venture, to compete in some new niche markets.

In one case, the two partners wished to enter the North American automotive market with a product both firms manufactured outside North America. The joint venture allowed the partners to combine forces and share the risk of entering a new market. The joint venture vice president explained:

The Japanese partner was sceptical that they could adapt their process to North America. They had some problems in the past and therefore decided that a joint venture was probably less risky than going it alone. The American partner was not competing in this market in the United States. They saw the joint venture as a way of entering the North American market and establishing closer ties with a leading Japanese company.

Finally, in one case the formation of the joint venture was motivated by the desire of the American partner to collaborate with a Japanese firm because "everyone else was doing it." This motive could be called a legitimacy motive because the American partner was motivated to appear in agreement with the prevailing norms in the automotive industry. Other managers indicated that forming a joint venture with a Japanese partner was a very "fashionable" thing to do during the period 1985-90.

Except the risk-sharing and legitimacy cases, the primary joint venture motives involved access to markets and technology. There were definite financial objectives associated with these joint ventures, which were largely seen as a means of strengthening an existing business. Often, firms saw their existing domestic market share declining. A joint venture could compensate for the decline by providing relatively quick access to a new customer or product market.

While product and customer market motives provided a specific, and often short term objective for American firms, two less tangible objectives were also important. The first is the learning intent and the second is the desire to internationalize and move beyond domestic markets. As a joint venture manager explained:

The joint ventures were formed because we felt we [the American partner] had to have a greater international presence in an industry that was rapidly becoming more international in scope. The American partner wanted to be a supplier with a "window to the world"; the joint venture helps give us that window. Access to the transplant market may have provided an initial short-term objective for the formation of the joint ventures and it may have brought the firms together. However, our longer term objective is to become a world leader in automotive ____ technology.

The manager went on to contend that alliances were critical to an international strategy and that the Japanese were much better at using alliances than North American firms. Another manager echoed those comments:

We wanted to establish a global connection in the automotive supply industry. The joint venture is one step toward becoming a more international player in the automotive industry. We are now investigating alliances in Europe. The OEMs are getting closer to having common products across regions (i.e., North America and Europe). For a supplier it would be advantageous to be capable of supplying the same part in different parts of the world.

A common theme expressed by many managers was that access to the JOEM market comprised the American firm's first step toward becoming a more international firm. American firms recognized that the automotive industry was changing rapidly and wanted to participate in that change. Unfortunately, the objectives of JOEM access and internationalization often took precedence over economic reasons for forming an alliance. Several managers indicated that "faith" drove the joint venture formation process; both the American and Japanese firms entered the joint venture with little more than faith in each other. In these cases, neither partner communicated its objectives and little effort was made to prepare financial forecasts. Not surprisingly, many joint ventures subsequently experienced problems because of the lack of communication during the formation process.

The Roles of Joint Ventures

The joint ventures were classified according to how they influenced the product-market activity of the American parent (Table 5-2 shows the joint venture product strategy and the joint venture customer). Following Koh and Venkatraman (1991), the role classification was along two dimensions: product expansion, or adding new products, and market expansion, or serving new customers. Four categories were used: similar product-similar markets, similar product-new markets, new product-similar market, and new product-

new customer³. The classification is an indicator of the relatedness of joint venture and parent strategies.

TABLE 5-2
Joint Venture Role and Joint Venture Customer

JV Customer	Number of Joint Ventures			
	SPSM*	SPNM	NPSM	NPNM
Single JOEM Customer	-	9	-	2
Multiple JOEM Customers	-	11	-	2
Domestic JOEM Customers	1	6	1	3
Domestic OEM Customers	-	-	3	2
	1	26	4	9

*SPSM - similar product, similar market
SPSM - similar product, new market

NPSM - new product, similar market
NPNM - new product, new market

The largest group, with 26 joint ventures, was the similar product-new market category. Joint ventures in this group produced products similar to existing American parent products. Although the products were not identical because of differences in engineering and design, they met a similar functional need.

The discussion of joint venture motive indicated that joint venture managers often contended that American firms could get access to JOEM customers only through a joint venture with a Japanese supplier. Consistent with that observation, Table 5-2 shows that the most common configuration was a joint venture formed to produce a similar product for JOEM customers.

³Koh and Venkatraman (1991) attached labels to their categories. Similar products-similar markets was labelled identical; similar products-new markets was labelled related-supplementary; new products-similar markets was labelled related-complementary; and new products-new markets was labelled unrelated.

Joint Venture Ownership

The predominant equity relationship was equal ownership (Table 5-1). In seven cases, equity had changed since the joint venture formation and in three of the seven cases, the Japanese partner had recently acquired the interest of its American partner⁴. In the other four cases, the Japanese partner had significantly increased its equity position. In five additional cases, informants indicated a high probability that the Japanese partner would buy out their American partner. Thus, there were 12 cases in total where the Japanese partner increased or probably would increase its equity position in the joint venture. There was only one case in which the American partner increased its equity position. There were no cases of joint venture dissolution; all the organizations created by the joint ventures were still in operation.

The data suggest that joint venture ownership is associated with the type of joint venture customer (Table 5-3 shows American partner ownership and various joint venture characteristics). Single JOEM customer joint ventures was the category with the largest number of cases in which the Japanese partner had greater than 50 percent ownership. Eleven joint ventures had only one JOEM customer and seven of these were majority controlled by the Japanese partner. There were no cases of a single JOEM customer joint venture with American partner majority ownership.

⁴The inclusion of several terminated joint ventures created some minor problems in data collection, primarily associated with the questionnaire. For example, the questionnaire asked questions about the current state of interaction between the partners. Obviously, those questions could not be answered by the informants in terminated joint ventures. However, since only three terminated joint ventures were included in the sample, this was not a major problem.

TABLE 5-3
American Partner Ownership and Various Characteristics

	Number of Joint Ventures			Total
	Ownership < 50%	Ownership = 50%	Ownership > 50%	
<i>Joint Venture Product Strategy:</i>				
Similar product	9	14	4	27
New product	6	3	4	<u>13</u>
				40
<i>Joint Venture Customers:</i>				
Single JOEM Customer	7	4	0	11
Multiple JOEM Customers	4	7	2	13
Domestic JOEM Customers	2	5	4	11
Domestic OEM Customers	2	1	2	<u>5</u>
				40
<i>Joint Venture Initiation:</i>				
Initiated by Japanese partner	9	4	2	15
Initiated by American partner	3	5	4	12
Both partners initiated	3	8	2	<u>13</u>
				40
<i>Joint Venture Motive:</i>				
Access to JOEMs	11	15	3	29
Access to capital and technology	2	1	1	4
Access to technology	1	1	3	5
Risk sharing	-	-	1	1
Japanese alliance	1	-	-	<u>1</u>
				40

The strength of the relationship between Japanese firms and their suppliers may contribute to the joint venture equity split. Japanese firms are often members of supplier groups that share a common large customer. The customer, usually a large manufacturer such as the JOEMs, may have a minority interest in the suppliers, say five percent. Supplier group members have an implicit understanding that the main customer takes priority over other customers.

In the single JOEM cases, Japanese partners were usually part of JOEM supplier groups⁵. As part of a supplier group, the Japanese partners would normally be influenced by the expectations of the JOEMs. As several managers indicated, the expectations often revolved around joint venture ownership. The Japanese partner was often expected to have a controlling interest in the joint venture. In addition, the joint venture may have been "encouraged" to have only one customer.

The Japanese supplier-manufacturer relationships create significant customer leverage over suppliers⁶. Many American managers, exposed for the first time to the Japanese system of supplier-manufacturer relationships, expressed concern about the leverage and unrelenting pressure from JOEM customers.

When a joint venture was supplying multiple JOEMs and perhaps also domestic customers, there may not have been a group relationship between the Japanese partner and a JOEM (at least in terms of the Japanese partner's investment in North America). In cases of a weak Japanese partner-JOEM relationship, the data suggest that the Japanese partner was less likely to be majority owner. Nevertheless, there were cases where the Japanese partner was a supplier group member *and* the joint venture was supplying multiple JOEMs. In some instances, the Japanese partner was doing most of its business with one JOEM and had smaller contracts with several other OEMs. In other situations, the Japanese partner was a group member but was encouraged by the JOEM to seek domestic business. The JOEM, as

⁵Japanese suppliers that were not part of supplier groups were referred to as independent suppliers.

⁶Although a Japanese customer does have substantial leverage over its supplier, the network of cross shareholdings and implicit expectations is such that outright abuses of the system are relatively uncommon (Kester 1991).

part owner of a Japanese supplier, may benefit if the joint venture expands its North American market share beyond one customer.

Joint Venture Initiation

American partners initiated about the same number of joint ventures as Japanese partners (Table 5-1). For one-third of the joint ventures there was no clear initiator. When there was no initiator, the joint ventures typically evolved out of several years of discussions about possible collaborative relationships. For example, there were several cases in which the partners had a long history of cooperation via licensing and technology exchange. As the JOEMs became established in North America, the partners began discussions about forming a joint venture. Neither partner could be identified as the initiator since a prior relationship was in existence and the formation of a joint venture was precipitated by the desire of both partners to access the North American JOEM market⁷.

Of the 12 joint ventures initiated by American partners, four had access to technology and capital as the primary venture motive and three sought access to technology. These seven technology-related, American partner-initiated joint ventures had either both OEMs as customers or dealt solely with domestic OEMs.

Not surprisingly, there appears to be a relationship between initiation and ownership (Table 5-3). Where there was a clear initiator, there was a trend toward that partner having majority control. Where there was no initiator, equal ownership was common. Table 5-4 presents a breakdown of initiation and joint venture customer, showing that for single JOEM customer joint ventures, the Japanese partner was the initiator in seven of 11 cases.

⁷Beamish (1988) developed the notion of mutual need, which may apply to those cases where a single initiator could not be identified.

American partner initiation was most common when joint venture customers were domestic OEMs.

TABLE 5-4
Joint Venture Customer and Joint Venture Initiation

	Number of Joint Ventures			Total
	Initiated by Japanese Partner	Initiated by American Partner	Both Partners Initiated	
Single JOEM Customer	7	1	3	11
Multiple JOEM Customers	4	3	6	13
Domestic JOEM Customers	3	4	4	11
Domestic OEM Customers	1	4	-	5
				40

Other Characteristics

The number of years operational (Table 5-1) reflects the years since the joint venture began production. Two-thirds of the cases were between three and four years old and only two joint ventures were as old as six years. No adjustment was made for the terminated joint ventures because the terminations had occurred recently.

Using categories similar to Davies (1990, 62), the joint ventures were classified according to the engineering content of the joint venture product (Table 5-1):

- 1) Low product engineering content - includes steel, glass and resins that are stamped or blow-molded.
- 2) Modest product engineering content - includes engine mounts, damping, switches, and batteries.
- 3) Substantial product engineering content - includes seat assemblies, instrument panels, and engine parts.

- 4) High product engineering content - includes built-up components such as transmissions, radiators, and engines.

None of the joint venture products were classified as high engineering content while the largest category, with 17 joint ventures, was modest engineering content. Generally, joint venture product engineering originated with the Japanese partner. No relationships were discerned between engineering content and other joint venture characteristics.

THE LEARNING EXPERIENCE

This section provides an overview of the organizational learning experience. As described in the joint venture characteristics section, learning was an important objective for many American parent firms. Informants often emphasized that there was an initial belief in the inherent competitive superiority of their Japanese partners. While that belief was often modified subsequent to the joint venture formation, learning usually remained an important joint venture objective.

Joint ventures provide companies with a window to their partners' capabilities. In the context of this study, there were two main ways that the window could be of value to the American partners. First, all but five joint ventures were involved as JOEM suppliers and generally, the products supplied to the JOEMs were similar to products manufactured by the Japanese partners in Japan. Because the Japanese partner was usually responsible for implementing the manufacturing process and supplying the product technology, the joint venture plant was often a virtual copy of a Japanese plant. The equipment usually came from Japan with a team of Japanese engineers responsible for the joint venture startup. Consequently, the joint ventures provided the American partner with a unique opportunity to study a new, state-of-the art organization that would not have been possible with a collaborative relationship.

Besides the proximity to the capabilities of another firm, the joint ventures were often the American partner's initial experience in supplying JOEMs. As a manager explained, the JOEM supplier-manufacturer relationship was radically different from that between domestic OEMs and suppliers:

The typical domestic auto-maker's relationship with its supplier is adversarial. With the JOEMs, the relationship is supportive if you can deliver the product. JOEMs will work with their suppliers and help them when there is a problem. They also expect complete commitment. With our main JOEM customer, if there is one problem, there is one phone call; we are expected to fix the problem immediately. . . . Business is too fast with the JOEMs; the rules that bind the other [American parent] plants would not work here. . . . With the Big 3, you manufacture according to the drawing and if the part doesn't fit, you tell your customer to stuff it. With a JOEM, the drawing is only the starting point. The part must fit the car; if it doesn't the JOEM will say "what can we do to make it fit." They expect their suppliers to fix problems even if they have produced according to spec.

Informants tended to focus on three areas in which the JOEMs differed from the domestic auto companies in terms of supplier management. One area was pricing practices. The JOEMs expected that suppliers would meet target prices and that price reductions or cost-downs would occur throughout the model life-cycle. In their survey of supplier relationships in the automotive industry, Cusumano and Takeishi (1991) found that prices to JOEMs typically decreased annually. In contrast, prices to domestic OEMs rose approximately one percent annually. The second area of difference was quality management. The JOEMs usually expected that parts received from suppliers would be free of defects and therefore, the burden of parts inspection was pushed down to the supplier level. Cusumano and Takeishi (1991) found that JOEMs in Japan had a decrease in defect rate of approximately 10 percent per year versus 2 percent from U.S. OEMs. The Japanese companies also received parts from suppliers with a significantly better defect rate than their

U.S. counterparts. The third area was the degree of involvement of JOEMs in supplier operations. As the previous quote indicates, the JOEM supplier-manufacturer relationship involves substantial interaction between supplier and OEM.

Thus, the joint ventures in this study provided potential learning experiences for most American partners. This opportunity was usually recognized prior to joint venture formation and represented a motive for the venture formation. By examining the two learning variables, learning efforts and learning outcome, important aspects of the learning experience are introduced.

Learning Efforts

The process variable, learning efforts, represents the learning initiatives or actions undertaken by the parent. These parent actions have the potential to transfer knowledge from the joint venture to the parent and are viewed as necessary conditions for learning to occur. As discussed in Chapter 4, the actions are not necessarily undertaken with a learning objective in mind. However, without these actions, learning will be less likely to occur. The presence of the actions provides a predictor that learning is occurring.

Table 5-5 shows the components of the learning efforts variable and the number of firms involved in the various activities. Table 5-6 presents a distribution of the learning efforts variable. To gain a more complete understanding of learning efforts, each learning activity is examined separately.

Rotation of Personnel

The first activity, rotation of personnel from the joint venture to the parent, was the learning activity most infrequently used. There were explicit plans to rotate individuals through the joint venture in only six cases. While rotation could potentially be of great

benefit in exposing managers to a new and vastly different experience, there were two main reasons why rotation schemes were generally not used. One, rotation requires forward planning of several years. Given the state of the domestic automobile industry, few firms could make plans for managerial changes several years down the road. This was a particular problem for the smaller parent firms. As a manager commented:

Initially, there were plans to rotate people through the joint venture. However, no plans have been put in place and I don't want to go back because it would be difficult for me to get a comparable position in the parent. Until the auto business gets out of its recession, the rotation scheme cannot be used.

TABLE 5-5
Learning Efforts by the American Parent

Learning Effort	Number of Joint Ventures
Rotation of managers from the joint venture to other parent facilities	6
Visits and tours of the joint venture by parent managers	19
Shared information between the joint venture and the parent	24
Senior parent management involvement in joint venture activities	30
Parent access to the Japanese partner through the joint venture relationship	10

TABLE 5-6
Learning Efforts Variable

Learning Efforts Score	Number of Joint Ventures
0	4
1	10
2	8
3	10
4	7
5	<u>1</u>
	40

Second, even if a rotation scheme was in place, there was no guarantee that managers would want to move when given the opportunity. Often, the joint venture was viewed as a more interesting and challenging organization than the parent. As well, given that the JOEM segment of the auto market showed significant growth potential, greater personal and organizational development opportunities were often found in the joint venture. For example, an American parent intended to rotate managers through its joint venture and the rotations were to be for 4-5 years. However, of the parent managers in the joint venture, only one wanted to go back to the parent. In another case where rotation was considered, joint venture managers viewed the joint venture as an interesting and growing company and the parent as a very conservative firm with limited opportunities. The joint venture allowed the managers to experiment in areas that would not have been possible in the parent.

Nevertheless, there were cases of rotation schemes in place. In one case, several rotations had taken place and a manager described a position in the joint venture as "a plum job, people want to go to the joint venture because it is viewed as a way to get promoted in the parent firm." In a second rotation example, the joint venture was characterized as a "satellite plant." Parent managers were to be rotated through the joint venture plant after 2-3 years. As openings occurred in other parent plants, the joint venture individuals would be given opportunities to move. However, it remains to be seen if the plan will be successful.

In all the rotation cases, the joint venture product was similar to that of the parent. In the absence of some overlap between the parent and joint venture product strategies, rotation probably would be of only marginal effectiveness in transferring product technology. However, aspects of manufacturing technology or managerial knowledge should be transferable despite the lack of similarity between joint venture and parent products.

For the Japanese partners, there were very different objectives concerning rotation. There were only a few cases where Japanese managers were assigned indefinitely to the joint ventures and it was unusual for a Japanese manager to express interest in staying with the joint venture after the 3-5 year term expired⁴. Generally, Japanese managers were rotated back to the parent or another subsidiary after 3-5 years in the joint venture. Based on observations made by American managers, the rotation of managers was used by Japanese firms as an explicit learning action. The rotations were also consistent with Japanese career planning. A move out of Japan can be very damaging to a Japanese manager's career prospects, so most Japanese managers were anxious to go back to Japan.

Visits and Tours

In almost half the cases, visits and plant tours by parent managers were a regular occurrence. Visits and tours were very effective in convincing parent managers of the differences between the joint venture operation and the parent because they provided an immediacy and first hand experience with the joint venture operation. Several joint venture managers indicated that they were met with disbelief when they tried to explain the joint venture operation to parent managers. Some of that disbelief was dispelled following visits by parent managers to the joint ventures. The comments of several managers convey the importance of visits and tours:

⁴The movement of Japanese joint venture managers raised several concerns for the American joint venture managers. First, the American managers rarely had input into decisions regarding the rotation of Japanese managers. The Japanese parent, perhaps in consultation with a senior Japanese joint venture manager, made the decision; the American managers were not expected to participate in the decision. Second, each new batch of Japanese managers had to be trained. An American manager offered this perspective: "I thought the new [Japanese] team would incorporate much of the initial team's development, learning, etc. Unfortunately, that was not the case. The new team is like going back to 1986 when we formed the joint venture."

There is at least one parent tour a month to see what the joint venture is doing; the people from the parent are generally enthusiastic and impressed with what they see.

The parent's intent was to use the joint venture as a "guinea pig." Since the formation of the joint venture, there have been many "tourists" from Japan and the American parent. These people are welcome in the plant.

Parent managers frequently visit the joint venture to benchmark its strengths and weaknesses.

In several cases, joint venture managers were frustrated because parent managers seemed unwilling to visit the joint venture, despite being invited and encouraged to do so.

For example:

Since the joint venture was formed, there has never been a visitor [from the American parent] with the objective of studying the joint venture operation. I recently asked a plant manager to come visit but was told that the cost would not be approved by the parent.

In a few cases, parent managers were visiting the joint venture but only because of problems in the venture. For example:

The American parent thought they would be able to gain from the Japanese partner's technology base. To date, they have not tried to take advantage of it. There has never been a program in place from top management. As far as I know, they have not copied anything from the joint venture. Right now, the only parent managers involved in the joint venture operation are the finance people. They are trying to help us sort out some of our financial problems. The senior managers in the parent have taken a tour through the joint venture and are amazed, but that is all they have done. We would be happy to work with the parent and the Japanese partner also would be willing to work with them.

A few managers were not pleased that they were the subject of parent scrutiny via regular visits. These managers indicated that they were not consulted about the visits and would have preferred not to be bothered by parent managers. Visits also can be unproductive if they are not taken seriously by the visiting managers. Keller (1989, 134-135)

described the situation at the NUMMI joint venture regarding General Motors and visits to the joint venture: "The few times GM executives visited the plant, they did a five minute-fly-by . . . no one believed that they were really interested. . . . GM wanted to learn everything in one day.

Information Sharing

The transfer to the parent of specific information originating in the joint venture was evidence of the information sharing activity. In total, there were 24 cases of shared information. For example, in one case there was a weekly meeting between joint venture and parent manufacturing managers. One explicit objective for these meetings was to share cost reduction ideas. Several of the information sharing cases involved the joint venture as a customer for the American parent. If there was a significant supplier-manufacturer relationship between the joint venture and the American parent, the case was classified as one of shared information because in this type of relationship, information would be known to both parties about the other's needs and demands. A joint venture manager provided this perspective of the supplier-manufacturer relationship:

They [the parent] are our largest supplier and we have had a lot of problems with them. When they started they were shipping us about 20 percent rejects. They got it down to about 2.5 percent and thought that was great. We expect much better because our rate with our customer is one-half of one percent. The parent's reaction is "you want too much." They even put a man in our plant with the job of inspecting the parent product as it arrives. They pay him but it still costs us because he is using our facilities. Why can't they inspect it before it leaves their plant?

While the example suggests some problems in the joint venture relationship, there can be little doubt that the American parent is aware of the demands of its joint venture, and customer.

Other cases of information sharing involved activities such as joint R&D, quality meetings involving the parent and the joint venture, and joint marketing activities. For example:

The American parent has some experience in dealing with the transplant JOEMs. They were an original Nissan supplier but have not established strong relationships with the other transplants. The relationship with the Japanese partner has the potential to build up relationships between the American parent and other transplants. They [the Japanese partner] are more familiar with the need to emphasize some different things in their relationships with the transplant customers. The Japanese joint venture managers have tried to emphasize to the parent that 1) the pricing structure [with the JOEMs] is very different and less profitable at the outset of the contract and 2) suppliers have to be patient and recognize that they cannot just make a call and send a bid. There has to be a commitment to getting in the door and establishing contacts and communication with the customer.

Senior Parent Management Involvement in Joint Venture Activities

Senior managers often can influence organizational change and therefore, their involvement in, or knowledge of, joint venture activities is a critical aspect of the learning process. Senior managers may be involved with the joint venture for various reasons, including: the venture is a startup operation; the venture is novel (i.e., Japanese); it is losing money; the Japanese and American partner CEOs are good friends. From the perspective of learning, senior manager involvement indicates the potential for learning to occur. Without management's involvement and commitment to enhancing their companies skills, learning will be less likely (Hamel, Doz, and Prahalad 1989).

Top management involvement in the joint venture was exhibited in various ways. In several cases, there was a close personal relationship between the American parent CEO and a counterpart with the Japanese partner. In other cases, the reporting relationship between the joint venture (as a parent subsidiary) and the parent provided evidence of senior

management involvement. Involvement was also exhibited by specific actions. For example, a joint venture executive indicated that, "American parent management is banking on the Japanese influence for the future. They are opening a new plant with an explicit objective of duplicating the kinds of things being done in the joint venture but without the Japanese."

In most cases (30), senior management of the American parent had an active interest in the joint venture operation and were involved in joint venture management in more than just a peripheral capacity. Most of the cases with limited involvement were large, multi-divisional companies in which the joint venture was a relatively minor operation. In six of the non-commitment cases, the joint venture product was new to the parent firm and in one of those cases, the parent was being taken over by another company. In another case, the joint venture was a downstream firm processing raw material for a parent that seemed to have lost interest in its venture.

Parent Access to the Japanese Partner

The final indicator of learning efforts was initiatives taken by the American parent to gain access to the Japanese partner beyond those specifically associated with the joint venture relationship. Because of the close working relationship that may develop between the partners, a joint venture has the potential for a more systematic integration of the partner operation outside the joint venture. In 10 cases, American partners were making significant efforts to broaden their relationship with their joint venture partner. Two managers elaborated on their firm's relationship with the joint venture partner:

Our partner is very open with its technology and production processes. Many [American partner] people have been sent to Japan. In fact, more people from outside the joint venture than inside have been sent. We are trying to send as many plant managers and engineers as possible to Japan.

We formed the joint venture for several reasons: 1) it would be a feather in our caps to become involved with the Japanese partner and be perceived as having a relationship with the transplants; 2) it would give us a feel for worldwide purchasing since our partner is the largest trader in the world; and 3) the joint venture would lead to future opportunities with the Japanese partner.

These examples illustrate that through efforts to broaden the partner relationship, firms were getting closer access to the skills and capabilities of their partners. This effort is considered an important element in the learning process. However, since all joint ventures in the sample were operational for six years or less, greater access to the Japanese partner may be an objective that had not yet been realized.

Learning Outcome

The learning efforts variable provides an indication of the intensity of the learning process. Actions that can facilitate a transfer of joint venture-derived knowledge were used as the observable indicators of learning efforts. Although learning efforts provides an indication of learning initiative, it does not provide evidence about the transfer of knowledge to the parent. Thus, the learning outcome represents a second learning variable that provides an indication of the outcome of the learning experience and a more detailed view of the various organizational skill areas that contribute to the learning experience. Note, however, that the problem of a time lag between knowledge transfer and organizational change remains an unresolved methodological problem. While the learning outcome provides a managerial perception of the extent of learning by the American parent, the important link between managerial knowledge change and organizational behavior remain untested.

American parents were ranked according to the outcome of their learning experience. The results show 17 firms classified as non-learning organizations, 15 firms classified as moderate learning organizations, and eight firms classified as learning organizations. The

key difference between the learning organizations and the non-learning organizations was a recognition and appreciation for the capabilities embodied in the joint venture operation. The learning organizations clearly viewed the joint ventures as an important learning opportunity. In contrast, the non-learning organizations were disinterested in the learning opportunity and appeared unable or unwilling to recognize the important differences in skills and capabilities of the joint venture partner. Without a recognition of the differences, learning was problematic.

In many of the non-learning organizations, the calculation of the payoff to learning was low. The joint venture was not seen as a route to skills internalization but as a means of modifying product-market scope. As discussed, the primary joint venture motive for most American parents was access to the JOEM market. Without an appreciation for the longer term competitive implications of access to partner capabilities, efforts to learn were minimal and consequently, the learning outcome was limited. The notion of a reluctant or defensive parent is further explored in the final chapter.

Another factor associated with many of the non-learning organizations was a change or likely change in joint venture equity. A crosstabulation between the classification equity change-no change⁹ and the three categories of learning outcome suggests a relationship between joint venture stability and the learning outcome (Chi-square = 14.40, $p < .001$). For the 13 cases of equity change, 11 of the American parents were classified as non-learning organizations. The result is not surprising--a reduction in joint venture equity is a strong

⁹All but one of the equity changes involved the Japanese partner increasing its equity in the joint venture. Further discussion on equity changes and joint venture termination can be found in Chapter 8.

indication that the parent firm has failed to recognize the potential learning value inherent in the relationship.

For many firms classified as moderate learning organizations, learning was an explicit joint venture objective. However, as will be discussed in detail, the learning intent may have been incorrectly specified or other factors may have acted as barriers to more successful learning experiences. To gain further insight into the type or content of the learning experience, Table 5-7 presents descriptive statistics for the components of the questionnaire measure of learning outcome. The means provide evidence of the learning focus. Consistent with the widespread belief in the superiority of Japanese manufacturing capabilities, American firms concentrated their learning efforts in the areas of engineering and production-operations. These results support the interview findings. Managers generally indicated that the primary American parent learning focus was associated with the manufacturing capabilities of the Japanese partners.

The mean of 3.00 in the area of production-operations suggests that substantial differences were detected between the Japanese and American manufacturing capabilities and that those differences were at least recognized by the American parent. In a few cases, there were explicit learning objectives focused on very narrow aspects of the Japanese partner's manufacturing capabilities.

Most managers believed that the joint ventures were exceeding the manufacturing capabilities of the American parents and that the main reasons for the differences were the input from the Japanese partner and the stringent demands of JOEM customers. Indeed, there was only one case where the informant asserted that the capabilities of the joint venture and the Japanese partner were inferior to those of the American parent. In this manager's

view, the Japanese partner's skills "were in all cases not up to our [the American parent's] standard; they brought nothing to the venture in the way of technical or managerial skills."

TABLE 5-7
Learning Outcome Components*

Learning Area	Mean	s.d.
General management	2.37	1.00
Marketing-selling	2.17	1.32
Distribution	1.57	1.09
Product R&D	2.29	1.30
Engineering	2.63	1.26
Production-operations	3.00	1.11
Human resource management	2.20	.93
Overall Measure: Mean	2.32	s.d. .75
	Minimum 1.00	Maximum 3.43

*Not applicable scores were recoded to 0

The following examples illustrate the widespread view concerning joint venture product quality:

Our defect rate beats the American partner's by ten times. They talk about quality but we do it.

The product manufactured in the joint venture is superior to anything made in other American partner plants. An American plant probably would consider it a perfect month if they were on time for all their shipments and had only five rejects. Our JOEM customer will look at the five rejects and say, "there are five problems so you have a quality problem."

They [the American partner] are light years behind in terms of their defect rate, their production equipment, their delivery capabilities, etc. For example, the American partner has an on-time delivery record of about 70 percent. Their target is 80 percent. The joint venture has a delivery record of 99.9 percent. It is not perfect because occasionally we have been early. . . . They don't have the engineering talent to

make changes. To them, making _____ is a craft. The engineer makes a drawing and gives it to the operators. The operators are the craftsmen. In the joint venture, the manufacturing process is an engineering process. Quality is engineered into the process rather than inspected in.

An argument could be made that managers' pride in their organizations contributed to the view that the joint venture was superior to its parent. However, several examples can be used to counter that argument. In two cases, joint ventures were preceded by licensing agreements. The American firms formed collaborative arrangements with Japanese companies primarily to access the JOEM market. In the first case, the licensing agreement was a failure because the American firm was unable to meet the quality and delivery demands of the JOEM customer and never produced an acceptable product. In the second case, the licensing agreement lasted five years. According to a joint venture executive associated with second case:

The American firm struggled to meet its customer's demands. After five years a joint venture was formed. Without the joint venture the American firm would have lost its business with the JOEM. The JOEM was concerned about pricing and quality standards and was pleased to see the formation of the joint venture.

In both examples, the American firm had the opportunity to supply JOEMs and failed. The joint ventures became successful JOEM suppliers, primarily because the role of the American firms was reduced when the joint ventures were formed.

Another argument is that because the joint ventures had new plant and equipment, exceeding the capabilities of their parents was to be expected. In response to my suggestion that the joint venture had an advantage because it had new plant and new equipment, a manager replied:

Only about 10 percent of the product quality is attributable to the machinery and equipment. The other 90 percent is a function of

software: people, systems, workforce. It can work in the United States if there is a commitment from management and from the workforce.

Nevertheless, as an executive explained, the joint venture quality difference often had an associated cost that several managers indicated would always exceed that of the American parent.

The joint venture product is higher quality but it also has a higher cost. The quality is higher because 1) the design is different (there are more parts) and 2) the manufacturing process is superior. The higher cost is attributable to a combination of lower volume and a better design. . . . Although the joint venture designs and quality are superior to the parent's product, the joint venture will never be competitive with the traditional sources [large American producers] because of its higher cost base.

The Japanese Mystique

The emphasis on manufacturing and specifically, process technologies in the engineering and operations areas, was a dominant characteristic of the learning organizations. Many firms hoped the joint venture relationship would answer the question of why Japanese firms in general seemed to be superior. However, many managers were surprised by the learning outcome.

There is a belief that the Japanese know it all but that is just not true. I thought the joint venture would solve our technical problems but they [the Japanese partner] are facing many of the same problems we are-- that was a revelation.

The American partner tried to find out about this mystical thing that the Japanese have and that we need. The president's attitude was "if we can get it, we can charge a high price for it." There was a belief that the Japanese partner had technology that the American companies did not have. After we formed the joint venture we realized that Japanese technology was no different from ours. They simply know how to use it better.

Another manager visited Japan with the express purpose of discovering the Japanese mystique or "magic". When there was no magic, it was necessary to reconsider the differences between Japanese and American operations.

The Japanese have been beating us for ten years so they must be doing something right. I went to Japan and visited their plants, hoping to find some magic dust. I did not find any magic. What I found was:

- 1) It is unbelievable the way they [the Japanese partner] cater to the customer. And, the customers work harder to develop their suppliers.
- 2) They have a very sound work ethic.
- 3) They have a different perception about quality. If material is not perfect it will not be accepted.

Our conclusion was that there was no mystique or technical difference at all in our niche of the business. We were actually very close to them in terms of our capabilities. The difference was in their execution and the demands of their customers.

In the previous example, realized learning was vastly different from intended learning. The idea of realized versus intended learning is an important issue and will be developed in greater detail as results are introduced.

An Analysis of the Learning Variables

Table 5-8 provides a breakdown of learning efforts for the joint venture characteristics¹⁰ of joint venture role, customer, equity, initiation, and primary joint venture motive (for a more meaningful comparison, product strategy and motive have been reduced to two categories each). The various characteristics were examined for evidence of intergroup differences.

¹⁰In Chapters 6-8 this set of characteristics is used in the analysis of specific variables.

TABLE 5-8
Learning Efforts and Joint Venture Characteristics

Joint Venture Characteristics	Learning Efforts Mean
Overall mean	2.23
<i>Joint Venture Role:</i>	
New product strategy	2.00
Similar product strategy	2.33
<i>Joint Venture Customers:</i>	
Single JOEM customer	2.27
Multiple JOEM customers	2.23
Domestic and Japanese OEMs	2.27
Domestic OEMs	2.00
<i>Joint Venture Equity:</i>	
Less than 50% ownership	2.00
50% ownership	2.12
More than 50% ownership	2.88
<i>Joint Venture Initiation:</i>	
Initiated by Japanese partner	2.07
Initiated by American partner	1.67
Both partners initiated	2.92*
<i>Joint Venture Motive:</i>	
JOEM access motive	2.24
Other motive	2.18

*ANOVA $F = 3.19, p < .05$

With the exception of learning efforts and joint venture initiation, there was no evidence of important differences. The results for initiation and learning efforts suggest that American firms initiating joint ventures made less effort to learn than did firms in joint ventures initiated by both partners (ANOVA $F = 3.19, p < .05$; Tukey test indicated a significant difference at the .05 level between American partner initiated and both partner-

nature of both partner-initiated joint ventures. These joint ventures lacked a clear initiator and typically evolved out of several years of discussions about possible collaborative relationships. The years of discussions preceding the joint venture formation may have allowed both firms to develop an understanding of their partner's capabilities. Given this understanding, collaborative learning may have been seen as a higher priority and therefore, learning efforts by the American parent were more intensive.

For the learning outcome classifications, crosstabulations of the joint venture characteristics were examined. Because of small numbers, the learning outcome variable was collapsed into two categories by combining the moderate learning organizations and the learning organizations. The crosstabulation of learning outcome and joint venture initiation was the only result yielding significant results (Table 5-9, Chi-square = 5.86, $p < .10$). Consistent with the results for learning efforts, joint ventures initiated by both partners resulted in more learning organization classifications than expected.

TABLE 5-9
Crosstabulation of Learning Outcome
by Joint Venture Initiation

	Joint Venture Initiated By			Row Total
	American Partner	Japanese Partner	Both Partners Initiated	
Non-learning organization	7 (5.1)	8 (6.4)	2 (5.5)	17
Learning organization	5 (6.9)	7 (8.6)	11 (7.5)	23
Column Total	12	15	13	40
Chi-square = 5.86, $p < .10^a$				

Note: Numbers in parentheses are expected cell frequencies

^aIf the American partner and Japanese partner categories are combined, Chi-square = 5.79, $p < .05$.

The Relationship Between Learning Efforts and Learning Outcome

Hypothesis 1 predicts a positive relationship between learning efforts and learning outcome. The rationale for the hypothesis was that learning efforts indicates the strength of the learning occurrence and therefore, if a learning process has been initiated, the learning outcome should be greater. The correlation between learning efforts and the interview rank of learning outcome support the hypothesis ($r = .87, p < .001$). A potential problem associated with this result is that both measures are based on interview data classifications and therefore may have resulted in biased measurements.¹¹ As an additional test of the hypothesis, learning efforts was correlated against the questionnaire measure of learning outcome. Although the correlation is weaker, the result also supports the hypothesis ($r = .38, p < .05$).

SUMMARY

Several important points regarding the learning experience emerged in this section. First, many firms had an explicit learning objective associated with their joint venture and initiated learning efforts as a means of internalizing joint venture knowledge. Second, American firm learning efforts were focused on the manufacturing capabilities of their Japanese partners. Third, there was often a divergence between anticipated learning and realized learning. Expectations of innate superiority in the Japanese firms were often misplaced. Finally, the ventures were often judged by the joint venture managers to be superior performers relative to the American parents. This superiority had the potential to create a powerful learning experience for the American partners.

¹¹As a check against potential bias, both classifications were reevaluated at various points throughout the data analysis phase in order to reflect new insights and modifications in the classification scheme. Thus, the classifications were made at different points in time.

CHAPTER 6

JOINT VENTURE FORMATION AND PARENT FIRM CONTEXT: FINDINGS

The factors surrounding a firm's decision to form a joint venture were expected to play an important role in the learning process. This chapter discusses the American parent within the context of the joint venture formation decision. The first section describes the American parents' learning intent, assessment of learning potential, joint venture experience, and prior partner experience. The second section presents the results of the hypothesis testing.

THE AMERICAN PARENT CONTEXT

Initial Learning Intent

The learning intent reflects the degree to which the American parent formed the joint venture with an objective of learning from its venture partner. As reported in Chapter 5, the primary motive for almost three-quarters of the cases was access to a new market. While a learning intent was often present, because of its less tangible nature learning was not considered the primary joint venture motive in any sample cases.

Given North American management's focus on tangible financial goals, it was not surprising that learning was viewed as an important but often secondary objective. The access motive was usually short-term and financially-oriented, akin to what Hamel (1991)

called an investment avoidance objective. Unlike the access objective, learning objectives were not directly associated with financial outcomes.

For several reasons, there was an expectation that learning intent would be focused on process technology and management know-how rather than product technology. First, much of the automobile components and supply industry was at a mature stage of product development. The focus for many supplier firms had shifted to cost and process improvement rather than new product development. Second, because licensing and technology agreements between the partners were often in place prior to the joint venture formation¹, specific product technologies were already being purchased. Third, for the North American JOEMs, the most highly engineered car parts were still imported or manufactured by the JOEMs themselves. As Table 5-1 indicated, most of the joint venture products had relatively low engineering content. Finally, the dominant culture of the Japanese firms and its association with technology is generally considered to revolve around manufacturing rather than product design (Burgelman and Rosenbloom 1989).

Learning Intent Results

Of the 40 sample firms, eight were classified as having no learning intent. As expected, only one intent was classified as exclusively a product technology learning intent (Table 6-1). Almost 50 percent of the cases had a process technology and management know-how focus associated with learning intent. In these cases, learning intent involved both manufacturing process technologies and aspects of management outside the specific boundaries of manufacturing technology.

¹There were 18 cases where technology sharing agreements preceded the joint venture formation. These relationships are later in the chapter.

TABLE 6-1
Learning Intent

Learning Intent	Number of Cases
No learning intent	8
Process technology	7
Product technology	1
Management	4
Process and product technology	3
Process technology and management	14
Product technology and management	1
Process and product technology and management	2
	40

Because of the number of learning intent categories and the considerable synergy between the categories, the variable was collapsed into three rank categories: no intent, moderate intent, and strong intent (the same categories used to examine convergent validity in Chapter 4; see page 88). Crosstabulations were then used to examine learning intent and various joint venture characteristics. The results for the crosstabulations of learning intent with joint venture role and joint venture motive are shown in Tables 6-2 and 6-3.²

Table 6-2 suggests a relationship between joint venture role and learning intent (Chi-square = 6.53, $p < .05$). Specifically, when the joint venture produces a product similar to the American parent product, learning intent may be stronger. For new products ventures, the American partner may have considered the learning experience to be more valuable, a finding consistent with Koh and Venkatraman's (1991) argument that opportunities for value creation are maximized when joint ventures are closely related to their parents in terms of product or market scope, or both. Table 6-3 suggests that learning intent is also related to

²In both tables there are two cells with expected frequencies of less than 5. While some analysts recommend that all expected frequencies should be at least 5, other studies indicate that this is probably too stringent and can be relaxed (Everitt 1977).

the primary joint venture motive (Chi-square = 8.19, $p < .05$). Ventures with JOEM access as the primary motive exhibited a stronger learning intent than those formed with other primary motives, most of which were technology-motivated. When access to technology was the initial motive, transferring knowledge from the joint venture to the parent was a secondary consideration. However, subsequent to the joint venture formation, technology-driven ventures often stimulated strong learning outcomes.

TABLE 6-2
Crosstabulation of Learning Intent
by Joint Venture Role

	Learning Intent			Row Total
	No Intent	Moderate Intent	Strong Intent	
Similar Product	3 (5.4)	7 (8.1)	17 (13.5)	27
New Product	5 (2.6)	5 (3.9)	3 (6.5)	13
Column Total	12	15	13	40
Chi-square = 6.53, $p < .05$				

TABLE 6-3
Crosstabulation of Learning Intent
by Joint Venture Motive

	Learning Intent			Row Total
	No Intent	Moderate Intent	Strong Intent	
JOEM Access Motive	3 (5.8)	8 (8.7)	18 (14.5)	29
Other Motive	5 (2.2)	4 (3.3)	2 (5.5)	11
Column Total	12	15	13	40
Chi-square = 8.19, $p < .05$				

Assessment of Joint Venture Learning Potential

The initial learning intent of the American parent is closely related to the assessment of joint venture learning potential. For many firms, an expectation that learning would occur was an important factor in the formation of the joint venture. Joint venture learning potential reflects the degree to which the American partner believed there was potential to learn from its Japanese partner. Learning potential differs from learning intent because it focuses on skill differences between the two partners as opposed to a focused learning objective. As expected, there was only a weak correlation between the learning potential and learning intent ($r = .18$, n.s.).

Table 6-4 shows the descriptive statistics for learning potential and a breakdown of the variable components. The greatest indicated learning potential was for the areas of engineering and production-operations. This result is not surprising, given the earlier discussion on the learning outcome and the popular notions of Japanese manufacturing

TABLE 6-4
Descriptive Statistics for Joint Venture Learning Potential*

Learning Area	Mean	s.d.
General management	3.14	1.09
Marketing-selling	3.03	1.48
Distribution	2.23	1.46
Product R&D	3.54	1.54
Engineering	4.03	1.36
Production-operations	4.09	1.10
Human resource management	2.94	1.37
Overall Measure:	Mean 3.36	s.d. .63
	Minimum 1.89	Maximum 4.57

*Not applicable scores were recoded to 0

superiority. In the interviews, managers usually indicated that the greatest differences between American and Japanese capabilities were in the manufacturing areas. The lowest learning potential scores were in the areas of distribution and human resource management.

Several themes characterized informants' descriptions of the anticipated learning potential. One, the expectation of learning in the manufacturing areas often stemmed from a belief that Japanese manufacturing was innately superior to North American manufacturing. As discussed earlier in this chapter, managers frequently described the notion of Japanese superiority in terms of a mystique.

A second theme was that differences between the Japanese partner and the American partner would be visible and easily transferrable, a situation Keller (1989) described in the General Motors\NUMMI learning experience. However, as Hamel, Doz, and Prahalad (1989, 136) observed, Japanese firms' joint venture contributions are often difficult-to-unravel strengths while Western partners contribute easy-to-imitate technology. An executive described an American firm's evaluation of the learning potential and elaborated on American-Japanese management differences:

When the joint venture was formed, we were not under the misconception that the Japanese partner was advanced in terms of manufacturing technology that was visibly different. We knew there was no magic cookbook.

The biggest thing in implementing Japanese manufacturing technology is understanding the soft side. Most Americans see only the hard side. For example, when Americans see a kanban system they focus on what is written on the cards, what quantities, etc. Ask a Japanese manager about the kanban system and the focus will be on how important it is that the cards are not lost and what will happen to the system if the card is lost, not what is on written on the cards.

For organizations to learn from the Japanese they have to understand the differences between the Japanese and the American management approaches. Most Western companies enter a joint venture expecting to find visible differences that are not only unique but unknown to the

rest of the industry. The reality is that the differences will be unique but they will be subtle. The differences are also going to be managerial rather than technological. That may require an admission that American managerial practice may be part of the problem. Many managers find that hard to admit.

Vignette 2 (Appendix 6) describes a firm with a managerial learning intent and an expectation of high learning potential from its joint venture. Because the learning potential was associated with the notion of visible differences, the outcome of the learning process was less satisfactory than anticipated. In this example, the American firm recognized that its Japanese firm was not technologically superior. However, the belief that transferable pieces or packages of knowledge would be found was too simplistic. Thus, while the learning intent was logical given the American parent's business and operating environment, the intent did not match the expected learning potential. The learning potential was based on the notion of visible differences that did not exist.

An analysis of learning potential and joint venture characteristics found that with the exception of joint venture initiation, there were no significant intergroup differences. The results for initiation indicate that the highest learning potential was for both partner-initiated joint ventures (ANOVA $F = 4.90, p < .05$; Tukey test indicated a significant difference at the .05 level between Japanese partner-initiated and both partner-initiated joint ventures). An explanation for the result is similar to that suggested for the learning variable-initiation results (Chapter 5 page 137-138). Both partner-initiated joint ventures probably involved greater pre-formation discussions and mutual understanding between the partners. With that understanding, the American parent may have anticipated a greater learning potential.

American Parent Experience

Nearly half the American partners lacked prior joint venture experience while 13 firms had experience with both international and domestic joint ventures (Table 6-5). Using crosstabulations, the relationships between prior joint venture experience and joint venture characteristics were examined.

TABLE 6-5
Prior Joint Venture Experience

American Partner's Previous Joint Venture Experience	Number of Cases	Percent
None	16	40.0%
Domestic joint ventures	3	7.5%
International joint ventures	8	20.0%
Domestic and international joint ventures	<u>13</u>	32.5%
Total	40	

Table 6-6 reports the crosstabulation results for prior joint venture experience and joint venture initiation (Chi-square = 9.47, $p < .01$). The results suggest a relationship between joint venture experience and initiation. When the American partner lacked joint venture experience, the joint ventures tended to be initiated by the Japanese partner or by both partners. There was only one case in which the American partner lacked joint venture experience and initiated the joint venture.

No other significant relationships were found between prior joint venture experience and joint venture characteristics. As for the Japanese partners, many were described by the joint venture managers as internationally inexperienced. A large number had no foreign investments outside of Korea or Taiwan. Although specific data on the joint venture

experience of the Japanese partners was not collected, there were indications that when the Japanese partner lacked joint venture experience, ventures were initiated by the American firms or by both partners.

TABLE 6-6
Crosstabulation of American Partner Joint
Venture Experience by Joint Venture Initiation

	<u>Joint Venture Initiated By</u>			Row Total
	American Partner	Both Partners Initiated	Japanese Partner	
No Previous Experience	1 (4.8)	5 (5.2)	10 (6.0)	16
Previous Experience	11 (7.2)	8 (7.8)	5 (9.0)	24
Column Total	12	13	15	40
Chi-square = 9.47, $p < .01$				

Prior Partner Relationships

There were 24 cases where the partners had been involved in a prior relationship (and 16 cases without). In most cases, prior relationships involved technology sharing and licensing agreements, many beginning in the 1960s with the American firm transferring technology to Japan. Over the years, the agreements often evolved into two-way technology sharing arrangements. In several cases, technology sharing agreements resulted in the American and Japanese firms agreeing not to compete with each other in their home markets. These non-competition agreements provided the impetus for the formation of several joint ventures. The Japanese partner could not enter North America without breaking the

agreement with its American partner and the American partner wanted access to the growing JOEM market.

In a few joint ventures, prior partner relationships involved personal relationships between senior managers rather than explicit business arrangements. In one situation, the presidents of the joint venture partners were roommates in university. In another case, the partners met at a conference in Japan and maintained contact for almost 20 years before initiating joint venture discussions. Many managers emphasized the importance of personal relationships between senior executives of the joint venture partners. In fact, these personal relationships were often viewed as a key factor in keeping the joint venture partners together when financial and other conflicts indicated a potential termination.

The analysis of prior relationships and joint venture characteristics indicated a relationship between joint venture ownership and prior partner relationships (Table 6-7; Chi-square = 4.00, $p < .05$). Specifically, in cases where there was a prior relationship, the American partner often had less than 50 percent ownership. The existence of the prior relationship suggests an initial degree of trust and therefore, the American partner may have been willing to accept less than 50 percent equity. Alternatively, as discussed in Chapter 5, Japanese partners often preferred majority ownership when there was a strong relationship with a JOEM. Of the 12 cases with prior partner relationships and less than 50 percent equity for the American partner, seven had single JOEM customers and four had multiple JOEM customers.

An interesting finding was that of the 11 single JOEM customer joint ventures, only three had no prior partner relationship. The role of the JOEMs in the joint venture formation process may provide an explanation. Earlier it was suggested that if the joint venture had a single JOEM customer, this was a strong indicator that the Japanese partner and the JOEM

customer were closely related. A strong JOEM-Japanese partner relationship probably meant that the JOEM was involved in the joint venture formation process and in particular, played a role in partner selection. Given the importance that the Japanese attach to trust and business relationships (Kester 1991; Sullivan and Peterson 1982), the JOEMs may view a joint venture between one of its suppliers and an "outsider" as less than desirable. Thus, from the JOEM's perspective, a prior relationship between the partners was probably a desirable feature in an American joint venture partner.

Not surprisingly, of the 13 both partner-initiated ventures, ten involved prior partner relationships. Also, where technology access was the primary motive, there tended not to be a prior relationship, consistent with the fact that most prior partner relationships involved technology sharing.

TABLE 6-7
Crosstabulation of Prior Partner
Relationships by American Partner Equity

	<u>American Partner Equity</u>		Row Total
	Less than 50%	50% or More	
No Prior Relationship	3 (6.0)	13 (10.0)	16
Prior Relationship	12 (10.0)	12 (15.0)	24
Column Total	15	27	40
Chi-square = 4.00, $p < .05$			

HYPOTHESIS TESTING

Learning Intent

Hypothesis 2 (see Table 6-8 for the hypotheses associated with the American partner and the joint venture formation) predicts that learning efforts will be influenced by the strength of the initial joint venture learning intent. There was a moderate correlation between learning intent and learning efforts ($r = .39, p < .01$), providing evidence that an initial learning intent is associated with efforts to acquire joint venture knowledge. In the absence of a strong learning intent, learning efforts may be weaker or not initiated. Using ANOVA and the collapsed categories of learning intent as discrete groupings, intergroup differences in learning efforts were found, contributing additional support for the hypothesis ($F = 6.43, p < .01$, Tukey test indicated significant differences at .05 between the group with no learning intent and the other two groups).

While a learning intent may be associated with efforts to transfer knowledge, the learning intent will likely change after the venture formation. Thus, Hypothesis 2a predicts that the initial learning intent will only moderately influence the learning outcome. The correlation between learning outcome and learning intent was somewhat stronger than expected ($r = .30, p < .05$), although less than the correlation between learning intent and learning efforts. A crosstabulation of learning intent and learning outcome with the classifications treated as discrete categories was examined. Of the eight parent firms with no learning intent, six were classified as non-learning organizations. However, seven firms with a strong learning intent were also classified as non-learning organizations. With learning outcome collapsed into two categories, the chi-square was 4.33 ($p = .11$). Both the correlational and crosstabulation results provide moderate support for Hypothesis 2a.

TABLE 6-8
Hypotheses: The American Partner and the Joint Venture Formation

Hypothesis 2: The strength of the parent firm's initial learning intent will positively influence the parent's initiation of learning efforts.

Hypothesis 2a: The parent firm's initial learning intent will have only a moderate influence on the parent's learning outcome.

Hypothesis 3: The parent firm's learning efforts will be positively associated with the anticipated learning potential associated with the joint venture partner.

Hypothesis 3a: The parent firm's learning outcome will not be strongly related with the anticipated learning potential associated with the joint venture partner.

Hypothesis 4: Parent firms experienced in joint venture management will have more successful learning experiences than firms without joint venture experience.

Hypothesis 5: When the joint ventures partners have been involved in a prior relationship, parent firms will be more likely to engage in learning efforts than when there is no prior relationship.

The results for Hypotheses 2 and 2a suggest that the initial learning intent may motivate a firm to initiate learning efforts. However, those learning efforts may not be entirely successful given that the intent may change after the joint venture formation. The intent may be unrealistic or it may be impeded by other factors associated with the collaborative relationship. Thus, while learning intent may be related to learning efforts, there does not appear to be a direct link between intent and the eventual learning outcome.

Vignettes 3 and 4 (Appendix 6) examine the link between the learning intent and the learning outcome. Vignette 3 illustrates an unanticipated learning experience that occurred primarily through a vertical link between the joint venture and its American parent. Vignette 4 involves a firm with an explicit learning intent that incorporated an unclear understanding of the differences between the Japanese and American firm capabilities.

Learning Potential

The learning potential variable indicates the American partner's initial expectations about the capabilities of its venture partner. In the absence of expectations of different capabilities, the learning process may not be initiated. Consequently, learning should be greater when joint venture partners are perceived to have superior skills and capabilities.

Thus, Hypothesis 3 predicts a positive relationship between learning potential and learning efforts. Initial analysis revealed a weak relationship ($r = .16$, n.s.). A scatterplot of the data revealed two significant outliers. After eliminating the outliers, there was a moderate correlation between learning efforts and learning potential ($r = .30$, $p < .05$).³

Following the rationale used for hypothesis 2a concerning learning intent and the learning outcome, Hypothesis 3a predicts that the relationship between learning potential and the learning outcome will not be strong. As expected, the correlation was weak and non-significant, providing support for the hypothesis.

³In the first outlier case, the informant indicated a low level of learning potential while the firm was scored five on learning efforts. A review of the interview write-up indicated that the joint venture manager (the manager had a dual role in the joint venture and the parent) was initially unwilling to concede that the joint venture represented a learning experience for the American partner. In reply to questions about the learning experience the manager stated:

Although I hate to admit it, the quality of the joint venture product is superior to that in the parent. The joint venture is more meticulous because the customers demand it. As a result, I am starting to rethink my attitudes about quality and serving the customer.

In the second outlier case, learning efforts was low while the informant indicated a high value for learning potential. The American parent played a minor role in the joint venture management and was a minority shareholder. The joint venture had a single JOEM customer and was in a business outside the parent company's product scope. There appeared to be no mechanisms in place to transfer knowledge from the joint venture to the parent.

An example illustrates the often unrealistic initial expectations about learning potential. The initial learning potential was viewed as very low but subsequently, the joint venture proved to be a very powerful learning experience.

Initially, we thought there was nothing to learn from our partner. We thought we were better than anybody. When we first went to Japan we thought our partners wanted a joint venture so they could learn from us. We were shocked at what we saw on that first visit. We were amazed that they were even close to us, let alone much better. We realized that our production capabilities were nothing [compared with the Japanese firm's]. We realized that we were not world class. Our partner was doing many things that we couldn't do. For example, they had excess equipment capacity that gave them more flexibility. We can't do that because of our short-term pressures.

For further insight into the relationship between learning potential and learning outcome, the relationship between learning potential and the questionnaire measure of learning outcome was examined. The correlation between these two variables was positive and significant ($r = .46, p < .01$), suggesting that learning was consistent with initial expectations about the partner and the partner's specific capabilities. Perhaps, the initial evaluation of learning potential created a self-fulfilling prophecy. Firms were reluctant to change their previously conceived ideas about partner skills and capabilities. Therefore, managerial evaluations of the learning experience remained consistent with expectations.

To investigate this possible explanation, a new variable called learning difference was created. The measure of learning potential and the questionnaire measure of learning outcome used the same seven competency areas. For each competency area of the learning outcome score, the score for learning potential was subtracted. The seven differences were summed and divided by seven to yield a measure of learning difference. The difference provides an indication of the extent to which the learning outcome was more or less than the learning potential.

The mean learning difference was $-.90$ and the s.d. was $.68$. More important, only two cases had positive learning differences. This suggests that few firms realized their learning expectations, providing further evidence to support Hypothesis 3a. Looking at the individual components (Table 6-9) reveals that the greatest learning differential is associated with the manufacturing areas, the same areas with the greatest expectation of learning.

TABLE 6-9
Descriptive Statistics for Learning Difference

	Mean	s.d.	Minimum	Maximum
Overall measure	$-.90$	$.68$	-2.86	$.14$
General management	$-.71$	$.91$	-3.00	1.00
Marketing/selling	$-.79$	1.22	-4.00	2.00
Distribution	$-.59$	1.05	-4.00	1.00
Product R&D	-1.18	1.24	-3.00	2.00
Engineering	-1.32	1.15	-4.00	1.00
Production/operations	-1.00	1.28	-4.00	1.00
Human resource management	$-.74$	1.14	-3.00	3.00

The interpretation of the learning differential suggests that most firms had overly optimistic expectations about their potential learning experience. This is consistent with the earlier discussion about a Japanese mystique. When the reality of the learning experience became clear, firms often reevaluated their learning expectations. The same skill areas were emphasized but the overall outcome was less than anticipated, resulting in a moderate correlation between learning potential and learning outcome.

Prior Joint Venture Experience

Hypothesis 4 predicts that parent firms experienced in joint venture management will have more successful learning experiences than firms without joint venture experience. The

rationale for the hypothesis was that previous joint venture experience would provide a base of experience in the management of joint ventures and in the utilization of joint ventures as learning experiences. A crosstabulation of joint venture experience and the learning outcome categories indicated no relationship (Table 6-10; Chi-square = 2.12, n.s.) and therefore, the hypothesis was not supported.

TABLE 6-10
Crosstabulation of American Partner Joint
Venture Experience by Learning Outcome

	<u>Learning Outcome</u>			Row Total
	Non-Learning	Moderate Learning	Learning	
No Previous Experience	6 (6.8)	5 (6.0)	5 (3.2)	16
Previous Experience	11 (10.2)	10 (9.0)	3 (4.8)	24
Column Total	17	15	8	40
Chi-square = 2.12, $p = .35$				

The lack of support may be a function of the uniqueness of the joint venture experience. Because the joint venture experience for many firms was very different than anticipated, previous joint venture experience may have been inadequate in preparing the American partners for their Japanese joint ventures. Many managers admitted that the American partners were unprepared for their Japanese joint venture experience. As a manager in a single JOEM customer venture explained:

When I was with the American parent I knew the rules and I knew that there were certain steps that I had to go through. For example, if we had a problem with our suppliers we could ask for new bids. With the joint venture, we could not do that because of the different kind of

relationship we had with our suppliers. I could not solve problems the same way. I did not know what the rules were. Since there were two partners it was even more difficult. In some cases, decisions about things like suppliers were made at a higher level in the organization than would have been the case in the parent.

In this example, the American partner had both domestic and international joint venture experience and expected that the experience would be useful in managing a Japanese joint venture. However, conflict between the partners over a variety of issues eventually led to termination of the joint venture.

Shortell and Zajac (1988) found a similar result in their study of internal corporate joint ventures. They expected a positive relationship between prior experience in related programs and profitability of a new joint venture but instead, found a negative relationship. They concluded that because the prior experience involved different types of activities than the joint venture, the learning that occurred from the prior experiences had little transferability to the new joint venture situation.

Prior Partner Relationships

Hypothesis 5 predicts that when the joint venture partners had been involved in a prior relationship, parent firms will be more likely to engage in learning efforts than when there is no prior relationship. The rationale for the hypothesis was that prior knowledge of the joint venture partner would provide a better understanding of the potential learning experience and thus motivate the American firm to engage in learning efforts.

The results do not support the hypothesis; there was no significant difference in learning efforts between cases with and without prior partner relationships (2.29 vs. 2.12, $t = .36$, n.s.). Possibly, the American firm may have concluded that maximum learning had already occurred. However, it is unlikely that a less "intimate" relationship would have

yielded the same learning opportunities as a joint venture. The explanation may be that a prior relationship creates a buffer that prevents a relationship from dissolving even if initial outcomes are unfavorable (Fichman and Levinthal 1991). However, the establishment of a new joint venture organization means there are new partnering roles that have to be learned by the parents. These new roles may be so different from those of prior relationships that the carryover of prior knowledge and its impact on the joint venture learning experience will be limited.

An example illustrates the misconceptions that may arise when there are prior partner relationships. In this case, the American partner had licensed technology from its Japanese partner for many years. The Japanese partner was a world leader in a particular technology and had licensed it to both North American and European companies. The prior relationship between the partners was the stimulus for the initiation of joint venture discussions in 1986. The joint venture became operational in 1988. After a short time, there were conflicts over various issues, such as product prices, workforce management, and joint venture supplier selection. The joint venture general manager attributed many of the problems to both partners' lack of a realistic understanding of the other.

Both partners were naive about the other partner's capabilities and about the nature of the joint venture. The American partner did not grasp the implications of the changing [automotive] industry structure and how that would impact the joint venture performance. They did not appreciate the Japanese philosophy. The Japanese partner expected a much leaner partner, one that was prepared to work hard on the joint venture's behalf. They sensed that management in the American partner was not committed to the same things they were.

SUMMARY

The parent firm context was examined in this chapter, with a focus on learning intent, learning potential, and the experience of the American partner with joint ventures and with the joint venture partner. At this stage of the analysis, a tentative causal framework can be proposed. The data suggest a series of processes that begins with an initial assessment of the joint venture learning potential and the establishment of the motives for the venture formation. Contrary to expectations, joint venture experience and prior partner relationships seemed to have little impact on the learning process.

A strong learning intent may provide the impetus to put in place the efforts necessary to transfer knowledge from the venture to the parent. However, the intent and the anticipated learning potential may not be realistic. Or, there may be misplaced beliefs about visible differences and ease of knowledge transfer (the notion of visible differences is explored in greater detail in Chapter 9 in the section on barriers to learning). In any event, the data is suggestive of a link between the initial, pre-formation intent and learning efforts. The process that occurs subsequent to the formation of the joint venture requires further analysis.

CHAPTER 7

THE JOINT VENTURE CONTEXT AND JOINT VENTURE CENTRALITY: FINDINGS

The previous chapter analyzed the parent firm context, the first set of variables in the conceptual framework. This chapter presents findings pertaining to the joint venture context and joint venture centrality. The first two sections describes the joint venture context and present the results of the joint venture context hypothesis tests. The following sections describe joint venture centrality and the related hypothesis tests.

THE JOINT VENTURE CONTEXT

Trust and the Relationship Between the Partners

Trust and its role in joint venture relationships has been considered in several studies (Beamish 1984; Geringer 1988; Sullivan and Peterson 1982). In this study, trust was an important issue with most informants. Consistent with the study by Beamish (1984), many managers suggested that trust was a significant predictor of joint venture performance (joint venture performance is examined in detail in Chapter 8). In the absence of mutual trust, the partners may question each others' actions and motives, making a long-term relationship difficult or impossible to manage.

The interviews indicated that prior to joint venture formation, American partners often expected their future Japanese partners to be trustworthy. As a result, American firms

were more willing to enter joint ventures "on faith"¹ than might have been the case with domestic or other international partners. Unfortunately, joint ventures described as having been formed on faith were often the ones that subsequently developed operating problems.

The managers also indicated that trust was a major factor in the Japanese firm's selection of a joint venture partner and possibly, the most important factor. Many Japanese firms were entering the North American market for the first time and consequently, were unwilling to enter on their own. Finding a trustworthy partner was deemed critical and a means of eliminating uncertainty about the American market.

The Japanese partners' emphasis on trust was consistent with descriptions of the Japanese business environment. In Japan, extensive networks of inter-corporate agreements exist between many firms; Kester (1991, 76) referred to this as an "intricate network of largely implicit reciprocal trading agreements." Trust and loyalty play a key role in creating an environment of voluntary forbearance and long-term relationships (Kester 1991a).

The Japanese automobile industry illustrates how a network of high trust relationships can evolve into an institutionalized arrangement. For example, Toyota's first tier suppliers are organized into a group known as *Kyoho-kai*--roughly translated as a "club for co-prospering with Toyota" (Dodwell Marketing Consultants, 1990, 36). The existence of Japanese automotive supplier groups is perhaps a fundamental reason American firms have been largely unsuccessful in capturing a large share of the JOEM business. Because of the implicit reciprocity in the Japanese networks and the norms and expectations that have

¹From the American partner's perspective, faith involved expectations about issues such as joint venture profitability and market development, partner contributions, start-up timing, and Japanese partner joint venture objectives.

developed over many years, it is logical that the JOEMs would prefer to deal with the same suppliers in North America as in Japan.

Although trust was a key factor for both American and Japanese partners, the data suggest that perspectives of trust differed between American and Japanese firms. For the Japanese firms, trust appeared synonymous with long-term relationships and was closely related with the notion of dependence. Dependence is a key aspect of Japanese relationships and contributes to the strength of supplier-manufacturer agreements. Once a relationship built on trust and mutual dependence is developed, both sides will probably attempt to make the relationship work².

The American firms viewed trust as important because it allowed the partners to work together and rely on one another to operate within the spirit of the agreement. However, the presence of trust did not necessarily ensure a long-term relationship. An American partner with complete trust in its Japanese partner might still wish to sell its share of the joint venture for financial reasons. To the American firm this would be good business; to the Japanese it would be a breach of trust because it failed to acknowledge mutual dependence and the importance of long-term relationships. Several managers indicated their belief that the Japanese focused too much on trust rather than good business sense (good business sense was defined, of course, from an American perspective).

The different trust perspectives were clearly evident in several cases where the American partner wanted to terminate the joint venture. The Japanese firms were shocked and offended when they realized their American partners wanted to break the relationship.

²When dependence diminishes, attitudes about the importance of a long term relationship probably change. Reducing dependence may be a joint venture objective--the concepts of joint ventures as transitional arrangements is discussed in later chapters.

In another case, the American partner wished to reduce its equity from 60 percent to 20 percent, primarily for financial reasons. A joint venture executive described the response of the Japanese partner:

Initially, the American partner was not trying to end the joint venture. They talked about 20 percent ownership [with the Japanese partner holding the other 80 percent]. However, the Japanese partner was shocked that its American partner was considering reducing its commitment to the venture. Once the Japanese partner knew that its American partner was unhappy with the existing relationship, they felt that changing the ownership structure would not help a relationship that was obviously in trouble. The Japanese partner made the drive to take over the joint venture completely. Their attitude was, "Why bother to stay in the joint venture when there is no longer any trust between the partners?" They took it as an affront that the American partner would want to break the relationship.

In the previous example, the Japanese partner adopted the perspective that the relationship was built on trust and despite some problems, the two partners had agreed to work together. The joint venture executive commented, "The Japanese partner would never have brought up the problems and would have stayed in the joint venture for 50 years." Once the American partner openly indicated their dissatisfaction with the joint venture, the Japanese partner concluded that there was no longer mutual trust between the partners.

Trust and Joint Venture Characteristics

The mean score for the trust variable was 5.59 with the maximum 7.00 and the minimum 1.00 (s.d. 1.19). Trust and the joint venture characteristics were examined; no significant intergroup differences were found.

Openness and Information Sharing

Joint venture openness reflects the willingness of the joint venture partners to share information. Sharing information is a key aspect of most collaborative arrangements. For

this study, openness was considered critical, given the view that the processing and of information is a key aspect of learning. Comments from the managers regarding openness include:

The Japanese partner is willing to be very open about its technology and wants to see its partner benefit from its knowledge.

The openness is right up to the board level. They [the Japanese managers] are very willing to share information and there is no attempt to withhold information from the Americans.

Both partners are willing to share information. The Japanese partner is confident of its ability to compete and consequently, is willing to give the us [the American partner] access to their technology. In addition, the Japanese partner trusts the American partner and does not believe that they will do anything unethical. For example, the joint venture is using Japanese technology. I could try to get access to it and transfer it back to our R&D lab but I won't and our partner trusts us.

Despite many assertions of relationships openness, the lack of partner openness was a concern to some managers (paranoia perhaps?). The belief that the Japanese partner had a "hidden agenda" was expressed by several managers, particularly as it related to the relationship between the Japanese partner and JOEM customers. In several cases, Japanese partners were reluctant to release product design information to the joint venture, even though the joint venture product was a copy of a product produced in Japan. In other cases, openness was a problem when the Japanese partner supplied components to the joint venture. Informants often expressed concern about the costing of Japanese-supplied components. Finally, several managers expressed concerns about openness associated with startup issues and the introduction of Japanese management to the joint venture. The Japanese partner expected a very straightforward transfer of Japanese management without the need to provide training and advice. As a manager explained:

The Japanese managers were unable to communicate their expectations about things like quality and continuous improvement. They were used

to dealing with other managers and workers who had been in the Japanese environment and in the ___ business. The joint venture had a new workforce without any experience in the business. This was complicated by the inability of the American partner senior management to understand the Japanese philosophy. They weren't able to put management in place that could effectively work with and understand the Japanese process.

Interestingly, openness was usually described as if it were a function of the Japanese partner's willingness to share information rather than a mutual sharing of information between the partners. The general view was that the Japanese partners controlled the most valuable information in the joint venture. Therefore, although openness is a joint venture variable, it is oriented toward the American partner's view of its Japanese partner's willingness to share information. This finding is consistent with Hamel's (1991) assertion that Western alliance managers generally believed that Western partners were more open than their Japanese partners. Hamel also found that no Japanese manager expressed an opinion that Western partners might be less open than Japanese partners. In this study, American managers almost took it as a given that the American firm would share information with its Japanese partner. That the Japanese partner was also willing to share information was viewed as somewhat surprising by many managers.

Openness and Joint Venture Role

The openness mean was 4.99 and ranged from 2.33 to 7.00 (s.d. 1.23). An interesting finding was that openness was higher for joint ventures with products new to the American firm (5.62 vs. 4.67, $t = 2.61$, $p < .05$). A possible explanation for this difference is that Japanese partners recognized the competitive implications of forming a joint venture with an American firm manufacturing a product similar to the joint venture product. Accordingly, Japanese partners may have been less open because they perceived a risk in

revealing distinctive skills. When the joint venture product was new to the American firm, the perceived competitive risks may have been lower and the Japanese partner more willing to share information.

A second and related explanation involves the importance that the Japanese attach to supplier-manufacturer relationships. Of the new product joint ventures, 70 percent served domestic customers, indicating that the joint venture was probably not tied strongly into the Japanese partner's JOEM supplier network. Without a strong JOEM customer relationship in the venture, the Japanese partners may have felt a lesser need to protect their distinctive capabilities.

In several cases, there were explicit attempts by the Japanese partner to control the flow of information. Vignette 5 (Appendix 6) illustrates a situation in which the Japanese partner explicitly tried to control the transfer of knowledge to its joint venture partner. A senior joint venture manager attributed the Japanese partner's reluctance to share information as a primary cause of the joint venture's termination. After the termination, the Japanese partner became the venture's sole owner and the new organization became a direct competitor with its former American partner.

Intensity

The intensity measure focused on interactions at the joint venture level and therefore, is included as a joint venture context variable with trust and openness. Intensity is concerned with frequency and volume, that is, how much effort the partners put into their cooperative relationship. The measure also provides an indication of the potential for learning since it is within the joint venture that the learning process is initiated. If joint venture managers are

not interacting and exchanging information, it will be very difficult for a joint venture partner to capitalize on the learning opportunity.

The interviews identified a concern of many joint venture managers: "two camps" of management within the joint venture, the Japanese and the Americans. At its worst, the two camps tried to operate autonomously from each other, as the following example illustrates:

There was really no such thing as a joint venture manager. There were American partner managers in the joint venture who made decisions about product sourcing process decisions, human resources, and finance. And there were Japanese managers in the joint venture who make decisions about product design, production scheduling, quality pricing and sales. . . . The two sides were no longer talking to each other in the joint venture.

This example was an extreme situation. The more usual situation was one in which the two sets of managers worked together but still had misunderstandings about the working relationship. A common complaint of the American managers was that they were excluded from meetings held by the Japanese managers. A joint venture president explained:

When the Japanese president visits the joint venture there are meetings between the Japanese managers. The American managers, including me, are usually excluded. When that happens the Americans wonder what the Japanese are talking about behind our backs. I have tried to convince the Japanese managers that there should be common meetings held in English, but they don't agree. . . . The two camps problem happens because of the Japanese tendency to manage in North America using shadow management; each Japanese manager has an American shadow. Generally, the real power lies with the Japanese. In this joint venture, there is a shadow system and it is never clear who is in charge.

Despite the problems in bringing together two very different sets of management, many managers reported that the situation had improved substantially since the joint venture began operations. In several cases, both sides replaced their management teams because the two sides could not work together. In a few instances, the managers began to see each other socially as a means of resolving their differences.

Intensity and Joint Venture Characteristics

The intensity mean was 7.10 and ranged from 3.50 to 9.00 (s.d. 1.26). A difference was found in the mean level of intensity after grouping the cases by joint venture role (6.43 vs. 7.44, $t = 1.93$, $p < .10$). The similar product joint ventures show a higher level of intensity than the new product cases. A logical explanation for this finding is that in the similar product joint ventures, managers from the American parent are familiar with the joint venture product and therefore will interact more actively with the Japanese managers. In the new product joint ventures, the American managers may be less familiar with the joint venture product and therefore, find themselves excluded from various aspects of the joint venture decision making. A related explanation is that in the new product joint ventures, the American managers made a greater effort to interact with the Japanese managers to learn more about the Japanese partner and its capabilities.

JOINT VENTURE CONTEXT HYPOTHESIS TESTING

Trust

Consistent with the discussion of the relationship between prior partner relationships and venture ownership, Hypothesis 6 (see Table 7-1 for the hypotheses associated with the joint venture context) predicts that trust will be higher in cases where there is a prior partner relationship. The hypothesis was not supported. There was no significant difference in trust between the groups of joint ventures with and without a prior relationship (5.66 vs. 5.52, $t = .37$, n.s.).

Two possible explanations are proposed for the lack of hypothesis support. One, the prior relationships were generally technology sharing agreements rather than joint ventures. Since a joint venture involves a much closer operating relationship than a technology sharing

agreement, a different notion of trust between the partners may be necessary. Therefore, the existence of a prior relationship between the partners may not be a good predictor of joint venture trust.

TABLE 7-1
Hypotheses: The Joint Venture Context

Hypothesis 6: In cases where the joint venture partners have been involved in prior relationships, trust will be greater than when no prior relationships exist.

Hypothesis 7: Openness in the joint venture relationship will be positively associated with the parent firm's learning efforts.

Hypothesis 7a: Openness in the joint venture relationship will have a positive influence on the parent firm's learning outcome.

Hypothesis 8: Trust between the partners and joint venture openness will be positively related.

Hypothesis 9: The greater the intensity of partner interactions, the greater the parent firm's learning outcome.

Hypothesis 9a: The intensity of partner interactions will be positively associated with joint venture openness.

Two, trust was measured as a current state rather than trust at the time the joint venture was formed. Trust may have been higher during the initial "honeymoon" period, until performance issues became a key factor in the relationship. Because the current state of trust is a belief related to future actions, poor joint venture performance may result in a decrease in trust. This explanation was supported by an analysis of the relationship between performance and trust. There was a strong correlation between trust and the questionnaire measure of performance (Pearson correlation coefficient = .69, $p < .001$). ANOVA using the joint ventures classified by overall satisfaction (3 groups: failure, moderate success,

success) indicated significant differences in trust between the groups ($F = 6.00, p < .05$). Thus, initial trust may have been higher in those ventures where the partners had prior relationships. However, after several years of operation, other factors such as performance tended to neutralize the effects of the prior relationship.

Openness

Hypothesis 7 predicts that openness will be positively associated with the parent firm's learning efforts. The moderate correlation between openness and learning efforts ($r = .39, p < .01$) supports the prediction that openness plays a role in the initiation of the learning process. If a joint venture relationship is perceived to be open and the partner willing to share information, parent firms may consider it worthwhile to make the effort to transfer knowledge.

Hypothesis 7a predicts that openness will contribute to the learning outcome because an open relationship provides more information available for absorption by the joint venture parent. The relationship between learning outcome and openness was as anticipated ($r = .36, p < .05$), supporting the hypothesis. For further evidence, the learning outcome classifications were used to test for differences in group means. The result provides additional support for the hypothesis ($F = 2.97, p < .10$). Together, both results provide evidence that the willingness of joint venture partners to share information is related to the ability of the learning organization to absorb the information.

The relationship between trust and openness was also examined. Hypothesis 8 predicts that if trust between the partners is strong, there will be a greater degree of information sharing. Thus, trust and openness should be positively related. As expected,

the relationship between trust and openness was positive and significant (Pearson correlation coefficient = .75, $p < .001$).

Intensity

Hypothesis 9 predicts that the greater the intensity of partner interaction, the greater the parent firm's learning outcome. The rationale for this hypothesis was that the greater the level of interaction, the greater the opportunity for the exchange of information and thus, the greater the opportunity for learning. This hypothesis was not supported ($r = .17$, n.s.). Using one-way ANOVA and the learning outcome classifications provided further evidence that the hypothesis was not supported ($F = .58$, n.s.).

Hypothesis 9a predicts that the intensity of partner interaction will be positively associated with joint venture openness. Therefore, in joint ventures where the partners willingly share information, there should be more intensive partner interactions. This hypothesis was not supported as the correlation was weak and not significant ($r = .12$, n.s.).

The lack of support for both hypotheses suggests that the intensity of partner interactions at the joint venture level has a limited impact on the learning process. This conclusion is supported by the interview data in that the nature and extent of joint venture interactions tended to involve operational rather than strategic decision making. Given that organizational learning is viewed as a strategic concept, operational level interactions may be relatively unimportant to the learning process.

JOINT VENTURE CENTRALITY

This section analyzes joint venture strategic centrality. The variables, joint venture importance and strategic integration, are proposed as important factors in creating a receptive learning environment within the parent.

Joint Venture Importance

Joint venture importance reflects the strategic importance of the joint venture to the American parent. Most informants indicated that at least initially in the joint venture process, the venture was considered very important by the American parents. For several reasons, strategic importance was usually high, perhaps even disproportionately high given the joint ventures' size and contribution to overall firm results. One, following Hagan and Newman's (1990) discussion of joint venture importance, most of the joint ventures in the study were related to the parent firms' primary business activities. Two, many American firms viewed access to the JOEM market as critical because of the JOEMs' increasing market share. A joint venture could help the American firm overcome barriers to entry in the JOEM market and hopefully, the American parent could develop its own JOEM business. Three, in most cases, the joint ventures represented the American partner's first close relationship with a Japanese firm. Since Japanese firms were viewed as a genuine threat to American automotive suppliers, a joint venture would give the American parent an inside look at the reality of Japanese competition.

Four, the joint ventures were often the result of an attitude of "if we can't beat them, join them." As one executive said, "The joint venture was essentially a defensive move. I could not improve the company by myself. I had to find a partner who could help me." Finally, while many American parents had international experience, competition from

international competitors in North America was relatively new. Forming a joint venture was, to some degree, an admission that international competition in North America was here to stay and that American manufacturing was not necessarily world class.

Not all American firms saw their joint ventures as strategically important. Older joint ventures were often viewed as less important. There was a moderate negative correlation ($r = -.26, p = .12$, two-tailed) for the relationship between age and importance. A scatterplot for age and importance revealed two prominent outliers. After eliminating the two outliers, the correlation increased ($r = -.35, p = .04$, two-tailed). The interviews confirmed this finding. Many joint ventures were formed with extremely high expectations concerning both profitability and market share. As one executive commented about anticipated joint venture performance, "We thought we were well positioned to get transplant business. The joint venture would be a piece of cake; the transplants were like ducks on the pond." Another executive, quoted in a business publication when the joint venture was formed, said, "The joint venture is an extremely important strategic move for us." In both cases the joint ventures were eventually terminated.

The moderate negative correlation between age and importance suggests that when the joint venture failed to become a panacea for American partner, the joint venture lost some of its lustre. Although the joint venture may have been performing adequately, initial expectations were so high and the reality so different that the American partner reconsidered the strategic importance or centrality of the joint venture.

With the reconsideration of importance came the realization that selling to the JOEM market and managing a joint venture were very difficult tasks. Together, they presented a formidable challenge that some American firms eventually decided was too great. Others firms began to downplay the importance of the joint venture because of new challenges and

opportunities. For example, in one case a joint venture was formed with very high expectations about the importance of forming a link with a Japanese firm. However, several years later the American partner became the subject of a takeover. While the joint venture was performing satisfactorily, senior American partner management had little time to devote to the joint venture.

Informants were also asked to indicate the extent to which the Japanese partner viewed the joint venture as important. Since this question was similar in wording to the question concerning American partner importance, the two questions could be used for an estimation of relative importance. The scores for Japanese partner importance were subtracted from American partner importance. A negative score indicates that the Japanese partner viewed the joint venture as more important than the American partner. Scores ranged from -5.00 to 2.00 with a mean of -.92 and only five cases greater than 0. This suggests that from an informant perspective, Japanese partners viewed the joint ventures as more important than did the American partners³.

Possibly, the difference in joint venture importance reflects the frustration of informants. As senior joint venture managers, the informants often had to explain performance that was lower than expectations. At the same time, there almost a consensus about the superiority of the joint venture product relative to that of the American parent. Managers often expressed concern that the American parent was primarily interested in financial performance issues and failed to grasp that the joint venture was producing a world

³A joint venture manager described the difference between the American and Japanese perspectives of importance: "The American view is that if it is important, things have to happen quickly. The Japanese take an opposite view; if it is important, patience and planning are critical."

class product. Additionally, the Japanese firms tended to place their emphasis on areas such as market share and quality control. An executive commented, "The Japanese are not interested in ROI; they are interested in looking for voids, departures from the plan." When there were divergent perspectives between the two partners, it is not surprising that informants attributed Japanese interest as more strategic and important than that of the American partner.

Vignettes 6 and 7 (Appendix 6) provide a more detailed look at strategic importance. Vignette 6 illustrates a joint venture that was positioned as an important element in the American firm's strategy. Despite the small initial investment in the joint venture, the American partner remained committed to the joint venture and was able to capitalize on the learning opportunity. Vignette 7 describes a situation in which initially, the joint venture was viewed as central to the American firm's strategy. However, as the joint venture experienced performance difficulties, American partner management began to lose interest in the venture.

Joint Venture Importance and Joint Venture Characteristics

Joint venture importance ranged from 1.00 to 7.00 with a mean of 5.32 (s.d. 1.61). Joint venture importance was examined with the joint venture characteristics. The results indicate intergroup differences in mean joint venture importance for joint venture equity and joint venture initiation (Table 7-2; for both characteristics $F = 2.99$, $p < .10$; Tukey test indicated significant differences in importance at .05 between the group with less than 50 percent equity and the group with more than 50 percent). For joint venture equity, mean importance was highest when the American partner held more than 50 percent of the equity.

This finding suggests that joint venture parents may attach greater strategic importance to ventures over which they can exert a greater degree of control⁴.

For joint venture initiation, both partner-initiated joint ventures had the highest mean importance. American partner-initiated ventures could reasonably have been expected to have the highest level of importance. However, given the relationship between age and importance, the initiation of the venture is probably only an indicator of importance at the time the venture was formed. In most cases, perceptions of joint venture importance will change subsequent to initiation.

TABLE 7-2
Joint Venture Importance and Joint Venture Characteristics

Joint Venture Characteristics	Importance Mean
<i>Joint Venture Equity:</i>	
Less than 50% ownership	4.71
50% ownership	5.31
More than 50% ownership	6.38 ¹
<i>Joint Venture Initiation:</i>	
Initiated by Japanese partner	4.71
Initiated by American partner	5.17
Both partners initiated	6.17 ²

¹ ANOVA $F = 2.99, p < .10$

² ANOVA $F = 2.99, p < .10$

⁴Data on joint venture control were collected. Joint ventures were classified as Japanese partner dominant, American partner dominant, shared control, and independent. Twenty cases were classified as Japanese partner dominant. Of these 20, the Japanese partner had more than 50 percent equity in 11 ventures and 50 percent equity in 8 ventures. There was only one Japanese partner dominant joint venture with the American partner owning more than 50 percent. These results support the use of ownership as a proxy for control, as suggested by Hennart (1991).

Strategic Integration

Strategic integration reflects the linkages between the parent and the joint venture senior management. Like strategic importance, integration is viewed as a condition that contributes to the receptiveness of the parent to joint venture-derived knowledge. The integration of the joint venture with the parent helps embed understanding of partner skills in the parent. If a joint venture is closely integrated with the parent, the necessary joint venture-parent interactions and relationships should exist to facilitate the transfer of knowledge. Vignette 8 (Appendix 6) illustrates a case of strong integration between a joint venture and its American parent, Omega. Omega made an explicit effort to work closely with its joint venture and integrate the joint venture into the parent strategy. Because Omega recognized the competitive implications of internalizing its partner's skills and explicitly sought to do so by working closely with its partner, there was a regular exchange of ideas between the joint venture and Omega.

Strategic Integration and Joint Venture Characteristics

The mean score for the strategic integration variable was 3.88 with the maximum 6.50 and the minimum 1.00 (s.d. 1.36). Several intergroup differences were found in analyzing strategic integration and the joint venture characteristics (Table 7-3). The results for joint venture equity suggest that the degree of ownership is related to joint venture integration (ANOVA $F = 6.56$, $p < .01$; Tukey test indicated significant differences in integration at .05 between the group with less than 50 percent equity and both the groups with 50 percent and more than 50 percent). Given that ownership is a reasonable proxy for control, greater ownership should be associated with greater integration because the parent can exercise more influence over the joint venture.

The results for joint venture initiation are somewhat surprising (ANOVA $F = 5.39$, $p < .01$; Tukey test indicated significant differences in integration at .05 between the both partner-initiated group and both the Japanese and American partner initiated groups). Both partner-initiated ventures have the greatest mean integration. Perhaps the result can be explained by the underlying processes associated with both partner-initiated joint ventures. As discussed earlier, both partner-initiated joint ventures were generally formed after several years of preliminary discussions. The more extensive pre-formation discussions associated with both partner-initiated joint ventures may have convinced senior American parent management of the strategic implications of collaboration. The discussions also may reflect management's commitment to the venture and therefore, their desire to integrate the joint venture with parent activities.

TABLE 7-3
Strategic Integration and Joint Venture Characteristics

Joint Venture Characteristics	Strategic Integration Mean
<i>Joint Venture Equity:</i>	
Less than 50% ownership	2.96
50% ownership	4.31
More than 50% ownership	4.59**
<i>Joint Venture Initiation:</i>	
Initiated by Japanese partner	3.50
Initiated by American partner	3.35
Both partners initiated	4.83**

** ANOVA $F = 6.56$, $p < .01$

* ANOVA $F = 5.39$, $p < .01$

CENTRALITY HYPOTHESIS TESTING

Strategic Importance

By viewing a joint venture as an important element in the parent firm's competitive strategy, parent management may be more likely to get involved in joint venture activities and become familiar with the joint venture capabilities. Joint ventures that are peripheral to a firm's strategy may receive less attention, yielding reduced learning opportunities. Hypothesis 10 (see Table 7-4 for a summary of hypotheses associated with strategic centrality) predicts that the greater the level of strategic importance associated with a joint venture, the greater the level of parent learning efforts. As hypothesized, there was a strong correlation between learning efforts and joint venture importance ($r = .66, p < .001$).

Given that joint venture importance is suggested as an element of strategic centrality, a related hypothesis was that the greater the level of strategic importance associated with a joint venture, the greater the parent's learning outcome (Hypothesis 10a). The results support the hypothesis ($r = .65, p < .0001$), as does a one-way ANOVA using the learning classifications as discrete categories ($F = 14.96, p < .001$; Tukey test indicated significant differences in importance at .05 between the non-learning group and both the moderate and learning groups).

TABLE 7-4
Hypotheses: Joint Venture Centrality

Hypothesis 10: The greater the level of strategic importance associated^d with a joint venture, the greater the level of parent learning efforts.

Hypothesis 10a: The greater the level of strategic importance associated with a joint venture, the greater the parent's learning outcome.

Hypothesis 11: The greater the strategic integration between the joint venture and its parent, the greater the parent's learning outcome.

Strategic Integration

As a factor influencing the receptivity of joint venture knowledge, Hypothesis 11 predicts that strategic integration will be positively associated with the learning outcome. As expected, the correlation between strategic integration and the learning outcome was positive and significant ($r = .68, p < .001$). This result suggests that to exploit joint venture learning opportunities it is not enough that firms initiate learning efforts; joint ventures must also be integrated with the parent company's overall strategy, goals, and values.

SUMMARY

This chapter examined two sets of variables: the joint venture context and joint venture centrality. Overall, the results support the assertion that the transparency or openness of a joint venture relationship is an important factor in the joint venture learning process. The results also indicate that the joint venture role may influence openness. Specifically, when the joint venture product is similar to the parent product line, the venture partner may be less willing to share information. Trust between the partners was found to be independent of prior partner relationships. Also, trust may be a good predictor of joint venture openness. If the partners trust each other, they may willingly share information. As elements of joint venture centrality, both importance and strategic integration were important factors in the learning process. The findings support the inclusion of importance and integration as learning conditions. Both variables contribute to the capacity of the parent to absorb joint venture-derived knowledge. By initiating a process of learning efforts and also recognizing the strategic centrality of the joint venture, creating value via learning becomes more tenable.

CHAPTER 8

DATA ANALYSIS EXTENSIONS AND INTERPRETATION

The previous three chapters reported the detailed results of the research study. This chapter reviews the overall support for the research model. This is followed by an examination of joint venture performance and its influence on learning. In the third section, a revised conceptual framework incorporating the findings from the study is proposed. In particular, the influence of joint performance is examined in some detail. The final section discusses the results of several multivariate analyses designed to test the revised framework.

SUMMARY OF WORKING HYPOTHESIS TESTING

The data analysis was grounded in a framework containing three sets of variables: parent firm context, joint venture context, and joint venture centrality. The working hypotheses and results of their analysis are summarized in Table 8-1. While most of the hypotheses were at least moderately supported, no support was found for the hypotheses involving prior joint venture experience, prior partner relationships, and interaction intensity (Hypotheses 4, 5, 6, 9, and 9a). The lack of support for the experience hypotheses may reflect that prior experiences involved different types of activities than the current joint venture and therefore, learning accrued from the prior experiences had little transferability to the new joint venture situation. This explanation was supported by the interview data. Managers often emphasized how unprepared American parents were for their joint venture

TABLE 8-1
Summary of Hypotheses

Hypothesis	Relationship	Support
1	Learning efforts and learning outcome	Support
2	Learning efforts and learning intent	Support
2a	Learning outcome and learning intent	Moderate Support
3	Learning efforts and learning potential	Moderate support
3a	Learning outcome and learning potential	Support
4	Learning outcome and previous joint venture experience	No support
5	Learning efforts and prior partner relationships	No support
6	Trust and prior partner relationships	No support
7	Learning efforts and openness	Support
7a	Learning outcome and openness	Support
8	Trust and openness	Support
9	Openness and intensity	No support
9a	Learning outcome and intensity	No support
10	Learning efforts and strategic importance	Support
10a	Learning outcome and strategic importance	Support
11	Learning outcome and strategic integration	Moderate support

experiences. Years of operating in a relatively stable domestic market may have left many American parents ill-equipped to appropriate the maximum value from a complex joint venture in a changing industry. Even if a firm had experience with international joint

ventures, that experience was typically outside North America. The joint ventures in this study often provided the American parents with their first major exposure to non-domestic customers and competitors in their home market.

When the parent firm had a prior relationship with the Japanese partner, the relationship usually involved technology sharing and consequently, associated experiences and learning may not have been transferable to the new joint venture. Several joint ventures were formed primarily because of existing partner relationships. However, a joint venture usually proved to be more difficult to manage than a technology sharing relationship. The result was that accumulated experience associated with existing relationships was of marginal benefit in supporting joint venture learning.

The lack of support for the intensity hypotheses' may be the result of measurement problems. The measure primarily captured operational interactions rather than strategic interactions. Given that learning is viewed as an element of the strategy process, operational interactions may be relatively unimportant in the learning process.

JOINT VENTURE PERFORMANCE

Although not initially proposed in the conceptual framework, the interview data indicated that joint venture performance may be an important factor in the joint venture learning process. Performance issues were a major source of concern for most American partners. Poor joint venture performance seemed to create a barrier to learning because it shifted managerial attention away from the learning objective. Therefore, joint venture performance may represent what Hamel (1991) called a precondition for learning receptivity.

As discussed in Chapter 4, several measures of performance were used, all from the perspective of the American partner. The primary measures were a questionnaire measure

and a three category classification based on the interview data. The results for the categorical measure of performance were: 11 failures, 18 moderate successes, and 11 successes. The 11 failures were either terminations or high probability terminations¹. When the categorical measure was treated as a ranking variable it was strongly correlated with the questionnaire measure ($r = .75, p < .001$). Table 8-2 shows a breakdown of the questionnaire performance measure means for the three categories of joint venture performance.

TABLE 8-2
Joint Venture Performance Categories

Performance Category	Number of JVs	Questionnaire Performance Mean	Standard Deviation	Minimum	Maximum
Failure	11	3.05	1.12	1.25	4.75
Moderate Success	18	4.59	.96	3.00	6.25
Success	11	5.75***	.61	5.00	6.75

*** ANOVA $F = 22.6, p < .001$; Tukey test indicated significant differences at .05 between each of the groups

The mean for the questionnaire measure of performance was 4.52 with a range from 1.25 to 6.75 (s.d. 1.36). An examination of performance and the joint venture characteristics indicated that with the exception of joint venture motive, intergroup means were not significantly different. The result for joint venture motive showed lower mean performance for joint ventures with a primary motive of JOEM customer access (4.27 vs. 5.14, t value

¹There were 12 joint ventures that had been or were likely to be terminated. One termination resulted when the American parent was acquired. After the acquisition the new owners decided for financial reasons to sell their joint venture interest. This joint venture was not classified as a failure.

= 2.06, $p < .10$). This result is consistent with the nature of Japanese supplier-manufacturer relationships and the problems encountered by American firms in adjusting to the stringent demands of the JOEMs.

The nature of JOEM supplier management has been discussed at several points. Many American partner firms were unprepared for the level of profit margins their joint ventures experienced as suppliers to the JOEMs. Concerns about joint venture performance were a major cause of joint venture termination. The American partners were generally unwilling to absorb losses to the same extent as their Japanese partners. Granted, the Japanese firms often may have had no choice but to remain associated with the joint venture organization because of their relationship with the JOEMs.

Anderson (1990) maintained that firms often evaluate joint ventures using the same methods used to evaluate internal divisions. This situation existed for many American firms in this study. There was a tendency to treat the joint ventures as if they were in environments similar to the parent's domestic OEM product markets. Faced with an information poor environment, many American firms reacted by questioning their original joint venture motives and the motives of their partners.

When serious conflicts between the partners made termination of the joint venture inevitable, the Japanese partners acquired their American partners' interest in all but one case. Of the 12 ventures that have or likely will be terminated, none involved dissolution of the joint venture business. In the one case where the American partner acquired full ownership of a terminated joint venture, the informant indicated that the Japanese partner had not abandoned the North American market and was planning a re-entry in another form. The other 11 joint ventures have or likely will become wholly-owned subsidiaries of the Japanese partners.

For the terminated joint ventures that were JOEM suppliers, the American partners were willing to concede the JOEM market to their Japanese partners. In contrast, the Japanese firms remained committed to their North American investment and rather than dissolving the joint venture organization, became its sole owner. By transferring its share of the joint venture to the Japanese partner, the American firm was often creating a new competitor. Compounding the problem, the competitor had a state-of-the-art plant, a young workforce, and an owner that was willing to endure substantial losses to gain a foothold in the North American automotive industry.

In several cases, the implications of creating a competitor were recognized by the American parents only after the joint venture relationship became unmanageable. Other American parents recognized the risks of collaborating with a potential competitor and explicitly restricted the joint venture to JOEM business or domestic business outside the American parent's primary product lines. Several American firms that originally restricted their ventures to JOEM business decided that, because of the joint venture's superior capabilities, the venture should be used as the basis for targeting new domestic OEM business. A joint venture executive explained the dilemma facing an American partner:

The American partner is losing some of its domestic OEM business. They are starting to consider how they might be able to use the joint venture to manufacture for the domestic OEMs while not completely turning over the business to the joint venture. The American partner does not want to create a monster that becomes a potential competitor in the event of a breakup.

Managers in a few joint ventures indicated that they suspected the Japanese partners may have entered the joint ventures with a goal of full ownership several years later². The

²The issue of the joint venture as a transitional organizational structure is discussed in detail in Chapter 9.

American partners in this study may have underestimated the speed by which their Japanese partners would adapt to the North American environment. Similarly, Badaracco (1991) suggested that perhaps General Motors underestimated the risks involved in forming a joint venture with Toyota. The NUMMI joint venture was managed by Toyota and therefore, Toyota managers were forced to learn how to work with American workers and labor unions. Toyota was then able to deploy its new knowledge in a wholly-owned plant in Georgetown, Kentucky.

To make the transition from joint venture to wholly-owned subsidiary, Toyota, and the Japanese firms in this study, had only to learn how to transfer an existing management process to North America. While many of the Japanese firms were initially uncertain about operating in North America, several years as part of a joint venture probably would allow the firms to acquire the necessary knowledge to compete autonomously. In contrast, the American firms trying to learn from their Japanese partners were faced with making major changes in very fundamental operating philosophies. Thus, while Japanese joint venture partners were often seen as potential competitors by the American firms, none of the American partners studied were able to mount a genuine competitive threat to their Japanese partners.

Performance and Learning

An interesting description of the relationship between a firm's learning experience and joint venture performance is found in Vignette 9 (Appendix 6). In this situation, an American firm with an explicit learning intent found its attention diverted from the learning objective because of concerns about joint venture performance. A joint venture executive described the situation:

The American partner's emphasis on the profitability of the joint venture clouded their judgement. They just could not see past the startup period. The losses distorted their attitudes. Learning was never allowed to surface. Their attitude became, they [the Japanese partner] don't know anything so how can we learn from these people?

An argument could be made that a crisis situation stimulates learning in organizations.

The converse may also be true: a learning process that has been initiated may be disrupted by a crisis. For example, the American partners described in Vignettes 7 and 9 became preoccupied with issues of performance. In both cases, performance issues escalated to a crisis, leading to joint venture termination. Hamel (1991, 97) described the implications of learning when a firm is faced with a crisis situation:

Some slack is necessary if the organization is to search for new approaches, experiment with new methods, and embed new capabilities. Learning is a luxury which can be afforded by those with some minimum complement of time and resources. A small crisis abets learning, a big crisis limits learning.

While performance is not the only crisis situation that might arise, it was a major issue for many firms in this study. American firms involved with the JOEMs generally had unrealistic expectations about the profitability associated with supplying JOEMs. When the expectations were not met, learning objectives became less important, or at least less critical in the short term.

If joint venture performance influences the learning process, then high performance joint ventures should be associated with successful learning efforts. Firms that were satisfied with the venture performance appeared to have a more active interest in capitalizing on learning opportunities. In the poor performing joint ventures, the American firms seemed fixated on improving performance. With this fixation came two types of reactions. One, resources that might have been committed to staff development or other learning efforts were directed toward improving joint venture performance. Two, the American partner began to

lose interest in the joint venture. This is illustrated in Vignette 7; a similar situation is described by a joint venture executive:

The losses in the joint venture were much greater than anticipated, causing the American partner to rethink its involvement. A capital infusion became necessary. The American partner had a weak financial position and was discouraged by the loss situation. They were reluctant to get more involved in the joint venture. They decided not to put any more money into the venture.

A second vignette involving joint venture performance illustrates how an improvement in performance contributed to a shift in learning emphasis. In Vignette 10 (Appendix 6), the initial period of large losses limited the American parent's interest in learning from its joint venture. As the joint venture performance improved, the parent began to increase its interest in the learning opportunity and the joint venture in general.

Performance and the Learning Variables

Even if learning is occurring at the joint venture level, skill internalization may be impeded by parent perceptions of joint venture performance. For this reason and based on the previous discussion, the joint venture performance and learning outcome variables should be positively related. In predicting the relationship between performance and learning efforts, several factors should be considered. Temporally, learning efforts precede the learning outcome. Also, learning efforts may be initiated prior to joint venture performance becoming a major issue. Thus, an argument could be made that learning efforts should be unrelated to joint venture performance. However, the interview data indicated that performance issues were often a major concern within months of the joint venture startup, suggesting there might be a relationship between learning efforts and performance.

The correlation between the questionnaire measure of performance and learning efforts was positive and significant ($r = .52, p < .001$) as was the correlation between

performance and learning outcome ($r = .54, p < .001$). The first result supports the argument that joint venture performance plays a role in the initiation of the learning process. The second result, the correlation between performance and the learning outcome, suggests that performance may be a precondition for internalization of joint venture knowledge.

For further evidence of the relationship between performance and the learning variables, Table 8-3 shows the means for learning efforts and questionnaire measure of learning outcome for the three categories of joint venture performance. ANOVA indicated significant intergroup differences for both learning efforts ($F = 6.42, p < .01$) and learning outcome ($F = 4.94, p < .05$).

TABLE 8-3
Joint Venture Performance Categories
and the Learning Variables

Performance Category	Number of JVs	Learning Efforts Mean	Standard Deviation	Learning Outcome Mean	Standard Deviation
Failure	11	1.36	.50	1.79	.67
Moderate Success	18	2.17	1.38	2.44	.65
Success	11	3.18**	1.33	2.75*	.68

** ANOVA $F = 6.42, p < .01$; Tukey test indicated a significant difference at .05 between the failure and success groups

* ANOVA $F = 4.94, p < .05$; Tukey test indicated a significant difference at .05 between the failure and moderate success groups

Given the strong relationship between learning and performance, does learning influence performance? Such a relationship may hold true when a firm has a strong learning intent but fails to exploit its joint venture learning opportunity. Thus, performance for the strong learning intent/non-learning cases should be lower than for other cases. This was

supported by a *t*-test between a group containing the strong learning intent/non-learning cases and a second group of the remaining cases ($t = 2.48, p < .05$). Further examination found that of the eight strong learning intent/non-learning cases, seven were classified as failures and one as a moderate success. These results suggest that the relationship between performance and learning may be reciprocal. In an iterative process, poor performance may shift attention away from learning. When learning does not occur, the joint venture's performance is less satisfactory, which in turn further suppresses learning efforts.

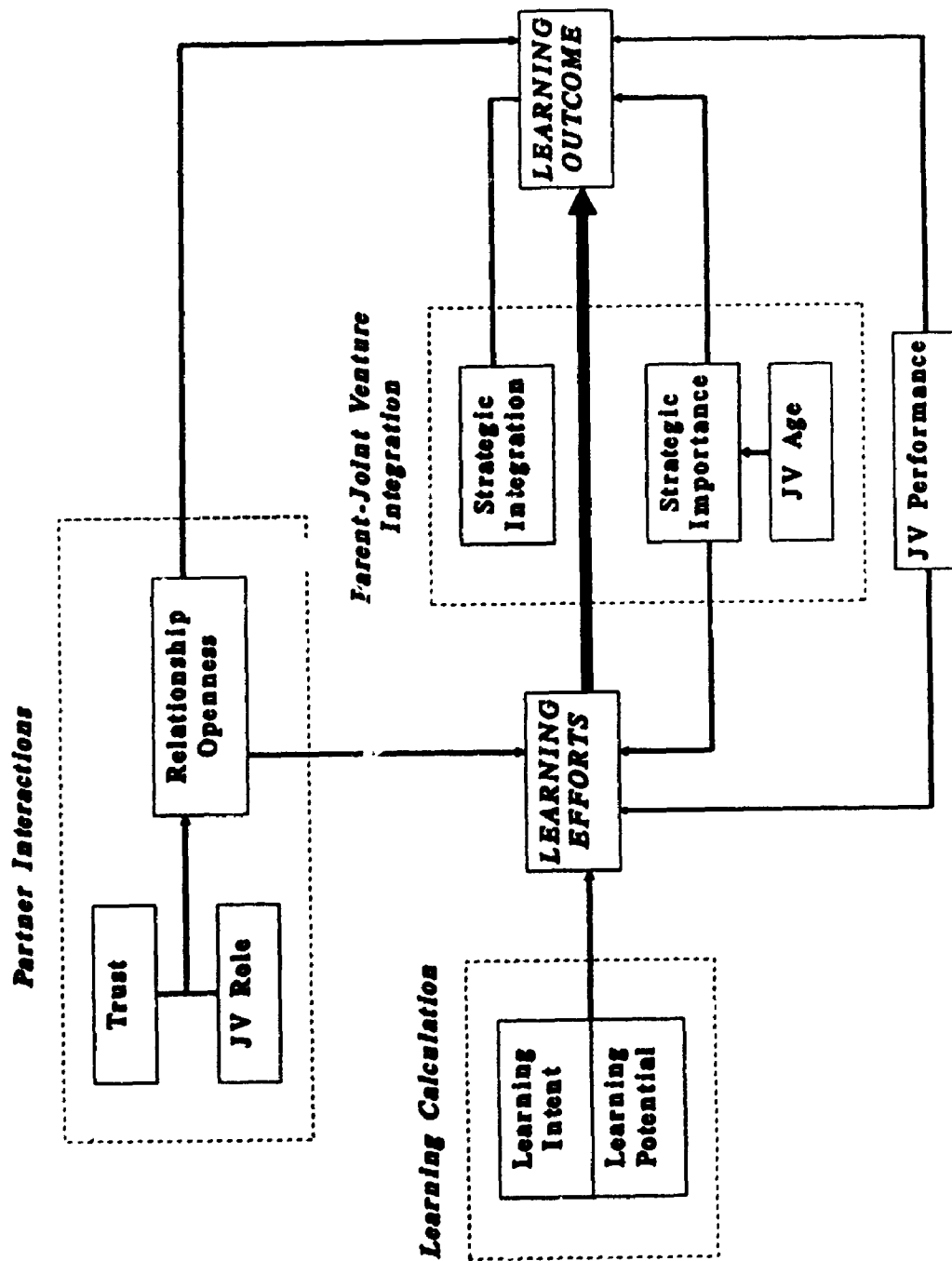
NEW PROPOSITIONS AND REVISED FRAMEWORK

Several new propositions emerged from the study, including:

1. Unsatisfactory joint venture performance will act as a barrier to the parent firm's recognition of joint venture learning opportunities.
2. The greater the parent's focus on joint venture performance, the more difficult it will be for joint venture-derived knowledge to be internalized by the parent.
3. When a parent has a strong learning intent and is unsuccessful in its learning efforts, joint venture performance will be less satisfactory.
4. Because of the relationship between the joint venture age and the parent's perception of venture strategic importance, initial years of a joint venture will provide the greatest learning stimulus.
5. Parent firms in new product joint ventures will have greater access to the skills and capabilities of partners than firms involved in similar product joint ventures.

A revised framework is proposed in Figure 8-1. There are two major differences between the revised framework and the original framework in Figure 3-1. One, the new propositions are reflected in the revised framework. Two, the framework proposes several causal linkages that were only tentative when the research study began.

FIGURE 8-1
Learning Framework



This study began by establishing a conceptual framework containing three sets of variables: parent firm context, joint venture context, and joint venture centrality. Although associational relationships were proposed, there was no initial attempt to develop directional linkages, primarily because of the limited research in the area. On the basis of the insights gained from the study, the revised framework indicates several causal linkages that are a direct extension of the three sets of variables in Figure 3-1. The variable linkages are shown as three subprocesses in the revised framework (the subprocesses are shown within the dotted lines in Figure 8-1). Table 8-4 shows the connection between the initial variable sets and the subprocesses in the revised framework.

TABLE 8-4
Learning Subprocesses

Variable Set in Initial Conceptual Framework (Figure 3-1)	Subprocess in Revised Framework (Figure 8-1)
1. Parent firm context	Learning calculation
2. Joint venture context	Partner interactions
3. Joint venture centrality	Parent-joint venture integration

The framework begins with the learning calculation. In this subprocess, the motives for the venture formation are established along with an initial assessment of the joint venture learning potential. Parent management must be willing to commit resources to the learning process if learning is to occur. A strong learning intent may provide the catalyst for learning efforts. However, the intent and the anticipated learning potential may not be realistic. Or, there may be misplaced expectations about the explicitness or discreteness of partner skills

and the ease of knowledge transfer. In any event, the data suggest a link between the initial, pre-formation learning intent and learning efforts.

The second subprocess involves the interactions between the partners and the link with joint venture openness. Following the establishment of the joint venture and the initiation of learning efforts, the openness of the relationship influences the generation of joint venture knowledge. As a critical indicator of the nature of partner interactions, trust influences relationship openness as does joint venture role, relative to the "learning" parent's product market strategy. Joint venture openness also contributes to learning efforts.

The third subprocess, parent-joint venture integration, occurs at the interface between the joint venture and the learning organization, the parent firm. The integration of the joint venture and the parent plays a key role in determining the parent's receptiveness to learning. Joint venture performance is shown within the integration subprocess because performance had a strong influence on the learning focus of the parents.

The revised framework is consistent with the earlier discussion of the two stage model of joint venture learning. In the model, stage one of the learning process begins with the joint venture managers. Stage two incorporates the transfer of joint venture-derived knowledge from the venture to the parent. Without the transfer, internalization of partner skills and capabilities cannot occur.

While the two stage model is still valid, the results indicate substantial overlap between the two stages, more so than was initially proposed. The notion of joint venture learning as a discrete process is now seen as only moderately important because of the learning process complexity and the influence of interactions between parents and their joint ventures. The learning process may begin with individual learning in the joint ventures. However, if learning goes beyond the joint venture, making an explicit distinction between

joint venture and parent level learning becomes very difficult. Thus, the framework does not precisely separate stage one and stage two learning. Instead, it recognizes that for individual learning at the joint venture level to be internalized by the parent, there must be efforts to transfer knowledge and there must be parent conditions that create a receptive environment for the new knowledge.

MULTIVARIATE ANALYSIS

The revised framework was examined with several multivariate analyses. The analysis begins with an investigation of the three subprocesses. The learning calculation and partner interaction subprocesses were tested using ordinary least-squares (OLS) regression. The centrality subprocess and an integrative model were examined with logistic regression.

The OLS regressions used listwise deletion of missing data. Listwise deletion computes regression equations only on cases that have complete data on all variables in the full equation. Because listwise deletion results in smaller samples than pairwise deletion, it results in a more conservative, less powerful test. However, listwise deletion is more appropriate for determining whether added variables, and not changes in the sample composition with each additional variable, increase the predicted variance explained in the dependent measure.

OLS Regression Results for the Learning Calculation and Partner Interaction Subprocesses

Table 8-5 shows summary means, standard deviations, and correlations for the variables used in the OLS regressions (except the dichotomous variable, joint venture role). In the first regression analysis, joint venture openness was treated as the dependent variable (Table 8-6). The predictor variables were trust in the joint venture relationship and the joint

venture role (relative to the American parent product-market strategy). The role variable was included because of the difference in openness between new product and similar product joint ventures.

TABLE 8-5
Summary of Correlations^a

Variables	Means	s.d.	1	2	3	4	5	6	7	8
1. Learning efforts	2.22	1.35								
2. Learning outcome ^b	2.39	.74	.38 [*]							
3. Trust	5.58	1.18	.31 [†]	.17						
4. JV openness	4.99	1.23	.39 [*]	.36 [*]	.75 ^{***}					
5. Learning intent	1.30	.79	.44 ^{**}	.09	.28 [†]	.11				
6. Learning potential	3.36	.63	.20	.49 ^{**}	.13	.16	.23			
7. JV importance	5.32	1.61	.62 ^{***}	.42 [*]	.41 [*]	.40 [*]	.31 [†]	.48 ^{**}		
8. Strategic integration	3.88	1.37	.43 ^{**}	.14	.04	.04	.29 [†]	.11	.39 [*]	
9. Performance	4.54	1.38	.54 ^{**}	.51 ^{**}	.67 ^{***}	.73 ^{***}	.16	.35 [*]	.55 [*]	.22

^aThe figures shown are Pearson product moment correlation coefficients.
Significance levels are on the basis of two-tailed tests.

^bQuestionnaire measure

[†] $p < .10$ ^{**} $p < .01$
^{*} $p < .05$ ^{***} $p < .001$

The results indicate that both trust and joint venture role are associated with joint venture openness ($B = .73, p < .001$; $B = -.51, p < .10$). The negative coefficient for strategy indicates that similar product joint ventures are negatively associated with openness. Overall, the model was significant ($R^2 = .58, F = 26.71, p < .001$). These results are consistent with the bivariate analyses and support the addition of joint venture role to the conceptual framework.

TABLE 8-6
Results of OLS Regression Analysis
for Joint Venture Openness

Variables	Parameter Estimate	Standard Error
Trust	.73***	.11
Joint venture role ^a	-.51 [†]	.28
Adjusted R^2	.58	
F	26.71***	

^aJoint venture role was a dummy variable coded 1 for same product strategy and 0 for new product strategy.

[†] $p < .10$

*** $p < .001$

The second regression equation considered the effects of learning intent, learning potential, and openness on learning efforts (Table 8-7). Overall, the model was significant ($R^2 = .29$, $F = 5.37$, $p < .01$). The coefficients for intent and openness were both significant ($B = .64$, $p < .05$; $B = .44$, $p < .01$) but the coefficient for learning potential was not significant. The results provide additional support for the relationships in the learning calculation subprocess.

The performance variable was added to the model with learning efforts as the dependent variable. The results are shown in Table 8-7. Joint venture performance added to the overall variance explained (increase in adjusted $R^2 = .07$). The regression was also executed without the openness variable because of the high correlation between performance and openness. Without openness, R^2 was .36 ($F = 7.48$, $p < .001$), suggesting that openness may be very closely related to joint venture performance. When performance is satisfactory and the partners, or at least the American partner, are not overly focused on

performance issues, the partners may be more willing to share information. In the less satisfactory ventures, American partners may perceive that their Japanese partner is withholding information (e.g., see Vignette 9), and therefore conclude that the joint venture is not an open relationship.

TABLE 8-7
Results of OLS Regression Analysis for Learning Efforts

Variables	Parameter Estimate	Standard Error	With Performance	
			Parameter Estimate	Standard Error
Learning intent	.64*	.26	.63*	.36
Learning potential	.11	.33	-.11	.33
Joint venture openness	.44**	.17	.09	.23
Performance			.44*	.21
Adjusted R^2	.28		.35	
F	5.37**		5.50**	
Change in R^2			.07	

* $p < .05$

** $p < .01$

Logistic Regression Results for the Centrality Subprocess

To examine the centrality subprocess, the three category learning outcome classification was collapsed into two categories and used as the dependent variable in a binomial logistic regression analysis (Hennart 1991). The regression coefficients estimate the impact of the independent variables on the probability that the American parent will be a learning organization. A positive sign for the coefficients means that the variable increases the probability of learning. The independent variables used in the model were the variables

strategic integration and joint venture importance, and the questionnaire performance measure.³

The logistic regression model provides further evidence that performance is an important factor in the joint venture learning process. The results of the logistic model are presented in Table 8-8. The model, which converged after seven iterations, has a high overall explanatory power, with a model chi-square of 34.23 ($p < .001$). The model chi-square is comparable to the overall F test in OLS regression. The predicted outcomes were also compared with observed outcomes. Hennart (1991, 490) suggested that the ability of the model to classify should be compared against the classification rate that would have been obtained by chance. That rate is equal to $a^2 + (1 - a)^2$, where a is the proportion of non-learning organizations in the sample. Here, the baseline rate is 51 percent. Table 8-9 shows

TABLE 8-8
Results for Logistic Regression Analysis: Centrality and Learning Organizations vs. Non-learning Organizations

Variables	Parameter Estimate	Standard Error
Joint venture importance	1.79 ^a	.86
Strategic integration	2.02 ^a	1.38
Performance	2.44 ^b	1.70
Model chi-square	34.23 ^{***}	

^a $p = .15$ ^{*} $p < .05$
^b $p = .14$ ^{***} $p < .001$

³A regression analysis using the questionnaire measure of learning outcome as the dependent variable was conducted. The results were very similar to those arrived at with the logistic regression analysis. The addition of performance increased the variance explained. The concordance among the approaches suggests that the logistic approach was satisfactory.

TABLE 8-9
Classification Table for Centrality Logistic Regression Model

	True	Predicted	
		Non-learning	Learning
Non-learning organizations	16	14	2
Learning Organizations	22	1	21
Total	38*	15	23
Sensitivity (ability of the model to predict learning organizations)			95%
Specificity (ability of the model to predict non-learning organizations)			88%
Overall correct			92%

* 2 cases were omitted because of incomplete data

that 92 percent of the observations are correctly classified, a rate higher than that which would be expected by chance. Looking at the model's sensitivity and specificity rates, the ability of the model to predict learning organizations is somewhat better than its ability to predict non-learning organizations.

An Integrative Model

The final multivariate analysis is an integrative model incorporating the three subprocesses in Figure 8-1 and their relationship with the learning outcome. The objective of the integrative model was to establish a stronger link between the learning outcome and its contextual determinants. This model directly addresses the research question concerning the organizational and strategic factors that operate as learning determinants. Since learning efforts is viewed as key learning variable and a type of outcome variable as well, it has not been included in the model.

Because of multicollinearity and the large number of variables in the framework, a reduced model was tested. Since openness is itself a consequent of several other variables, its antecedent variables trust and joint venture role were omitted. The correlations between the centrality measures used in the previous logistic analysis and other contextual factors necessitated the use of an alternative centrality measure. The coded interview measure for strategic integration was considered appropriate because of its strong convergent validity with the questionnaire measure.⁴ Also, the interview measure is more strategic in nature than the questionnaire measure because it focuses on aspects of integration such as product symmetry between the joint venture and the American parent and cooperation in R&D. An orientation towards strategic factors is consistent with an integrative perspective incorporating learning and performance.

Two integrative models were analyzed with logistic regression. In both models, learning outcome is the dependent variable. The first model is without performance data and the second has performance added. The first model converged after five iterations (Table 8-10) and has a model chi-square of 19.89 ($p < .001$). Table 8-11 shows that 83 percent of the observations are correctly classified, a rate higher than that which would be expected by chance. Like the centrality analysis, the ability of the model to predict learning organizations is somewhat better than its ability to predict non-learning organizations.

The results are consistent with the bivariate relationships examined in Chapter 6. The coefficients for learning intent and learning potential were not significant. The earlier argument was that these variables influence the initiation of learning efforts but are not directly linked with the eventual learning outcome because expectations about the partner and

⁴The correlation between strategic integration and the coded interview measure was .58 ($p < .001$). For further information see Chapter 4, page 93.

the partner's specific capabilities are often incorrect. Both openness and strategic integration were significant ($B = .79, p < .10$; $B = 1.95, p < .05$).

TABLE 8-10
Results for Integrative Model
Logistic Regression Analysis

Variables	Parameter Estimate	Standard Error
Learning intent	.88	.72
Learning potential	.90	.82
Joint venture openness	.79 [†]	.45
Strategic integration	1.95 [*]	.78
Model chi-square	19.89 ^{***}	

[†] $p < .10$

^{*} $p < .05$

^{***} $p < .001$

TABLE 8-11
Classification Table for Integrative Model
Logistic Regression Analysis

	True	Predicted	
		Non-learning	Learning
Non-learning organizations	14	11	3
Learning Organizations	21	3	18
Total	35 ^a	14	21
Sensitivity (ability of the model to predict learning organizations)			86%
Specificity (ability of the model to predict non-learning organizations)			79%
Overall correct			83%

^a 5 cases were omitted because of incomplete data

Performance was added to the second integrative model. The results are shown in Tables 8-12 and 8-13. The strong correlation between openness and performance presented a potential problem. Two models were tested, with and without openness. The overall results for both models were similar. Since openness was not significant, the results presented are for the model without openness.

TABLE 8-12
Results for Integrative Model Logistic
Regression Analysis with Performance

Variables	Parameter Estimate	Standard Error
Learning intent	1.14	1.03
Learning potential	.05	1.21
Strategic integration	2.50*	1.15
Performance	2.11*	.94
Model chi-square	30.35***	

* $p < .05$

*** $p < .001$

TABLE 8-13
Classification Table for Integrative Model
Logistic Regression Analysis with Performance

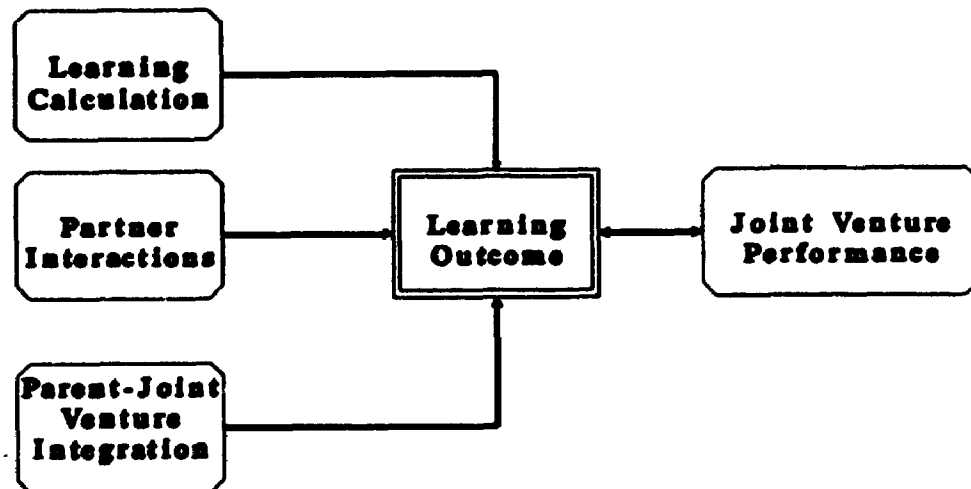
	True	Predicted	
		Non-learning	Learning
Non-learning organizations	14	12	2
Learning Organizations	21	1	20
Total	35*	13	22
Sensitivity (ability of the model to predict learning organizations)			95%
Specificity (ability of the model to predict non-learning organizations)			86%
Overall correct			91%

* 5 cases were omitted because of incomplete data

The model converged after six iterations. With performance in the model, the model chi-square increased to 30.35 ($p < .001$). Given that the overall correct classification rate increased to 91 percent, this model is a strong representation of the relationships between the learning outcome and the learning subprocesses.

The relationships in the integrative model are diagrammed in Figure 8-2. The learning outcome is shown as a function of the three learning subprocesses. Because of the complex relationship between performance and learning, a two-way relationship is indicated between performance and the learning outcome (consistent with the discussion on pages 190-191). The subprocesses are the macro determinants of the learning outcome. Within each of the subprocesses are the contextual variables that drive the subprocesses.

FIGURE 8-2
The Learning Outcome and its Relationship with Joint
Venture Performance and the Learning Subprocesses



SUMMARY

This chapter extended the research findings and proposed a revised conceptual framework. The revised framework took into account the dynamic nature of learning and its determinants and also incorporated several additional variables, including joint venture performance. When joint ventures were experiencing performance difficulties, the focus of the American parent was almost exclusively on the performance of the venture, relegating learning to a secondary position.

The strong positive relationship between performance and the learning outcome raised the question of joint venture performance as an antecedent or consequent of learning. There seems little doubt that when firms had an explicit learning intent and failed to capitalize on the learning experience, this failure influenced the assessment of joint venture performance. Managers in the American parent companies frequently pointed to the poor financial performance of the joint ventures as evidence that learning was not occurring, or could not occur. It is more difficult to conclude on the influence of learning on performance when the learning outcome was positive. Perhaps, as was suggested, the relationship is an iterative one with poor performance acting as a barrier to learning. The absence of learning may in turn downgrade the assessment of performance. Clearly, further research is required in the area of joint venture performance and learning.

The development of several multivariate models provided further support for the logic of the three learning subprocesses and confirmed the results of the working hypothesis relationships discussed in earlier chapters. The results also support the inclusion of joint venture performance in the revised framework. When performance was added to the multivariate models, their explanatory power increased.

CHAPTER 9

CONCLUSIONS AND IMPLICATIONS

This chapter has two main objectives: one, to summarize the findings of the study and to suggest several overall conclusions and two, to develop research and managerial implications from the findings. The chapter is divided into four sections. The first section discusses the key findings from the proposed research questions. The second considers the theoretical contributions of the study. The third considers the managerial implications. The final section discusses the limitations of the study and suggests directions for future research.

SUMMARY OF THE FINDINGS

The purpose of this research was to develop further understanding of how joint venture parents use their ventures to create and exploit learning opportunities. The findings of the study, although exploratory, extend research on organizational learning by focusing on joint ventures as strategic learning initiatives. The study builds on research on the effectiveness of alliance strategies (e.g., Badaracco 1991; Hamel 1991; Kogut 1988; Pucik 1991; Westney 1988) and provides new insights into how organizations internalize knowledge originating outside their boundaries.

The initial premise of the study, that joint ventures can effect a transfer of skills between partners, gave rise to the first research question. This question dealt with the extent to which international joint ventures provide learning opportunities for joint venture parents.

The results support the initial premise, suggesting that consistent with the conceptual arguments of various scholars, joint ventures (and perhaps alliance relationships in general) provide substantial opportunities for firms to not only gain access to partner skills but more important, to internalize those skills.

Joint ventures are often formed as a means of linking complementary partner skills. In most cases, informants in this study could specifically identify inter-partner skill differences embodied in the joint venture operation. From the American parent's perspective, the skill differences originating with the Japanese partners created the basis for joint venture learning. For the joint ventures manufacturing a product similar to that of the American partner (27 ventures), differences between the joint venture and American parent in terms of product quality and manufacturing process were often striking. The perceived superiority of joint venture products was attributed mainly to the skills of the Japanese partners and their experience with rigorous Japanese customer demands.

The study revealed that learning was a joint venture motive in most cases. Many of the American parents, struggling to compete in an industry in transition, saw their joint ventures as a point of leverage for the development of new skills and capabilities. Only eight American parents were classified as having no learning intent. However, despite the importance of the learning intent, learning was not the *primary* motive in any of the sample cases. For most American parents, the primary motive was access to a new product market. Learning represented a secondary and less tangible motive.

While American firms generally had a learning objective, the objectives were often unrealistic. In particular, expectations of easily transferable "visible" differences proved to be generally erroneous. The primary target for the learning objectives was knowledge associated with Japanese manufacturing skills. An expectation of inherent superiority in the

Japanese partner's manufacturing skills was a common theme. However, after working closely with the Japanese partner, many informants rejected the idea of significant partner gaps in technological skills, arguing instead that differences were fundamentally managerial.

Given the existence of learning opportunities, the second research question involved the extent to which parent firms capitalized on the opportunities. In other words, were parent firms aware of and willing to invest resources in the learning experience? The study found that 36 of the 40 American parents were engaged in efforts that could lead to a transfer of joint venture-derived knowledge. Actions indicating senior parent management involvement in the venture and the sharing of information between the parent and joint venture were the most prevalent types of learning efforts. However, 17 American parents (including the four firms without an initial learning intent) were classified as non-learning organizations, indicating that while firms were in a position to internalize joint venture knowledge, many learning opportunities went unexploited.

For the eight American parents classified as learning organizations, several factors were apparent. Management in the learning organizations recognized the existence of learning opportunities and were making serious efforts to transfer knowledge from the joint venture to the parent. These firms acknowledged that their joint venture could play an important role in parent strategy and were striving to integrate the joint venture into the parent's overall strategy process. There was a desire to see the joint venture expand and increase its market share. The learning firms also tended to have a more realistic learning intent, one consistent with partner capabilities. The learning experience was not a search for the Japanese mystique but an opportunity to use a collaborative relationship as a window into the skills and capabilities of a partner firm.

Nevertheless, a cautionary point should be raised. The American firms classified as moderate learning and learning organizations were generally satisfied with joint venture performance. While it is not possible to conclude on the causal direction between performance and learning, a positive learning experience may lead to satisfaction with joint venture performance. However, Chapter 8 argued that satisfactory performance may have allowed learning to surface, since performance usually became an issue before the learning opportunities were fully understood. Therefore, performance could have a direct impact on the learning outcome because of the relationship between performance and parent managerial resources devoted to the joint venture.

An examination of the factors surrounding successful and unsuccessful learning experiences was the focus of the third research question. The first two research questions provided the foundation for the third, which asked: What are the organizational and strategic factors associated with the joint venture that operate as determinants of the learning process? The investigation of the third question constituted the focus of the hypotheses testing and led to the development of several new propositions. The learning concepts were examined in relation to three sets of contextual factors: 1) the parent firm's joint venture motives and expectations regarding learning; 2) the nature of the interactions between the joint venture partners; and 3) the strategic relationship between the joint venture and its parent.

In developing the conceptual framework, the notion of joint venture learning as a two stage process was incorporated. The study found evidence of the two stages of learning, but the stages were less discrete than initially described. The joint venture learning process tended to proceed through several subprocesses, the boundaries of which were difficult to pinpoint. Therefore, in revising the conceptual framework to reflect the results of the study

(Figure 8-1), the learning process was shown as consisting of several subprocesses rather than two distinct stages.

The results showed that learning intent was clearly associated with the initiation of learning efforts. The learning intent was influenced by expectations regarding partner skills differences (the learning potential) and the strategic motives for forming the venture. The weak relationship between learning intent and the learning outcome was influenced by unrealistic or inaccurate learning expectations. When the learning intent was not clearly specified, ineffective learning efforts were often the result. The openness of the relationship was an important factor in both stimulating parent learning efforts and influencing the availability of transferable joint venture knowledge. Informants usually described the joint venture and their Japanese partner as open, although ventures outside the American parent's main product strategy tended to be more open than those manufacturing a product similar to the American parent. Possibly, the Japanese partners in these new product ventures were open in their interactions because they felt that an American partner learning strategy was not a serious competitive threat.

The strategic centrality of the ventures influenced the subprocess involving the transfer of knowledge to the parent. The American parents that saw their joint venture as an integral element of parent strategy were usually more successful in their learning efforts. An interesting finding was that informants usually believed the Japanese partners attached a greater degree of importance to the joint ventures than the American partners. Prior relationships between the Japanese partners and JOEMs probably influenced the Japanese firms' perceptions of joint venture importance. Additionally, Japanese firms may have a greater capacity for learning than western firms (Hamel, Doz, and Prahalad 1989),

suggesting that Japanese joint venture parents view joint venture strategic importance differently.

In the revised framework, several proposed variables were omitted as learning determinants, notably the experience variables and the intensity of partner interactions. Several new variables were added, including joint venture role as a factor influencing the openness of the partner relationship, joint venture age as a factor related to the parent's perception of joint venture strategic importance, and joint venture performance. The performance of the joint venture, although not originally proposed as a determinant of learning, often became a barrier to learning. When performance was perceived as poor, parent managerial efforts often shifted to performance issues with learning becoming less critical. In that sense, satisfaction with venture performance represents a precondition for successful learning efforts.

THEORETICAL CONTRIBUTIONS

The theoretical contributions of the study are examined in three areas: resource-based theories of strategy, organizational learning, and joint ventures and transactions costs.

Resource-Based Theories of Strategy

There are several implications for research in the area of firm resources and strategy, an area that is receiving renewed emphasis in the strategy literature.¹ In contrast to the product market positioning frameworks found in the competitive strategy literature, the resource-based view of the firm seeks to understand how organizations accumulate and

¹For example, see Barney (1991), Burgelman and Rosenbloom (1989), Nelson (1991), and Rumelt, Schendel, and Teece (1991).

coordinate internal resources as a means of developing sustainable competitive advantage. This study focuses on learning, one way for firms to create new resources and skills.

The primary strength of the resource-based view is that complex social phenomena are identified as determinants of core competence and organizational capabilities (Collis 1991, 65). If a strategy is formulated purely from a market positioning perspective, organizational factors associated with its implementation may be ignored. As Porter (1991) observed, firms create and sustain competitive advantage by maintaining a dynamic alignment between strategy and environment and by exploiting unique internal strengths.

Joint Venture Parents, Their Perspective of Strategy, and Learning

The market positioning and resource-based views complement each other and contribute to a more complete view of strategy. The problem facing organizations is that one view may come to predominate, constraining strategic choices and outcomes. Specifically, an organization with an explicit focus on external product markets may not recognize the importance of learning. This was the situation facing many of the American firms in this study. These firms had explicit learning objectives but were implementing their joint venture strategies from a narrow market positioning orientation. Because of an inability to abandon a preoccupation with JOEM market access as a means of displacing lost domestic markets, many American firms had unsuccessful learning experiences. Had the firms focused on the potential joint venture benefits in terms of enhanced skills and competencies, which is consistent with a learning objective, the learning outcomes would have been significantly different.

Figure 9-1 demonstrates how the perspectives of competition and strategy adopted by joint venture parents can have an impact on their ability to exploit learning opportunities.

Quadrant 1 shows defensive (i.e., "we better form a joint venture before it is too late") joint venture objectives coupled with a market positioning view. This can lead to a short term focus designed to protect a domestic market position. Quadrant 2 suggests that a market position view with an offensive venture strategy can result in a longer term focus on product line expansion, possibly in both domestic and international markets. In quadrants 1 and 2, the joint venture parents will probably view stability as a reasonable indicator of joint venture success. In the context of this study, a stability objective is inherently flawed. In the long term, the Japanese partners may not need their American partners once they learn to operate in North America. Unless the structure of the automotive industry changes dramatically from its current state, many American firms will remain dependent on their Japanese partners for market access purposes.

Quadrant 3 indicates a resource-based perspective associated with defensive joint venture objectives. Learning in this situation is focused on migratory knowledge rather than the complex embedded knowledge of the joint venture partner. Quadrant 4 represents the most desirable state: an offensive approach to the joint venture directed by a resource-based view of strategy. When learning is a collaborative objective, the termination of an agreement should not be seen as evidence of failure (Hamel 1991). In cases of joint venture termination (but not necessarily dissolution), the parent firm gaining full ownership may have outlearned its former partner. In all but one case of termination in this study, the Japanese partner acquired full ownership of the joint venture business and appeared willing to make a long-term commitment to its new subsidiary. The American firms, on the other hand, generally saw termination as evidence of joint venture failure.

FIGURE 9-1
Strategic Perspective and Learning

Parent's Joint Venture Objectives	Parent's Strategic Perspective	
	Market Positioning	Resource-based
Defensive ("Have to")	1. Short term focus; joint venture is a stand-alone profit center; primary objective is to protect domestic market position	3. Medium term focus; learning focus on migratory knowledge; reducing partner dependence not a primary objective
Offensive ("Want to")	2. Medium term focus; primary objective is to expand product line, improve domestic and international market positions	4. Long term focus; erasing partner dependency is an objective; create value by appropriating partner skills

The situation of the Japanese partners is also interesting, especially in the cases of joint venture termination. The Japanese firms that acquired full ownership of the joint venture businesses were able to apply their newly internalized skills to compete autonomously in North America, something that they were unable or unwilling to do prior to the joint venture formation. An evaluation of the strategy of these firms solely from a product-market positioning perspective would fail to recognize that performance is contingent on product-market positioning factors *and* the ability to acquire the necessary organizational skills to compete in a new market.

In sum, the finding that firms were using their joint ventures as learning vehicles is consistent with the argument that firms seeking to improve their competitive position cannot ignore learning and organization skill-building (Bettis, Bradley, and Hamel 1992). From this perspective, current market position provides only one measure of competitiveness because it is focused on product-based advantages at a given point in time. Without the ability to

innovate and change quickly, achieving sustainable competitive advantage will not be possible.

Imperfect Imitability

For firm resources to hold the potential for sustained competitive advantage, they must have several attributes (Barney 1991; Grant 1990). Among those attributes is imperfect imitability, which occurs when resources possessed by one firm cannot be obtained by another firm. The failure of many American firms to successfully exploit their joint venture learning opportunities can be traced, in part, to their inability to imitate the strategies of their Japanese partners. There are several factors contributing to imperfect imitability; of particular interest for this study are the concepts of causal ambiguity and social complexity.

Causal ambiguity Causal ambiguity arises when managers do not understand the relationship between organizational actions and outcomes (Reed and DeFillippi 1990). Grant (1991, 125) observed that "if a firm wishes to imitate the strategy of a rival, it must first establish the capabilities which underlie the rival's competitive advantage, and then it must determine what resources are required to replicate these capabilities."

The findings of this study support the notion of causal ambiguity as an impediment to the imitation of successful firm strategies. For joint venture and alliance learning strategies to be viable and for potential learning opportunities to be recognized, firms must overcome the ambiguity associated with their partner's areas of competency. However, many American parents were searching for the key to a Japanese mystique rather than trying to develop a fundamental understanding of the link between the Japanese partner's resources and its underlying competitive advantage.

The joint ventures in this study should have provided the necessary access for American firms to overcome the sources of ambiguity associated with Japanese partner competencies. Many joint ventures were established as virtual clones of the Japanese partners, giving the American partner unhindered access to the dedicated assets of their partners. Despite this access, learning often proved to be a difficult experience, suggesting that having information is not the same as understanding it.

The learning emphasis of the American firms was often on visible firm differences rather than on complex tacit knowledge, an obstacle that plagued GM in its joint venture with Toyota (Keller 1989; Womack 1988). The notion of visible differences is analogous to Badaracco's (1991) description of migratory knowledge. Migratory knowledge was defined as knowledge that can be clearly and fully articulated and therefore is very mobile. American firms may have expected to find migratory knowledge. Instead, they encountered differences that were embedded in the routines of their partners. As Badaracco (1991, 80) explained, "the main difficulty in understanding the challenge of embedded knowledge is that it requires rethinking familiar ideas about firms, their boundaries, and the work of business managers."

Social Complexity A second attribute of imperfect imitability identified by Barney (1991) is social complexity, which occurs when firm resources are complex social phenomena that firms cannot systematically manage and influence. This study provides evidence that social complexity can have an important influence on the process of learning and imitation.

One aspect of the joint ventures that was particularly difficult for American managers to comprehend was the Japanese network. An extensive network of inter-corporate agreements between firms is common in Japan, with trust and loyalty playing key roles in

creating an environment of reciprocal expectations (Kester 1991). The American firms generally recognized that there were competitive implications associated with the Japanese network of relationships, especially those between suppliers and manufacturers. However, there was often incomplete understanding of the specific factors that enabled the Japanese firms to exploit the network relationships for competitive advantage. This area is considered in more detail in the section on managerial implications.

Transferability

Even if the barrier of imperfect imitability can be overcome, successful learning by imitation requires internalization of the skills and capabilities of another firm (Grant 1991). This requires specific efforts to transfer and accumulate new resources and organizational knowledge. This study broke new ground by attempting to measure the learning efforts of joint venture parents. The results indicated that a successful learning strategy requires various different actions designed to channel knowledge from the joint venture to the parent.

The study also found that learning efforts alone cannot overcome a lack of receptivity to learning at the parent level. The strategic relationship between the parent and its joint venture is a key aspect of receptivity. This relationship is important because while specific learning efforts may be put into place, without an attempt to integrate parent and joint venture strategies, mobility of the new skills and capabilities will be constrained.

Organizational Learning

The previous discussion focused on the strategies and resources of the joint venture parents. Turning to the more micro issues associated with the nature of joint venture learning, contributions to organizational learning theory are examined.

The findings provide the foundation for a theory of organizational learning that can be adapted to different types of collaborative relationships, and more generally, to other strategic initiatives that create learning opportunities. The three subprocesses in the revised conceptual framework could be restated in more general terms. The learning calculation involves the learning objectives associated with the strategic initiative. The partner interactions subprocess represents the specific context of the learning initiative. Parent-joint venture integration captures the relationship between the learning organization and its strategic initiative.

More specifically, the findings may be adaptable to the case of MNCs. For example, in a study of competition in the worldwide bearings industry, Collis (1991) argued that three tasks are necessary for the development of effective organizational capability: innovation, collective learning, and information transfer. Collis suggested that building effective organizational capability is a process of continuous improvement, which is synonymous with the notion of organizational learning as a process of change and skills internalization.² For MNCs, transferring a set of requisite skills between disparate subunits is a more complex version of the joint venture knowledge acquisition-transfer process described in this study.

The results lend support to the argument that a concept of individual learning should be embedded in a concept of group learning, which in turn should be embedded in a concept of organization learning. At each level of learning, different learning processes are at work. At the individual level, the critical process is interpreting; at the group level, integrating; and at the organization level, internalizing. The product of the individual process of interpreting is a change in individual beliefs and individual behaviors. The product of the group process

²Ghoshal (1987) made a similar argument.

is shared beliefs and concerted actions. The product of the organization process is internalization of knowledge as reflected in organizational capabilities and routines (March 1991).

The study also demonstrated how an existing set of managerial beliefs can constrain the learning process. The tension between the expectation of visible differences and the reality of partner competitive advantages may have resulted in a blocking effect. While the managers in the American firms were often willing to concede that their partners were capable of producing a superior product, a focus on visible and easily transportable firm differences was inevitably futile. Perhaps the problem was a case of "believing is seeing" rather than "seeing is believing."³ In other words, the American managers went into the joint ventures with a set of beliefs in place that effectively precluded seeing anything different.

An ongoing debate in the organizational learning literature is the extent to which the learning outcome should ultimately contribute to improved organizational performance. In an empirical setting, establishing a link between learning and performance is difficult because of the time lag between internalization and organizational action. Nevertheless, understanding the linkages between learning and performance should represent a long term objective for organizational learning scholars. In this study, performance issues, especially those associated with the joint venture itself, were deeply intertwined with the learning process. Poor joint venture performance from an American parent perspective reduced the importance of learning. As well, the American joint venture partners were much more likely

³Weick's (1979) discussion of sense making and beliefs is particularly interesting.

than the Japanese to use venture profitability as a measure of learning and joint venture success.

Finally, the study raises the issue of "learning how to learn" as a competitive advantage. Various researchers have suggested that Japanese firms are more adept than western firms at maximizing learning opportunities. Many American parents had a learning focus but were unable, or unwilling, to put into place the appropriate mechanisms and systems to transfer knowledge from the joint venture to the parent. Again, an existing set of beliefs may have contributed to the difficulty of integrating new information with action.

Learning and Collaboration

In terms of previous research specifically concerned with learning and collaboration, the relationship with Hamel's (1991) work must be considered. Hamel developed the notion of learning through alliances as a proactive process of skill building and suggested that the capacity to learn may be the ultimate source of alliance bargaining power. By studying 11 alliances across several industries, Hamel developed a model of learning comprising three main concepts: learning intent, the initial propensity of the partner to view collaboration as a learning opportunity; transparency, the openness of the relationship; and receptivity, the parent's absorptiveness and capacity for learning. This model provided a foundation for this study.

In general, the results of the current research are supportive of Hamel's research. There are, however, several important differences and extensions in the current study. First, this study narrowed the research focus to a single industry and a specific type of alliance, equity joint ventures. Controlling for both industry and alliance type was considered necessary given the complexity of alliances and the limited research on collaboration and

learning. It also allowed for a much more indepth examination of the contextual environment in which learning occurs. Hamel's mix of industries and alliance types prevented this type of analysis. Second, the study controlled for the partner's country of origin. This allowed some very specific organizational and strategic factors to be identified, such as the influence of the Japanese network and the American partners' objective of JOEM market access.

Third, Hamel focused largely on the *process* of collaborative learning. This study addressed questions concerning the extent of learning and the relationships between organizational factors and learning. For the first time, cross-sectional evidence was found to support the argument that joint ventures create viable learning opportunities. Fourth, because this study was grounded in the organization learning literature, attention was focused on explicit firm learning experiences and the efforts undertaken to exploit learning opportunities. Finally, the identification of the strong relationship between joint venture performance and the learning outcome was an important new finding. Several propositions involving learning and performance were developed (see Chapter 8, page 191) and evidence was found to suggest that learning may influence the parent's assessment of joint venture performance.

Joint Ventures and Transaction Costs

Chapter 2 indicated that transaction costs explanations for the formation of joint ventures provide a compelling economic rationale for the formation of joint ventures and in particular, for the superiority of the joint venture mode of organization under specific circumstances (Hennart 1988; Kogut 1988). However, it was suggested that the transaction costs perspective is restrictive because it neglects more behavioral issues and implies too

strongly a tractable economic analysis in understanding cooperative relationships. This position is worth reexamining in light of the findings from this study.

Hennart (1991, 495) proposed that firms form joint ventures when they need to combine with other firms intermediate inputs that are subject to high market transaction costs. One of the inputs that firms might seek is tacit or embedded knowledge for which there is no reliable market. Thus, as Shan (1990) maintained, the organizational learning perspective may be consistent with a transaction cost argument because of the absence of a market for tacit knowledge. The difficulty with applying transaction cost theory to the learning perspective is the unit of analysis. Transaction cost analysis is primarily focused on single transactions as units of analysis (Doz and Prahalad 1991). However, the ambiguous nature of embedded knowledge and organizational skills makes it unlikely that identifiable units for these goods can be operationally delineated.

From a learning perspective, the unit of analysis begins with the individual manager, proceeding to an examination of how managerial knowledge acquisition and interpretation are integrated into shared understanding at the organization level. In the joint venture situation, the important question involves how knowledge generated within the joint venture is transferred and integrated by the parent. Therefore, the process of learning along with the nature of its outcome takes precedence over the choice of a structural mode by which to exploit the learning opportunity. In this study, many American firms experienced great difficulty in exploiting learning opportunities despite having access to the embedded skills of their partners. Consequently, an analysis of the transaction costs associated with acquiring the embedded knowledge via a marketplace alternative may be of limited usefulness.

Finally, for the joint ventures in this study, transaction cost theory is limited in its ability to explain Japanese firms' choice between full ownership and joint ventures. In many

cases, the Japanese partners were "encouraged" by their Japanese customers to locate in North America. Refusing to follow the JOEMs to North America would have risked damaging what Kester (1990) called the intricate network of implicit reciprocal trading agreements that exists in Japan between suppliers and manufacturers. The JOEMs played a role in joint venture formation decisions because using joint venture suppliers may have helped alleviate some of the political concerns about screwdriver auto plants in the United States (Womack 1988). Thus, for many Japanese suppliers, a primary consideration in both the decision to invest in North America and the choice of the joint venture mode was the desire to maintain an existing supplier-manufacturer relationship. This desire to maintain relationship goodwill is not explained by a transaction cost framework.

In sum, transaction cost theory provides useful input toward understanding issues of ownership choice. However, the view of this study, and consistent with Kogut's (1988) argument, is that the explanatory factors underlying the learning perspective are organizational and cognitive, and only indirectly economically motivated. Because organizational knowledge often has definite tacit and learning-by-doing dimensions, a rational economic analysis of the learning process and mode of knowledge transfer may not be possible (Teece 1982).

IMPLICATIONS FOR MANAGEMENT

The results of this study have some practical implications for managers. As an overview of the managerial issues, the section begins with a discussion of barriers to learning. Then, three specific aspects of the study are discussed: 1) partner dependence and the race to learn; 2) joint venture managers and the performance-learning paradox; and 3) American firms and their involvement in Japanese corporate networks.

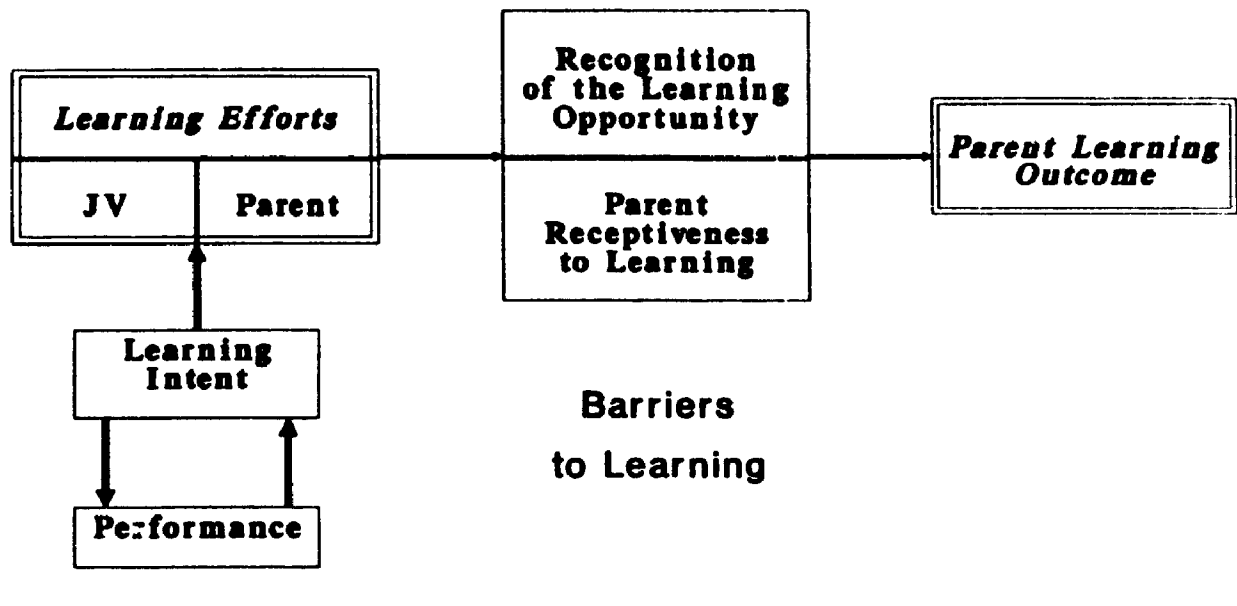
Barriers to Learning

While joint ventures can provide opportunities for learning, many of the American parents in this study were unsuccessful in their learning initiatives. From a managerial perspective, the question of why learning was not occurring is examined by looking at barriers to learning. The primary focus section is on firms that despite having a learning objective and engaging in learning efforts, struggled to capitalize on joint venture learning opportunities.

The barriers to learning are adapted from the learning framework (Figure 8-1). Two categories of learning barriers are discussed: barriers involving the recognition of the learning opportunity; and barriers related to the parent's receptiveness to learning. Although the barriers are discussed from the perspective of joint ventures and alliances, they are easily adaptable to other strategic initiatives that create learning opportunities. The barriers are summarized in Table 9-1 and incorporated into a model in Figure 9-2.

TABLE 9-1
Barriers to Learning

Recognition of the Learning Opportunity	Receptiveness to Learning
1. Ambiguity about the partner's areas of competency	1. Defensive posture of "what can we learn from them"
2. Limited integration between the joint venture and the parent	2. Preoccupation with short-term issues
3. Uncertainty as to how to integrate the knowledge in the parent	3. Lack of encouragement for joint venture managers as learning agents



Recognition of the Learning Opportunity

The first barrier involves uncertainty or ambiguity about the potential learning experience.⁴ The primary learning opportunities in this study were not product or technology-specific but related to an overall philosophy of doing business. Those firms recognizing partner differences as managerial and inextricably related to Japanese business philosophy were usually more successful in their learning efforts. Thus, the parent's assessment of learning pay-off and learning potential appear to have been influenced by the level of ambiguity surrounding the capabilities of its Japanese partner.

The second barrier involves the parent's perception of its venture's strategic centrality. The American parents that saw their joint ventures as integral elements of parent strategy were usually more successful in their learning efforts. However, some American

⁴This point is discussed in more detail earlier in the chapter in the section on causal ambiguity.

firms viewed their joint ventures as a means of substituting another firm's competitiveness for their lack of competitiveness. Consistent with Hamel's (1991) findings, this meant that some joint ventures were seen as stand-alone operations⁵ utilizing a set of complementary skills. The notion that the joint venture could erase an initial lack of competitiveness was generally not a primary joint venture objective. While there was usually an initial learning intent, the intent was predicated on the survival and success of the collaborative venture. This study did not find any American firms with a specific objective of replicating Japanese partner skills in order to eliminate an initial joint venture dependency.

The third learning recognition barrier was the failure to consider adequately how joint venture knowledge could be used once it was obtained. Keller (1989) indicated that GM management gave little thought to that part of the learning process. For the American parents in this study, learning was often an objective but the implications of internalizing knowledge from the venture were not explored in detail prior to the formation of the joint venture. Without plans in place to integrate the joint venture knowledge in the parent, learning efforts probably will be less effective and the full potential of the learning opportunity will not be recognized.

Receptiveness to Learning

Hamel (1991) defined a receptive learning environment as one in which top management of the parent firms are enthusiastic about learning and willing to be "taught" by their partners. Several factors act as barriers to a receptive learning environment. First, in some parents there was a prevailing attitude of "what can we learn from *them*?" This defensive posture stemmed from several sources. Many of the American parents had a long

⁵Hamel and Prahalad (1989) referred to this perspective as the strategic business unit mindset.

tradition of leadership in the domestic automotive industry. Because contrary experience conflicts with stable, shared knowledge,⁶ learning often becomes difficult (March, Sproull, and Tamuz 1991). The parents may also have had difficulty in accepting the joint venture child, a new organization with limited experience, as a legitimate "teacher." As a joint venture general manager explained:

Yes, they [American parent management] know that there are differences but it is difficult for them to internalize the reasons for the differences. At a high level in the parent organization, people should be in a position to look at the joint venture and at the parent operations to see the differences and learn from the joint venture experience. But, you have to understand the people involved. It is very difficult for them to openly discuss the situation, particularly when it is the child that is outperforming its parent.

The second receptivity barrier is joint venture performance. A preoccupation with short-term issues was a common characteristic of the American partners. Although it is too simplistic to describe Japanese management as long-term oriented and American management as short-term oriented⁷, the Japanese partner firms in this study appeared to focus on customer satisfaction and product quality rather than profit-based performance. Consistent with many articles written over the past few years, the Japanese firms seemed less constrained by issues of share price and impatient boards of directors than their American counterparts. Because the American partners were heavily focused on financial performance issues, learning was often a secondary and less tangible concern.

⁶A different view is that contrary information can be effective in shaking up the status quo. A joint venture, and especially an international joint venture with its layers of cultural factors, can provide contrary information.

⁷As a manager explained, "A big misconception is that Japanese have long horizons and Americans have short horizons. The Japanese horizon can be long or it can be short, it depends on the issue. If the issue is profit the Japanese partner will often take a long-term view. If the issue is quality and productivity the Japanese partner will want to act very quickly. They will bring over engineers and technical people and do what ever it takes to solve quality problems."

The third receptivity barrier involves the joint venture managers and their role in the learning process. These managers were often given insufficient direction, incentives, or resources to manage the learning process. Joint venture managers are the primary conduits for the transfer of knowledge because of their role in creating a knowledge link between the joint venture and the parent. In this study, joint venture managers usually recognized the competitive implications associated parent learning. However, without adequate support for their learning initiatives, joint venture managers may lose interest in the learning task and even shift their partner loyalty. Many informants were frustrated by the apparent inability of the American parents to go beyond recognition of potential learning experiences to exploitation of the experiences. For example, a manager commented:

The American parent should be learning through this experience. What good is the joint venture if the people and information in the joint venture do not go back to the parent? This information should not be limited to the partnership.

In several cases, American managers made no pretence that they had "gone native." In going native, the American partner's culture and values had been rejected in favor of the Japanese partner's.⁸ This may account for the reluctance of American managers to return to their parent firms. In contrast, the Japanese partners had little to fear; there were only a few instances where informants indicated that Japanese managers assigned to the venture were reluctant to return to the Japanese parent.

Joint Venture Managers and the Performance-Learning Paradox

The relationship between learning and joint venture performance poses a paradoxical challenge for joint venture general managers. On the one hand, they are charged with

⁸That American managers "went native" is interesting because going native is usually more of a concern with individuals from outside the joint venture's country of domicile.

generating an adequate financial return for the American parents; on the other hand, they are expected to act as the conduit for the parent's learning initiative. A focus on one objective may detract from the other, as Figure 9-1 indicates. More importantly, when either learning or performance are less than satisfactory, there are implications for the assessment of the other objective. Thus, while poor performance can act as a barrier to learning, unexploited learning opportunities may lead to perceptions of unsatisfactory joint venture performance.

Those firms that were able to accomplish both objectives generally compromised on their expectations regarding joint venture performance. These firms also had more realistic expectations in terms of the learning potential of their joint ventures and the joint venture managers tended to adopt the role of learning champions. For example, in one joint venture, the general manager invited all American parent managers involved in manufacturing to visit the joint venture. At parent corporate meetings, the general manager tried to emphasize that the joint venture was outperforming the other parent plants on a quality basis. Initially, parent management seemed reluctant to learn from the joint venture. However, as the joint venture's performance improved and the domestic automotive industry experienced a downturn, parent management began to express a greater interest in joint venture activities. An expansion plan for the joint venture was approved and managers from other parent plants began to visit the joint venture.

Partner Dependence and the Race to Learn

Chapter 8 discussed the competitive implications of joint venture termination. Specifically, the creation of competitors through terminated joint ventures was considered. A further consideration is that joint venture parents may have termination as an objective.

Hamel (1991, 99) argued that joint ventures may represent transitional organizational forms for the partner firms, "a half-way house on the road from market to hierarchy."

Asymmetries in learning may alter relative bargaining power between the joint venture partners and lead to instability in the form of *unplanned* equity changes or major reorganizations. Asymmetric learning occurs when benefits are appropriated unevenly because of differences in the organizational learning capacity of the partners (Pucik 1991). Reich and Mankin (1986) documented this situation in describing the reversal in the relationship between Japanese and Western firms over the past few decades. According to Reich and Mankin, in various industries Japanese firms gained access to technology through collaborative relationships. When additional learning gains became difficult, the Japanese firms moved to gain control over the relationships as a platform for penetration into Western markets.

For the Japanese firms in this study, a learning focus was a logical strategy. In many cases, the joint ventures provided the Japanese parents with their first North American experience, giving them the opportunity to learn about competing in North America, how to market to the domestic OEMs, and how to manage an international subsidiary. As outlined in Chapter 8, many Japanese partners had only to learn how to transfer an existing management process to North America to eliminate the need for a joint venture.

The situation for the American firms in this study was very different. Given that the American firms usually were not trying to eliminate a partner dependency and given the nature of the partner contributions, a strategy of "outlearning" their Japanese partners was probably difficult to achieve. Thus, while the American firms were intent on learning, it is likely that their learning objectives were very different than their Japanese partners'.

Consequently, joint venture full ownership and partner outlearning were not typical goals of the American firms.

This raises two questions. First, were the Japanese partners in this study in a race to learn and were they intent on "de-skilling" their American partners? In most cases the answer is probably no; the Japanese firms may have viewed the joint ventures as transitional but my observations suggest that most did not have an explicit goal of unsanctioned skill transfers. However, there were a few cases where informants believed the Japanese partners had an explicit intention to learn as quickly as possible and make the joint venture obsolete, as comments from two managers illustrate:

The American partner did not understand what was needed to manage the joint venture. The Japanese partner knew exactly what was needed. I would not be surprised if the Japanese partner's original intention was to get their foot in the door by selecting a weak partner, get the joint venture started, and then take over the joint venture.

Our Japanese partner never did share their goals with us. They wanted a foothold in the United States which we could provide. They used us and then threw us away.

Second, is joint venture instability inevitable when one or both partners has a learning objective? In this sample, a Japanese partner learning objective will ultimately lead to instability because of reduced partner dependence. With the American partners, learning will not necessarily lead to instability if partner dependence is based on factors such as JOEM market access. Japanese partner skills may be internalized but if the barrier to entry associated with the JOEMs is not eliminated, partner dependence will continue.

In sum, the joint ventures in this study provided American partners with an excellent opportunity to learn. However, this opportunity was offset by the risk of the Japanese partner learning first and finding their partners expendable. The risks were exacerbated by the fact that the Japanese partners had less to learn to reduce joint venture dependence. The

Japanese partners typically contributed skills associated with product design, market experience, and manufacturing and had only to learn how to deploy those skills in a new environment. This suggests a proposition: the greater the learning opportunity for a firm in an alliance, the more likely that the firm will become expendable to the alliance business because of the asymmetries in partner skills. Drawing on Hamel (1991), a related proposition is that the greater the asymmetries in partner skills (i.e., the greater the need to learn), the more difficult it will be to exploit learning opportunities.

The Japanese Network

For American firms involved in joint ventures with Japanese firms, the Japanese network raises several issues. By forming a joint venture with a Japanese firm, the American partners in this study (willingly or not) became de facto members of their Japanese partner's network. The uncertainty surrounding the network position has several implications for the learning process.

Many of the Japanese partners were influenced in their North American investment decisions by their positions as long-term JOEM suppliers. To a much greater extent than in North America, Japanese suppliers are expected to do what is necessary to meet the needs of their primary customers. If the JOEMs build a plant in North America, suppliers must follow or risk upsetting their relationship with the JOEMs. Thus, much of the investment by Japanese automotive suppliers in North America has not followed the western notion of capital investment. It is unlikely that the Japanese suppliers treated the potential return on investment from a North American facility as the primary decision making criterion. Instead, the JOEMs expected their suppliers to follow them to North America and the suppliers realized they had little choice.

It is important to recognize, however, that Japanese manufacturers do not guarantee business to their long-term suppliers. Japanese firms strive to maintain a tradeoff between long-term relationships and competition between suppliers. Consequently, Japanese suppliers' investments in North America are not without risk. Several joint ventures in this study were formed with expectations of JOEM contracts that had not materialized. While the Japanese partners expected JOEM market access because of their existing relationships in Japan, it was not guaranteed. Nevertheless, a key to the JOEMs' success in North America has been the willingness of Japanese suppliers to invest in North America to support new assembly operations⁹. Many of the investments were made without any formal commitments from the JOEM customers.

A second important point is that Japanese suppliers in North America are often free to compete for business outside their primary customer segment. While several joint ventures in the study were explicitly tied to a single JOEM and effectively prevented from pursuing new customers, most ventures were actively developing new business. Indeed, a goal of many Japanese firms in North America is to become suppliers to the domestic OEMs. A link with an American firm was often perceived as a key factor in achieving that goal.

American Partners and the Japanese Network

When an American firm forms a joint venture with a Japanese firm, it usually becomes part of the partner's complex network of relationships. The unfamiliarity of most American managers with Japanese forms of supplier management and contractual governance

⁹Several managers commented that the Japanese companies were surprised by the level of competition between Japanese companies in North America. According to one manager, "With all the new plants and potential business in America, nobody wants to risk missing a piece of the action. So they all come over even if they don't have any guarantee of getting the business."

often created a sense of frustration for the American partners. A joint venture executive described the relationship between the Japanese partner and the joint venture:

Gradually, we realized that our partner had a hidden agenda that we would never be able to understand. They [the Japanese partner] saw the joint venture as advertising; they were willing to lose money to maintain their Japanese relationship. That relationship was beyond anything we could get a handle on.

An area that was particularly difficult for American managers to understand was pricing decisions. A dissatisfaction with the pricing structure of the joint venture products was a major source of conflict between the joint venture partners, particularly when the joint venture dealt only with JOEMs. When the customers were JOEMs and the products sold by the joint ventures were duplicates of products made in Japan (the majority of the cases in the sample), most of the American managers indicated that they had limited knowledge about how initial prices were determined for the joint venture products. Usually, the price was based on an agreement between the Japanese partner and the JOEM using the price in Japan as the target price.¹⁰ This price, at least initially, was not necessarily related to the cost of manufacturing the part in North America. Or, the price may have been low-balled by the Japanese partner to ensure that they were awarded the U.S. business. In any event, the American partners usually found themselves excluded from any discussions about price and profit margins.

The American partners' only link with the JOEMs was through the joint venture. There were few opportunities to benefit through adjustments other than price. Thus, armed with little or no knowledge about how the initial product prices were determined and a profit situation deemed unsatisfactory in many cases, a typical American partner reaction was "we

¹⁰The paper by Cusumano and Takeishi (1991) provide an excellent overview of Japanese automaker pricing practices.

need to renegotiate the price with the JOEMs." The Japanese partners, on the other hand, generally had myriad relationships in Japan to consider. Because these relationships went beyond formal contracts for specific parts, the last thing the Japanese firms needed or wanted to do was force a confrontation over price. Price adjustments are not the way Japanese companies usually solve conflicts (Kester 1991). Forcing a confrontation about a pricing issue may be relatively common in North America but in Japan it rarely happens between manufacturers and long-term suppliers. As a manager noted:

In Japan, our Japanese partner does not compete head-to-head. Head-to-head competition takes place between "mother" [the JOEM] and the other JOEMs. Mother tells the sibling to be good and we will take care of you. Getting involved in tough price competition in the United States was something new to our partner and made it hard for them to take the pricing issue seriously. In Japan the price is set gentlemanly.

Nevertheless, price confrontations were forced in several cases because the American partners decided the prices negotiated in Japan were unrealistic in an American environment. Without a price increase, they argued, the joint venture could not survive. In one situation, after a great deal of discussion the Japanese partner agreed that the pricing issue had to be raised with the JOEM. However, as the joint venture president explained, the Japanese partner preferred to remain in the background.

I was willing to force a confrontation because in my opinion, the JOEM would not be able to find another supplier with better prices, even with the increase. However, the Japanese partner wants American parent executives to take the lead with the pricing issue so they can blame the American parent as the bad guy in the dispute. The Japanese partner would never directly threaten its primary JOEM customer.

LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

Research in the area of organizational learning is at an early stage of development. This study represents only the beginning of a more complete understanding of how organizations effectively internalize new skills as the basis for developing competitive advantage. The findings of the study, which should be interpreted in light of several limitations, suggest directions for future research that will advance the groundwork reported here.

This study used field interviews and questionnaires as the primary data collection methods. The primary informant was the senior American manager in the joint venture. In most cases, this informant was the joint venture general manager or president, an approach supported by Geringer and Hebert (1991). Multiple informant interviews were carried out in a subset of the cases. While resource constraints prevented a greater reliance on multiple informants, the use of multiple informants for all cases would have provided a richer data base, reduced single source bias, and strengthened internal validity.

Also, data collected directly from the Japanese partner would have enhanced the study and provided evidence about areas of divergence between the partners. In particular, data on Japanese partner joint venture motives, performance evaluations, and learning strategies would have contributed valuable insights to the study. In a few cases, the senior Japanese manager in the joint venture was interviewed. However, collecting data from Japanese informants for all cases was not possible because of cost and logistical (e.g., language) barriers.

The measures of the learning variables were less than ideal. For learning efforts, a more detailed breakdown of the various mechanisms for transferring joint venture knowledge would have been desirable. Additionally, the various learning efforts were treated as equally

effective. Further research is necessary to determine the relative effectiveness of the various actions used to transfer knowledge from joint ventures to the parents. It would also be useful to know more about the link between specific actions and types of knowledge transfer. For example, one type of action may be most effective in transferring knowledge about competitive strategy and overall business philosophies while another may be more useful for transferring manufacturing-related knowledge.

For an evaluation of the parent firm learning outcomes, a categorization scheme derived from the interview data was used. Convergent validity was assessed using the outcome categories and several questionnaire measures. While there were reasonable correlations between the various outcome measures, a more rigorous measure that incorporated multiple informant responses would be desirable. There is also a need for a detailed identification of types of knowledge as a solid basis for operationalization and measurement. Studies such as Winter's (1987) article discussing knowledge as a strategic asset may be a useful starting point.

Furthermore, a longitudinal design going beyond the input-output perspective used in this study would permit a more detailed focus on managerial processes. A longitudinal design would also help overcome the methodological problem associated with the lag between knowledge acquisition and change. A followup study will be carried out, since a greater time lapse may reveal greater consequences of internalized joint venture knowledge. A longitudinal design also would provide insight into how the learning subprocesses become integrated into a larger process. In this study, it was difficult to pinpoint exact boundaries between the processes of acquisition and transfer of organizational knowledge.

As evidence of the difficulty of identifying boundaries and delineating subprocesses, the study found that the two stages of joint venture learning were difficult to separate.

Learning is a dynamic process in which knowledge change may be both an input and output. Learning efforts, although portrayed in Figure 8-1 as a variable that influences the learning outcome, also can be viewed as an intermediate output in the learning process. For example, an understanding of the differences between joint venture partners, a learning input, may stimulate efforts to transfer knowledge. Learning efforts may in turn act as an input in creating the capacity for organizational change, a learning output.

A longitudinal design could also expand the proposed learning framework. For example, learning intent was found to be associated with the efforts to initiate the learning process. However, because of the difficulty of *a priori* specifications of learning outcomes, learning is inherently an emergent process despite an initial intent. It would be interesting to determine the extent to which an incorrectly specified learning intent influenced the eventual learning outcome and whether modifications in the intent played a role in the process.

The rationale for the inclusion of qualitative data requiring researcher categorization was outlined in Chapter 4. To counter the subjectivity of interview data categorization, convergence with an alternate method or measure was sought where possible. In analyzing the data, the categorization schemes restricted the range of analytical techniques that could be applied. The hypotheses were tested primarily using a bivariate approach involving tests of association. Although determinants of the learning process were proposed and supported by the analysis, constructing explanatory or predictive models using data from cross-sectional exploratory studies is difficult when the phenomenon of interest is as complex as learning and the number of cases studied is small.

Another issue is the extent to which the results can be generalized. It should be noted that a single industry study was most appropriate for this kind of investigation. Using multi-

industry data could introduce substantial variation in response characteristics from extraneous factors, such as different industry pressures for internationalization or changes in supplier-manufacturer relationships. By limiting the study to a single industry, variation in response characteristics from extrinsic factors was reduced. However, with one caveat, the theory and ideas specifically related to joint ventures should be relevant to different industries. Accordingly, the results of this study need to be extended to other types of industry contexts.

The caveat pertains to the influence of the Japanese element on the findings. While one should exercise caution in terms of generalizing about Japanese management, the influence of the Japanese firms was of great importance in this study. As outlined in the management implications section, there were several specific factors associated with the Japanese partners that played a role in the learning process.

Finally, as international competition intensifies, the efficiency and extent of learning by organizations may become the essential factor that determines long-term competitive success. As a step toward understanding how organizations internalize skills in developing viable strategies, this study explored learning through joint ventures. In so doing, it is possible that the study raised more questions than it answered. Studying organizational learning raises very complex issues, both conceptually and methodologically. One of the study's goals was to develop an appreciation for the conceptual and methodological challenges awaiting future researchers in this area. Ideally, this study will provide a framework for the investigation of learning in a broad spectrum of possible contexts.

APPENDIX 1

PILOT STUDY

Pilot interviews were carried out with several executives involved in the management of alliances and joint ventures. The interviews averaged two hours in length; information about the interviews is summarized in Table 1. The objective of the interviews was to discuss organizational learning and joint ventures and to identify factors involved in the learning process. The interviews also provided an opportunity to develop the interview protocol.

TABLE 1
Pilot Interviews

Informant	Parent Firm	Joint Ventures and Alliances Discussed
Director, Corporate Strategy	Canadian MNC U.S.-West Germany	Canada-Mexico
Manager, Project Development and Manager, Marketing Development	Canadian Subsidiary of U.S. Parent	U.S.-Canada Canada-Canada
Vice President, Operations	Canadian MNC	Canada-Japan
Vice President	Canadian MNC	Canada-Australia Canada-U.S.

In all cases, the executives found the topic of learning and joint ventures interesting and relevant. In summary, the implications from the pilot interviews were:

1. Interactions between the partners appear to be instrumental in the learning process.
2. The willingness to learn is an important factor in the learning process. One executive referred to the "arrogance" of his company which prevented learning from occurring.
3. Learning is rarely the primary objective in joint venture formation.
4. The perceived skills of the partner are important. In one case, a learning motive was instrumental in the formation of the joint venture. The North American company saw a joint venture as an excellent opportunity to get access to the skills and knowledge base of its partner. Unfortunately, the learning motivation was based on the untested notion that the international partner "must" have an inherent superiority in both technological and managerial skills. Once the partners firms became closely involved in the joint venture, the North American firm came to the conclusion that their initial assessment of the skills of their partner was incorrect. As a result, no effort was made to transfer knowledge because as the vice president operations stated, "We could not learn from them; they should have been learning from us."
5. Several variants of joint venture-derived knowledge were identified:
 - Technological knowledge related to the task performed by the venture.
 - Strategic or managerial knowledge that draws on the partner's administrative skills.
 - Knowledge about the skills and capabilities of the parent firm.
 - Knowledge about a potential competitor (i.e., the joint venture partner).
 - Knowledge about the process of managing joint ventures.

6. There are practical and methodological problems in delineating learning at stage one and at stage two. For example, in some cases the board interactions may represent the only interaction between the partners and therefore, learning at the joint venture level may not be clearly distinguishable from learning by the parent.

7. The learning process may involve a period of several years depending on the motives and goals of the learning firm. A surrogate measure for the extent of learning may be the effort expended by the joint venture partner in transferring knowledge from the joint venture back to the head office. A lack of effort may signal the absence of learning.

APPENDIX 2

RESEARCHER ACCESS

Summary of the Pre-interview Procedures

1. Using industry guides and other available sources prepare a background data sheet on the joint venture. The data sheet should include the Joint venture and parent telephone numbers and addresses.
2. Telephone the Joint venture or parent to determine (or confirm) the name of the appropriate respondent.
3. Contact the potential respondent by letter. Outline the nature of the study, assure confidentiality, and indicate that the letter will be followed by a telephone call.
4. Contact the potential respondent by telephone. If the respondent agrees to participate, set up an interview if possible.
5. Immediately following the scheduling of the interview, send a confirming letter to the respondent and enclose a copy of the questionnaire. (Note: The questionnaire sent will depend on whether the respondent is at the parent or Joint venture level.)
6. Prepare for the interview by reviewing the Joint venture data sheet and the interview guide.
7. Take a copy of the questionnaire and a copy of the Joint venture data sheet to the interview.



The UNIVERSITY of WESTERN ONTARIO

Western Business School

Letters to Participants Introductory Letter

Dear Mr. Smith:

I am writing to seek your help in a research project studying North American companies involved in international joint ventures (JVs). The research is supported by the School of Business Administration, University of Western Ontario and the National Centre for Management Research and Development. Your input is important to this research. If you participate, you will receive a summary of our study's results, including recommendations for improving performance in future JVs.

The focus of this research is on the design and management of JVs. We do NOT seek information on the JV's financial performance. Rather, we will gather information about:

- 1) The reasons for forming the JV.
- 2) The extent of the partners' involvements in the JV.
- 3) The communication between the partners.
- 4) The communication between the North American parent and the JV.
- 5) The knowledge and skills transferred between the partners.

We would like to include your JV,, in our study. I would like to meet with you for about one hour, at your convenience. I would also be interested in meeting with a manager in your North American parent, **EVERYTHING** you or your colleagues say, as well as the fact of your participation and your corporate affiliation, **WILL BE HELD IN THE STRICTEST CONFIDENCE**. To maintain confidentiality, all data collected will be aggregated. Individual company data **WILL NOT** be disclosed in the research reports.

Soon, I will call to try to arrange a convenient time to talk. I look forward to meeting you.

Yours sincerely

Andrew Inkpen
Joint Venture Research Project



The UNIVERSITY of WESTERN ONTARIO

Western Business School

Confirmation Letter

Dear Mr. Smith:

Thank you for agreeing to participate in our research study. To reconfirm our previously arranged plans, I have noted the following appointment time:

Prior to our meeting, I would appreciate it if you could complete the enclosed questionnaire. Using a questionnaire allows for a more efficient use of your time in the interview. The questionnaire is designed to capture background information about your joint venture and also to complement the material that will be covered in the interview. The information provided by you will be held in the strictest confidence; in none of our formal or informal reports will it be associated with your organization.

Once again, thank you for taking the time to complete the questionnaire. If you have any questions concerning the study, please do not hesitate to contact me. I look forward to our meeting on . At this time I will also collect the questionnaire.

Yours sincerely

**Andrew Inkpen
Joint Venture Research Project**

/Enclosure

APPENDIX 3



The UNIVERSITY of
WESTERN ONTARIO

School of Business Administration

JOINT VENTURE QUESTIONNAIRE

The attached questionnaire is part of a large scale research project studying North American firms involved in joint ventures with Japanese firms. This questionnaire is intended to complement interview data which will also be collected. These questions have been designed so that you can answer them quickly.

All information you supply on this questionnaire will be treated as strictly confidential. Neither you nor your company will be identified in any reports.

PLEASE NOTE:

- Please attempt all questions.
 - If you feel that a question requires further explanation, please feel free to add appropriate comments on the reverse side.
-

Project Director

Andrew Inkpen
School of Business Administration
University of Western Ontario
London, Ontario N6G 3K7
Canada
(519) 661-3206

SECTION 1: This section asks general questions about the JV.

Name of JV _____

Your position in the JV _____

Year JV was established _____

Please indicate the share of JV equity held by the North American partner:

___ LESS than 50% ___ 50% ___ MORE than 50%

Has the North American partner's equity share changed since the JV was formed?

NO _____ YES (Please specify) _____

What were the reasons for establishing the JV?

Which partner initiated the JV?

___ NORTH AMERICAN PARTNER
 ___ JAPANESE PARTNER

Who provides the JV general manager?

___ NORTH AMERICAN PARTNER
 ___ JAPANESE PARTNER

Besides this JV, how many other JVs is/has the North American partner been involved in?

___ DOMESTIC ___ INTERNATIONAL

Prior to forming the JV, was the North American partner associated in any way with the Japanese partner?

___ YES ___ NO

If YES, in what respect? _____

Which of the following activities is the JV engaged in? (Please check all categories that apply.)

1. ___ Basic research and development
2. ___ Product design
3. ___ Manufacturing of components, or raw materials refining or processing
4. ___ Assembly of finished goods
5. ___ Marketing
6. ___ Distribution
7. ___ After-sales service

Please indicate the JV's approximate number of full-time employees: _____

PLEASE INDICATE THE EXTENT TO WHICH YOU (Circle number):	NOT AT ALL							TO A GREAT EXTENT						
Regularly communicate with managers from the head office of the North American partner.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Involve managers from the head office of the North American partner in JV decisions	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Regularly communicate with managers from the head office of the Japanese partner.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Involve managers from the head office of the Japanese partner in JV decisions	1	2	3	4	5	6	7	1	2	3	4	5	6	7

PLEASE INDICATE THE EXTENT TO WHICH THE JAPANESE PARTNER (Circle number):	NOT AT ALL							TO A GREAT EXTENT						
Willingly shares information	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Aggressively tries to acquire information from its JV partner.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Is overly protective of its skills and capabilities	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Is a firm that stands by its word	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Views this JV as very important.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Follows whatever recommendations the North American partner makes regarding the management of the JV	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Has learned from its North American partner	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Is satisfied with the performance of the JV	1	2	3	4	5	6	7	1	2	3	4	5	6	7

PLEASE INDICATE THE EXTENT TO WHICH THE NORTH AMERICAN PARTNER (Circle number):	NOT AT ALL							TO A GREAT EXTENT						
Aggressively tries to learn from its JV partner.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Keeps its partner well-informed about problems associated with the JV	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Can rely on its partner to abide by the JV management agreement	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Follows whatever recommendations the Japanese partner makes regarding the management of the JV	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Views this JV as very important.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Is satisfied with the performance of the JV	1	2	3	4	5	6	7	1	2	3	4	5	6	7

PLEASE INDICATE HOW MUCH YOU AGREE OR DISAGREE WITH THE FOLLOWING STATEMENTS (Circle number):

	STRONGLY DISAGREE				STRONGLY AGREE		
The relationship between the JV partners is open and informal.	1	2	3	4	5	6	7
Within the JV, the quality of communication between staff from the partner firms is very good.	1	2	3	4	5	6	7
There is a high level of trust in the working relationship between the partners.	1	2	3	4	5	6	7

PLEASE INDICATE THE EXTENT TO WHICH BOTH PARTNERS (Circle number):

	NOT AT ALL				TO A GREAT EXTENT		
Actively work together so that both can benefit from the JV relationship.	1	2	3	4	5	6	7
Willingly share information with each other.	1	2	3	4	5	6	7
Are involved in important decisions made by the JV managers.	1	2	3	4	5	6	7

PLEASE INDICATE THE EXTENT TO WHICH (Circle number):

	NOT AT ALL				TO A GREAT EXTENT		
The JV operates independently of the JV board	1	2	3	4	5	6	7
The JV board provides the only way for senior managers of the partner firms to become involved in JV activities.	1	2	3	4	5	6	7
The efforts of the partners are complementary and consistent with the objectives of the JV	1	2	3	4	5	6	7
The JV has met the objectives for which it was established	1	2	3	4	5	6	7

SECTION 2: This section asks questions about the JV formation.

How much do you agree with the following statement?
(Circle number)

	STRONGLY DISAGREE				STRONGLY AGREE		
One of the North American parent's objectives in forming the JV was to learn something, e.g., an unfamiliar market, technology or management technique.	1	2	3	4	5	6	7

At the time the JV was formed, senior managers in the North American partner may have believed there was **POTENTIAL** to learn **FROM THE JAPANFSE PARTNER**. In the following areas, please indicate the degree to which managers in the North American partner believed there was learning potential at the time the JV was formed. (If an area is not relevant, please mark N/A):

	LOW POTENTIAL			HIGH POTENTIAL		
	1	2	3	4	5	
a. General management	1	2	3	4	5	N/A
b. Financial management	1	2	3	4	5	N/A
c. Marketing/selling	1	2	3	4	5	N/A
d. Distribution	1	2	3	4	5	N/A
e. Market research	1	2	3	4	5	N/A
f. Product R&D	1	2	3	4	5	N/A
g. Engineering	1	2	3	4	5	N/A
h. Production/operations	1	2	3	4	5	N/A
i. Human resource mgmt.	1	2	3	4	5	N/A

**SECTION 3: This section asks questions about
the JV as a learning experience.**

PLEASE INDICATE HOW MUCH YOU WOULD AGREE OR DISAGREE WITH THE FOLLOWING STATEMENT (Circle number):

**STRONGLY
DISAGREE**

**STRONGLY
AGREE**

Overall, this JV experience has been a useful learning experience for the North American parent.

1 2 3 4 5 6 7

In the following areas, to what extent have JV MANAGERS FROM THE NORTH AMERICAN PARENT learned through their involvement in the JV?

	NOT AT ALL			TO A GREAT EXTENT		
	1	2	3	4	5	
a. General management	1	2	3	4	5	N/A
b. Financial management	1	2	3	4	5	N/A
c. Marketing/selling	1	2	3	4	5	N/A
d. Distribution	1	2	3	4	5	N/A
e. Market research	1	2	3	4	5	N/A
f. Product R&D	1	2	3	4	5	N/A
g. Engineering	1	2	3	4	5	N/A
h. Production/operations	1	2	3	4	5	N/A
i. Human resource mgmt.	1	2	3	4	5	N/A

In the following areas, to what extent has THE NORTH AMERICAN PARENT learned through its involvement in the JV?

	NOT AT ALL			TO A GREAT EXTENT		
a. General management	1	2	3	4	5	N/A
b. Financial management	1	2	3	4	5	N/A
c. Marketing/selling	1	2	3	4	5	N/A
d. Distribution	1	2	3	4	5	N/A
e. Market research	1	2	3	4	5	N/A
f. Product R&D	1	2	3	4	5	N/A
g. Engineering	1	2	3	4	5	N/A
h. Production/operations	1	2	3	4	5	N/A
i. Human resource mgmt.	1	2	3	4	5	N/A

SECTION 4: This section asks questions about communication between you and other managers.

A. HOW OFTEN DO YOU COMMUNICATE WITH THE FOLLOWING INDIVIDUALS? (Please circle only one position. If an individual communication point is not relevant, please mark N/A.)

	Daily	Weekly	Monthly	Quarterly	Rarely/ Never	N/A
1) The Japanese managers in the JV:						
- general management	1	2	3	4	5	N/A
- marketing/sales	1	2	3	4	5	N/A
- manufacturing	1	2	3	4	5	N/A
- finance	1	2	3	4	5	N/A
2) JV board members from the Japanese partner who are <u>not</u> managers in the JV	1	2	3	4	5	N/A
3) JV board members from the North American partner who are <u>not</u> managers in the JV	1	2	3	4	5	N/A
4) Individuals working with the Japanese partner who are <u>not</u> JV board members	1	2	3	4	5	N/A
5) Individuals working with the North American partner who are <u>not</u> JV board members	1	2	3	4	5	N/A

B. WHO USUALLY INITIATES YOUR COMMUNICATION WITH THE FOLLOWING INDIVIDUALS
(Please circle only one position. If an individual communication point is not relevant, please mark N/A.)

	You Usually Initiate	Other Party Usually Initiates	Both Parties Initiate	<u>N/A</u>
1) The Japanese managers in the JV:				
- general management	1	2	3	N/A
- marketing/sales	1	2	3	N/A
- manufacturing	1	2	3	N/A
- finance	1	2	3	N/A
2) JV board members from the Japanese partner who are <u>not</u> managers in the JV	1	2	3	N/A
3) JV board members from the North American partner who are <u>not</u> managers in the JV	1	2	3	N/A
4) Individuals working with the Japanese partner who are <u>not</u> JV board members	1	2	3	N/A
5) Individuals working with the North American partner who are <u>not</u> JV board members	1	2	3	N/A

C. WHAT IS YOUR COMMUNICATION WITH THE FOLLOWING INDIVIDUALS USUALLY ABOUT?
(Please circle only one position. If an individual communication point is not relevant, please mark N/A.)

	JV Strategic Issues	JV Operational Issues	Head Office Issues	<u>N/A</u>
1) The Japanese managers in the JV:				
- general management	1	2	3	N/A
- marketing/sales	1	2	3	N/A
- manufacturing	1	2	3	N/A
- finance	1	2	3	N/A
2) JV board members from the Japanese partner who are <u>not</u> managers in the JV	1	2	3	N/A
3) JV board members from the North American partner who are <u>not</u> managers in the JV	1	2	3	N/A
4) Individuals working with the Japanese partner who are <u>not</u> JV board members	1	2	3	N/A
5) Individuals working with the North American partner who are <u>not</u> JV board members	1	2	3	N/A

THIS IS THE END OF THE QUESTIONNAIRE

THANK YOU FOR YOUR COOPERATION

APPENDIX 4

DATA COLLECTION PROCEDURE

Summary of the Interview Procedure

A. *OPENING PHASE* Approximate time: 5 minutes

Introduction: spend a few minutes reviewing the study for the respondent and building rapport.

- purpose of the study: to address the problems of designing and managing international joint ventures, we are interviewing senior American managers involved in the management of American-Japanese joint ventures. We hope to gain an insight into the complex process of managing international joint ventures.
- why study: Increasing number of joint ventures between North American firms and Japanese firms. We are interested in the impact of the joint ventures on the North American parent.

Research Issues:

- assurance of confidentiality - the name of the organization and the informant will not be used.
- assurance that financial performance data for the joint venture is not required.
- researcher's role in the study.
- collection of the questionnaire, inquire if there were any problems with the questionnaire.

B. *QUESTION-RESPONSE PHASE*

- structure of the interview: combination of specific questions and open-ended discussion.
- the interview guide provides the general outline for the interview

C. CLOSING PHASE

- open-ended questions about issues which may be important to the informant.
- inquire about further contact if necessary:
 - contact with the informant
 - contact with another manager (head office or joint venture)
- thank the informant for his (her) time, reiterate that the study results will be available.

Interview Checklist

1. Discuss:
 - purpose of the study
 - confidentiality assurance
2. Collect the questionnaire: any problems?
3. Interview guide questions
4. Other questions
5. Other contacts? - parent or joint venture (if yes, get the mailing address and telephone number)
6. Respondent business card
7. Thank-you; promise of management summary; inquire about followup if necessary

Interview Guide: Parent Manager

RESPONDENT INFO:

- 1) Position in the Parent
- 2) Position in the joint venture (if applicable)
- 3) Length of time in the organization

A. THE JOINT VENTURE:

THE JOINT VENTURE FORMATION

- Describe the formation of the joint venture: why was it formed; how did the two partners get together; who initiated the joint venture?
- Is your partner a competitor; potential competitors?
- Do you worry about the implications of creating a competitor?
- Background information on the American parent: Business strategy, international experience, Japanese experience
- Describe the joint venture activities: SCOPE
- Is the joint venture a "clone" of its Japanese parent?
- How much of the joint venture sales are to JOEMs?

MOTIVATION:

- Was ACCESS to the partner's skills and knowledge an important consideration (for the American partner) in forming the joint venture?
- What factors were important in the formation (MOTIVATIONS)?
 - SCALE
 - RISK REDUCTION
 - ACCESS TO NEW PRODUCTS OR MARKETS
 - EFFICIENCY
 - LEGITIMACY
 - LEARNING

- Was **LEARNING** from the Japanese partner a motivation?
- Was the joint venture created for the purpose of learning something, e.g.,
 - **AN UNFAMILIAR MARKET**
 - **TECHNOLOGY** (product and/or process)
 - **MANAGEMENT TECHNIQUE**
- Subsequent to the formation of the joint venture, have the American parent's original joint venture **OBJECTIVES** changed?
- Does the joint venture solve the problem of gaining access to Japanese customers (i.e., the **JOEMs**)?

B. JAPANESE PARTNER FACTORS:

- Partner characteristics:
 - **SIZE**
 - **INTERNATIONAL EXPERIENCE**
 - **PRIOR RELATIONSHIPS WITH THE AMERICAN PARTNER**
 - **PART OF A KEIRETSU OR SUPPLIER GROUP**
- What were the **JAPANESE** partner's motives in forming the joint venture?
 - **SCALE**
 - **RISK REDUCTION** ("Handholding")
 - **ACCESS TO NEW PRODUCTS OR MARKETS**
 - **EFFICIENCY**
 - **LEGITIMACY**
 - **LEARNING**
- Why did they need a partner?
- Did the **JOEM** customer play a role in the formation of the joint venture? In the management of the joint venture?
- Do you think that **LEARNING FROM THE AMERICAN PARTNER** is a key objective for the Japanese partner?
- Has the Japanese partner learned from you?
- What have they learned?

- Overall, how would evaluate the contribution of the Japanese partner to the joint venture?

C. JOINT VENTURE MANAGEMENT:

- ORGANIZATION CHART

- Who provides the joint venture managers? How many are:
 - PROVIDED BY THE AMERICAN PARENT
 - PROVIDED BY THE JAPANESE PARENT

- How senior are the managers provided by the American partner and at what level were (are) they in the parent?

- Who provides the joint venture board members? How many are from the:
 - AMERICAN PARENT
 - JAPANESE PARENT

- Is the Japanese partner's managerial contribution critical to the success of the joint venture (Strategic or Operational)?

- Is the North American partner's managerial contribution critical to the success of the joint venture (Strategic or Operational)?

- To what extent are non-board members from your firm involved in the management of the joint venture?

- Is the senior management of the joint venture constant? Are managers rotated through the joint venture:
 - BY THE JAPANESE PARTNER
 - BY THE NORTH AMERICAN PARTNER

- Which partner has the most influence on the management of the joint venture?

- Are there any American managers in the joint venture with:
 - Japanese language capability?
 - Japanese management experience?

D. THE JOINT VENTURE AND ITS RELATIONSHIP WITH ITS PARENTS:**AUTONOMY:**

- Do the parents get involved in joint venture activities?

- How much operational autonomy does the joint venture have?
 - FROM ITS AMERICAN PARENT
 - FROM ITS JAPANESE PARENT

- Has the amount of autonomy changed over time?
 - NO CHANGE
 - MORE AUTONOMY
 - LESS AUTONOMY

- Does the joint venture BUY FROM or SELL TO its parents?

E. THE PARTNER RELATIONSHIP:

- How would you describe the relationship between the partners?
 - INFORMAL, OPEN, SECRETIVE

- What is the relationship like within the joint venture?

- Is there a problem with 2 camps of management? If so, what are the implications?

- How often do you meet with managers from the Japanese partner?

- Which way does information flow?

- How good is the information that you get from the Japanese partner?

- Do you aggressively try to acquire information from the Japanese partner?

- Does the American parent aggressively try to acquire information from the Japanese partner?

PARTNER CONFLICT:

- Do the partners agree on the time frame for profitability?
- If there is a conflict over profitability, how will it be resolved?

BOARD LEVEL INTERACTION:

- How often does the board meet?
- What is the focus of the joint venture board meetings?
- How often do the board members visit the joint venture?
 - AMERICAN PARENT BOARD MEMBERS
 - JAPANESE PARENT BOARD MEMBERS
- Do the board members communicate outside the board meetings?

F. LEARNING EXPERIENCE:

Ask the respondent in general about learning from their partner:

- Has the joint venture been a useful learning experience? Why or why not?
- Has YOUR exposure to the Japanese partner been a useful learning experience?
 - has the learning experience been as you anticipated?
- Do you feel that the MAJORITY OF THE AMERICAN PARENT MANAGERS in the joint venture have learned as a result of their joint venture experience?
- What is DIFFERENT about the Japanese partner's operation?
 - Are the differences associated with:
 - BETTER TECHNOLOGY
 - BETTER PLANNING
 - HARDER WORK
 - BETTER QUALITY CONTROL
 - BETTER WORKFORCE
 - BETTER MANAGERS
 - MORE DEMANDING CUSTOMERS
 - OTHER

- Can or should those differences be incorporated in the AMERICAN PARENT?
- Did you feel that there was a Japanese "mystique" that could be exploited by forming a joint venture?
- How would you describe your learning experience? Is the learning related to:
 - PRODUCT TECHNOLOGY
 - MANUFACTURING PROCESS
 - MANAGEMENT SKILLS
- If the learning associated with this joint venture was limited, why do you think that this was not a good learning experience for your firm?
 - What could you have done differently to maximize the learning?

LEARNING AND THE JOINT VENTURE-AMERICAN PARENT RELATIONSHIP:

- Does your firm encourage its joint venture managers to learn from the Japanese partner?
- Do parent managers show an interest in the joint venture as a learning experience?
- What effort does your firm make to incorporate joint venture learning in its operations?
 - ROTATION OF MANAGERS
 - VISITS/TOURS BY AMERICAN PARENT MANAGERS
 - PRESENTATIONS TO THE AMERICAN PARENT BY JOINT VENTURE MANAGERS
 - SHARING OF INFORMATION BETWEEN AMERICAN PARENT AND JOINT VENTURE (E.G., COST REDUCTION DATA)
 - JOINT PROJECTS
 - TECHNICAL ASSISTANCE TEAMS FROM THE AMERICAN PARENT
- Could your firm do more to capitalize on the joint venture as a learning experience?
- Will this joint venture affect your firm's strategy and operations?

G. JOINT VENTURE PERFORMANCE:

- Are you satisfied with the joint venture's performance?
 - Are the parents satisfied?

- Are lower profit margins available from the JOEMs a problem?
- Is there any conflict between the partners in terms of the profit margins of the joint venture?
- Has the joint venture met the American parent's expectations?
- Overall, is the American parent satisfied with the joint venture?
- Is the Japanese partner satisfied with the joint venture?

Interview Guide: Joint Venture Manager

RESPONDENT INFO:

- 1) Position in the joint venture
- 2) Prior position in the parent (if applicable)
- 3) Length of time in the organization

A. THE JOINT VENTURE:

THE JOINT VENTURE FORMATION:

- Describe the formation of the joint venture: why was it formed; how did the two partners get together; who initiated the joint venture?
 - Are the partners competitor; potential competitors?
 - Background information on the American parent: Business strategy, international experience, Japanese experience
 - Describe the joint venture activities: SCOPE
 - Is the joint venture a "clone" of its Japanese parent?
- How much of the joint venture sales are to the JOEMs?
- Will the joint venture sell to domestic companies?
 - Does the American parent worry about the implications of creating a competitor?

MOTIVATION:

- Was ACCESS to the partner's skills and knowledge an important consideration (for the American partner) in forming the joint venture?
- What factors were important in the formation (MOTIVATIONS)?
 - SCALE
 - RISK REDUCTION
 - ACCESS TO NEW PRODUCTS OR MARKETS
 - EFFICIENCY
 - LEGITIMACY
 - LEARNING

- Was **LEARNING** from the Japanese partner a motivation?
- Was the joint venture created for the purpose of learning something, e.g.,
 - **AN UNFAMILIAR MARKET**
 - **TECHNOLOGY** (product and/or process)
 - **MANAGEMENT TECHNIQUE**
- Subsequent to the formation of the joint venture, have the American parent's original joint venture **OBJECTIVES** changed?
- Does the joint venture solve the problem of gaining access to Japanese customers? (i.e., the **JOEMs**)

B. JAPANESE PARTNER FACTORS:

- Partner characteristics:
 - **SIZE**
 - **INTERNATIONAL EXPERIENCE**
 - **PRIOR RELATIONSHIPS WITH THE NA PARTNER**
 - **PART OF A KEIRETSU?**
- What were the **JAPANESE** partner's motives in forming the joint venture?
 - **SCALE**
 - **RISK REDUCTION ("Handholding")**
 - **ACCESS TO NEW PRODUCTS OR MARKETS**
 - **EFFICIENCY**
 - **LEGITIMACY**
 - **LEARNING**
- Why did they need a partner?
- Did the **JOEM** customer play a role in the formation of the joint venture? In the management of the joint venture?
- Do you think that **LEARNING FROM THE AMERICAN PARTNER** is a key objective for the Japanese partner?
- Has the Japanese partner learned from you?
- What have they learned?

- Overall, how would evaluate the contribution of the Japanese partner to the joint venture?

C. JOINT VENTURE MANAGEMENT:

- ORGANIZATION CHART

- Who provides the joint venture managers? How many are:
 - PROVIDED BY AMERICAN PARTNER
 - PROVIDED BY JAPANESE PARTNER
- How senior are the managers provided by the AMERICAN PARENT and at what level were (are) they in the parent?
- Who provides the joint venture board members? How many are from the:
 - AMERICAN PARENT
 - JAPANESE PARENT
- Is the Japanese partner's managerial contribution critical to the success of the joint venture (Strategic or Operational)?
- Is the North American partner's managerial contribution critical to the success of the joint venture (Strategic or Operational)?
- To what extent do non-board members from the American parent get involved in the management of the joint venture?
- Is the senior management of the joint venture constant? Are managers rotated through the joint venture:
 - BY THE JAPANESE PARTNER?
 - BY THE NORTH AMERICAN PARTNER?
- Which partner has the most influence on the management of the joint venture?
- Are there any American managers in the joint venture with:
 - Japanese language capability?
 - Japanese management experience?

D. THE JOINT VENTURE AND ITS RELATIONSHIP WITH ITS PARENTS:**AUTONOMY:**

- Do the parents get involved in joint venture activities?

- How much operational autonomy does the joint venture have?
 - FROM ITS AMERICAN PARENT
 - FROM ITS JAPANESE PARENT

- Has the amount of autonomy changed over time?
 - NO CHANGE
 - MORE AUTONOMY
 - LESS AUTONOMY

- Does the joint venture BUY FROM or SELL TO its parents?

E. THE PARTNER RELATIONSHIP:

- How would you describe the relationship between the partners?
 - INFORMAL, OPEN, SECRETIVE

- What is the relationship like within the joint venture?

- Is there a problem of 2 camps of management? If so, what are the implications?

- How often do you meet with managers from the Japanese partner?

- Which way does information flow?

- How good is the information that you get from the Japanese partner?

- Do you aggressively try to acquire information from the Japanese partner?

- Does the American Parent aggressively try to acquire information from the Japanese partner?

PARTNER CONFLICT:

- Do the partners agree on the time frame for profitability?
- If there is a conflict over profitability how will it be resolved?

BOARD LEVEL INTERACTION:

- How often does the board meet?
- What is the focus of the joint venture board meetings?
- How often do the board members visit the joint venture?
 - AMERICAN PARENT BOARD MEMBERS
 - JAPANESE PARENT BOARD MEMBERS

F. LEARNING EXPERIENCE:

Ask the respondent in general about learning from their partner:

- Has the joint venture been a useful learning experience for the American parent? Why or why not?
- Do you think that you are making a superior product in the joint venture (i.e., superior to the parent)?
- Does your parent know? Agree? Care? What has been their attitude towards your joint venture and its success?
- Why do you think you are able to produce a product superior to the American Parent? Is it because you have:
 - a new plant?
 - a more demanding customer?
 - better workforce?
 - other?
- Has YOUR exposure to the Japanese partner been a useful learning experience?
 - has the learning experience been as you anticipated?
- Do you feel that the MAJORITY OF THE AMERICAN PARENT MANAGERS in the joint venture have learned as a result of their joint venture experience?

3. What is DIFFERENT about the Japanese partner's operation?

- Are the differences associated with:
 - BETTER TECHNOLOGY
 - BETTER PLANNING
 - HARDER WORK
 - BETTER QUALITY CONTROL
 - BETTER WORKFORCE
 - BETTER MANAGERS
 - MORE DEMANDING CUSTOMERS
 - OTHER
- Can or should those differences be incorporated in the American parent?
- Did you feel that there was a Japanese "mystique" that could be exploited by forming a joint venture?
- How would you describe your learning experience? Is the learning related to:
 - PRODUCT TECHNOLOGY
 - MANUFACTURING PROCESS
 - MANAGEMENT SKILLS
- If the parent's learning associated with this joint venture was limited, why do you think that this was not a good learning experience?
- What could the American parent have done differently to maximize the learning?

LEARNING AND THE JOINT VENTURE-AMERICAN RELATIONSHIP:

- Does the American parent encourage its joint venture managers to learn from the Japanese partner?
- Do parent managers show an interest in the joint venture as a learning experience?
- What effort does the American parent make to incorporate joint venture learning in its operations? For example:
 - ROTATION OF MANAGERS
 - VISITS\TOURS BY AMERICAN PARENT MANAGERS
 - PRESENTATIONS TO THE AMERICAN PARENT BY JOINT VENTURE MANAGERS

- SHARING OF INFORMATION BETWEEN AMERICAN PARENT AND JOINT VENTURE (E.G., COST REDUCTION DATA)
- JOINT PROJECTS
- TECHNICAL ASSISTANCE TEAMS FROM THE AMERICAN PARENT

- Has the American Parent made any changes as result of the joint venture exposure?
- Could the American parent do more to capitalize on the joint venture as a learning vehicle?
- Will this joint venture affect the parent's strategy and operations?

G. JOINT VENTURE PERFORMANCE:

- Are you satisfied with the joint venture's performance?
 - Are the parents satisfied?
- Are low profit margins a source of conflict?
- Is there any conflict between the partners in terms of the profit margins of the joint venture?
- Has the joint venture met the American parent's expectations?
- Overall, is the American parent satisfied with the joint venture?
- Is the Japanese partner satisfied with the venture?

APPENDIX 5

DATA REDUCTION: POST INTERVIEW DATA ANALYSIS

Summary of the Post-interview Procedure

1. Immediately after the interview, spend about 20-30 minutes clarifying the interview notes and reviewing the interview guide.
2. The "24-hour" rule: detailed interview notes and impressions should be completed within one day of the interview.
3. All data should be included in the write-up even if it is outside the interview protocol. (The classifications used in the write-up are in the next section called "Interview Write-Up Guide.")
4. The researcher's impressions should be added separate from the informant's (i.e., memoing).
5. The researcher should ask himself open-ended questions such as "what did I learn?" and "how does this compare to the prior interview?"
6. Several days after preparing the write-up, it should be reviewed for consistency and logical flow and also for any obvious omissions.
7. A list of omissions should be maintained. A follow-up telephone call to the respondent should be made if necessary.
8. Annual reports and periodical searches should be used to obtain further information.

Interview Write-up Guide

INTERVIEW NUMBER:

JOINT VENTURE:

PARTNERS:

DATE: note - include the date of the interview plus the dates of any followup calls or visits

MANAGER:

TIME:

JOINT VENTURE OWNERSHIP:

BACKGROUND ON THE PARTNERS AND THE JOINT VENTURE:

FORMATION:

- American Parent Perspective: Why was the joint venture formed?
- Motivation:
- Japanese Partner Perspective: Why was the joint venture formed?
- Motivation:

JOINT VENTURE OBJECTIVES:

PARTNER CONTRIBUTIONS:

JOINT VENTURE SCOPE:

AUTONOMY:

JOINT VENTURE MANAGEMENT:

PARTNER INTERACTION:

LEARNING EXPERIENCE:

Management:

Organization:

JAPANESE-NORTH AMERICAN DIFFERENCES:

PERFORMANCE:

RESEARCHER GENERAL IMPRESSIONS:

APPENDIX 6

VIGNETTES

Vignette 1 - Joint Venture Formation

For 30 years, Alpha had maintained a sales office in Japan. The office was established by a non-automotive division that had since been sold. Alpha kept the sales office open primarily to maintain contact with the Japanese market. In the mid-1980s, Alpha became interested in developing business with the growing JOEM market in North America. Alpha's objective was to be a major player in the world's largest markets, but at that point, lacked a significant Japanese presence.

Alpha considered forming a joint venture and used its sales office in Japan to review the industry for potential partners. Three companies were identified as potential joint venture partners. Alpha was considering its next step when Toyota's North American purchasing department asked Alpha to quote on a product for its new Georgetown, Kentucky plant. Alpha's vice president manufacturing remarked, "At that point we were still naive enough to believe that we might be able to get some transplant business without a Japanese connection."

After the quotation was submitted, Toyota contacted Alpha about forming a joint venture to supply its new plant. Toyota was informed that Alpha was interested; this led to a trip to Japan arranged with Toyota's assistance. Several senior Alpha executives met with two potential joint venture partners, the number one and two suppliers for Toyota in Japan. The meetings were very formal and according to Alpha's vice president, "We only saw their conference room."

The next step was to have the potential Japanese partners come to North America. Both companies visited in May, 1986 and "we only showed them our conference room." Neither Japanese company was interested in a wholly-owned North American investment because of unfamiliarity with the North American business environment.

Alpha management concluded that there was a better "chemistry" with the larger supplier, Hito Ltd (Hito). Hito was one of the largest automotive suppliers in Japan and a longstanding member of Toyota's supplier association. They also thought that Toyota was very supportive of Alpha as a joint venture supplier and would like to see an Alpha-Hito joint venture. Alpha's vice president commented, "I am not really sure of the extent to which Toyota influenced the joint venture formation but I think that Toyota and Hito worked together to make it happen."

The joint venture was formed in December 1986, about 1 year after the first meetings in Japan. The joint venture investment was \$15 million and initially, 100 per cent of the joint venture's business was with Toyota. Several years later, the joint venture developed a small amount of work with General Motors and Ford.

An initial problem in the formation process was that Hito wanted majority ownership. Alpha's vice president suspected that Hito sought majority ownership because that was what Toyota wanted. They also may have wanted to protect their technology. Alpha management knew they could not get majority ownership but held out and were successful in negotiating a 50/50 joint venture. After 10 years, the joint venture agreement will be reviewed.

Vignette 2 - Learning Potential and the Expectation of Visible Differences

Beta Corp. (Beta) was a large automotive supplier manufacturing components for the domestic Big 3. With its traditional market losing share, Beta saw a Japanese joint venture opportunity as a way to stem the losses expected from its domestic business. In 1987, Beta began discussions with Kinuko Inc. (Kinuko), a Japanese company closely linked with one of the largest Japanese car manufacturers. A joint venture agreement was reached that gave 60 percent ownership to Beta. Kinuko was to be responsible for day-to-day operations. The joint venture would be primarily a tier two supplier, selling to the wholly-owned subsidiary of the Japanese firm that owned 40 percent of Kinuko.

Beta was motivated by two factors in forming the joint venture. First, Beta sought access to the expanding transplant market. Since its domestic automobile business was declining, the joint venture would help Beta protect its market share. The joint venture was an extension of the existing operation and would produce a product very similar to existing product lines. Second, Beta management saw the joint venture as an excellent opportunity to learn about Japanese management.

Like many other American automotive suppliers, Beta saw its customers losing market share to Japanese companies. In the early 1980s, Beta sent several groups of managers to Japan to "find out what was really happening." The managers visited various facilities in the same business as Beta. The result of those trips was the realization that technologically, the Japanese plants were not radically different. The visitors saw equipment that was largely the same, although the plants were much better organized and more efficient.

Beta concluded that purchasing Japanese technology was not the answer. The Japanese were using more expensive raw materials and had the same equipment. In Beta's view, the differences had to be managerial. Beta had some idea of things like JIT and other techniques but

senior management could not agree on what the real important differences were. They decided that a joint venture would help them learn from the Japanese. As a Beta manager commented, "Our feeling was that we might not get rich from the joint venture but at least we could learn a lot about Japanese management."

Beta initially saw great potential for learning from their joint venture partner. However, Beta's expectations about a learning experience revolved around clearly identifiable and visible activities. As General Motors discovered in its NUMMI venture, the most valuable learning experience was not associated with specific techniques but with a philosophy of doing business. According to the joint venture vice president, a Beta manager assigned to the venture:

Beta was somewhat naive in their learning expectations; they knew little about the overall Japanese way of doing things. Learning could occur only if there was a complete acceptance of the philosophy since all its parts were interconnected.

Vignette 3 - Learning Intent and Learning Outcome

In the early 1980s, the Chairman of Gamma Corp. (Gamma), decided that Gamma had to modernize. He was "high on Japanese technology" and went to Japan once or twice a year. However, he realized that upgrading the firm's manufacturing process would require massive injections of both capital and technology. Unfortunately, Gamma had neither the capital nor the technology. In 1983, Kawa Inc. (Kawa), a Hiroshima-based company, initiated discussions with Gamma about forming a joint venture in the United States. The joint venture was formed in January 1986, plant construction started in December 1987, and the joint venture began production in April, 1988.

Gamma had two main objectives in forming the joint venture. One objective was access to Japanese manufacturing technology and capital. Gamma was not in a position financially to establish the new plant themselves. A second and related objective was to establish a new vertically integrated plant to absorb excess parent capacity. The new plant, with its state-of-the-art technology, would give Gamma access to new customer markets. Kawa was interested in greater penetration in the U.S. market but was reluctant to enter with a wholly-owned company. Kawa also was interested in establishing a long-term relationship with an American company.

The joint venture was two-thirds owned by the Japanese partner. The manufacturing plant was built using Japanese equipment and process technology and Kawa became the sole guarantor for the joint venture's loans. All joint venture products were sold through Japanese trading companies. Gamma became the primary raw material supplier for the joint venture. Management was contributed by both partners. The Japanese management in the joint venture would be rotated back to the Japanese parent after a few years while the Gamma managers were assigned to the joint venture indefinitely.

Learning was not an explicit objective for Gamma in the formation of the joint venture. The primary motive was the acquisition of new technology and the expansion of Gamma's

product line. However, the joint venture resulted in a positive and unanticipated learning experience for Gamma. While Gamma management was content to let Kawa and the joint venture managers control the operational aspects of the venture, the joint venture purchased 75 percent of its raw material from Gamma. Thus, the joint venture was by necessity, very close to several aspects of Gamma's operation. The joint venture used Kawa quality control standards in its operation and put substantial pressure on Gamma to meet those exacting standards as a supplier. For Gamma, meeting the joint venture's standards required some fundamental changes in operating procedures and provided a firsthand view of the realities of supplying a Japanese company, something Gamma had not experienced prior to the joint venture formation.

Vignette 4 - Learning Intent and Learning Outcome

The American partner, Delta Corp. (Delta), initiated joint venture discussions with its Japanese partner, Kudo Ltd. (Kudo), to enter the growing JOEM market in North America. The partners had been involved in various other relationships for several years and Delta licensed a proprietary product to Kudo.

Originally, Delta sought 75 percent ownership in the joint venture. However, Kudo indicated that the potential JOEM customers would be uncomfortable if Kudo had only 25 percent, so the result was a 50-50 agreement. The joint venture was formed after a long series of negotiations and trips to Japan. Steve Johnson, the joint venture president, commented, "Kudo treated the discussions as if the relationship was forever even though clearly, few joint ventures are forever."

Delta contributed an existing facility and half of one division's business to the joint venture. The portion of the division retained by Delta was established in a new facility near the joint venture. This business was very profitable and included several patented products. The business contributed to the joint venture had a secure domestic auto-maker customer base but was only marginally profitable.

Kudo formed the joint venture because its customer base was moving to North America. Kudo was also interested in becoming a domestic Big 3 supplier but was reluctant to start a wholly-owned U.S. facility. According to Johnson, "Kudo was probably scared to death to come to the United States. This was their first U.S. operation." Despite the marginal profitability of the business contributed by Delta, Kudo was satisfied. The firm wanted access to the domestic automotive market and was reluctant to start a greenfield joint venture.

From Delta's perspective, the joint venture was designed to provide access to Japanese customers and manufacturing technology. Delta hoped to use that access as a base for improving the part of the business it retained. The joint venture would also provide Delta with stable access

to Japanese raw materials. Most U.S. companies in the same industry as Delta and the joint venture used Japanese steel because it was lower priced than U.S. steel and was considered higher quality. Since Japanese firms were given preference over U.S. firms as raw material customers, Delta saw a joint venture with a Japanese firm as a way of ensuring that its supply needs were met.

Delta's contributions to the joint venture included the existing plant facility and unionized workforce, a domestic customer base, and several managers. Kudo contributed the JOEM connection, manufacturing technology (three technical teams were sent from Japan before the joint venture started operation), some process equipment, and the raw material supplier relationship.

After the joint venture had been in operation for one and a half years, management in Delta and the joint venture became concerned that the transfer of Japanese management practices to the joint venture was not happening as quickly or successfully as both partners had anticipated. Delta had thought that Kudo would regularly send over kaizen teams to assist in the transfer of Japanese management practice. A few teams were sent (to Johnson's surprise, the first dealt strictly with plant cleanliness; the Japanese emphasized that a good product could not be produced without a clean plant) but then Kudo was unable to spare additional personnel. At that point, the senior Japanese manager in the joint venture said, "I need to be in charge if we are going to improve things." He assumed operational responsibility and Johnson shifted his focus to marketing and sales.

For Johnson, the potential learning opportunity became apparent following the joint venture's initial dealings with the transplant companies. Johnson explained:

Delta was considered a high quality domestic supplier and had a Q1 rating from Ford. However, in the joint venture we quickly discovered that to deal with the Japanese you have to be world class; we were only American class. We initially had problems meeting our Japanese customers' quality standards. With one Japanese customer, the American managers working

for the customer were so concerned with our quality that they wanted to cut us off. The Japanese managers in the customer were unwilling because of the relationship between Kudo and the Japanese customer's parent in Japan. We were able to improve things and now the quality is much better.

Unfortunately, Delta made little effort to capitalize on the knowledge in the joint venture:

Delta initially thought that access to Kudo's manufacturing technology would be very important and that they would learn a lot about Kudo's operation. However, the expectations were very general and were not in sharp focus. Once the joint venture relationship was formed and Delta had the opportunity to see Kudo's operation, they were subtly surprised by the simplicity of things. The key difference was improvement for improvement's sake and not sophisticated technology differences. The main differences were simple things like always paying your suppliers on time and shipping 7200 parts not 7201. . . . I was surprised by the simplicity of the differences between Kudo and Delta and so was the Delta CEO.

Vignette 5 - Joint Venture Openness

Epsilon Inc. (Epsilon), the American joint venture partner, and Saikin Corp. (Saikin), the Japanese partner, had a long history of prior relationships, including a manufacturing joint venture in Japan. In 1985, the two firms formed a North American joint venture 51 percent owned by Saikin. The original agreement was for a five year relationship. The joint venture began operating in 1986.

Epsilon's primary joint venture motive was access to a JOEM market that was growing and becoming more competitive in terms of increased quality demands. Without the joint venture, Epsilon felt that it risked exclusion from the JOEM market as a finished products tier one supplier. Without tier one access, Epsilon's JOEM business would have been restricted to supplying materials to other tier one suppliers.

When Honda opened its U.S. car plant in 1981, North American suppliers were used for various parts. However, Honda soon discovered that for many parts, North American suppliers could not meet quality demands. Since it was not feasible to ship all parts supplies from Japan, Honda began encouraging its suppliers to invest in North America. In 1984, Honda told Saikin that they must locate in North America or they would find another supplier. Saikin opted for a joint venture for several reasons:

1. Saikin wanted a secure raw materials supplier in North America; Epsilon could be that supplier.
2. Saikin preferred not to upset its relationship with Epsilon by setting up a wholly-owned U.S. facility. (Epsilon had five plants in North America making products similar to the joint venture product.)
3. Saikin was uncertain about operating in the United States and thought it would be best to share the business with a potential competitor instead of taking the risk of going it alone.

The joint venture plant's manufacturing process and equipment were based on Saikin's plants in Japan. Epsilon's initial contribution involved assistance in the construction of the plant,

managing the legal process, and selecting suppliers. Epsilon wanted to provide the plant manager but Saikin, exercising its majority ownership, would not allow it. Saikin preferred to go outside the partner organizations for a plant manager. The plant manager eventually hired did not have prior experience in Japan or with Japanese organizations but was familiar with the joint venture product, having worked in the same industry for 20 years with several union-free companies. The union-free aspect was an instrumental factor in this individual's selection as plant manager.

From the beginning, the joint venture was run like a Saikin subsidiary. Epsilon provided only one joint venture manager; this "Epsilon rep" was given a joint venture corporate position. Epsilon management soon became frustrated over the lack of joint venture control. They also became frustrated with their efforts to take advantage of the joint venture as a learning opportunity. Saikin explicitly tried to limit Epsilon's exposure to the joint venture operation. The joint venture plant manager commented:

This is a technologically sensitive business and I was told by my Japanese bosses to share very little information with the Epsilon rep. We also made sure that the rep was not located in the plant. The rep was physically located outside the plant in an office across the street from the plant.

Epsilon also became frustrated because the ROI was lower than expected. According to the joint venture plant manager, "Epsilon was not willing to sacrifice profits for the length of time necessary to make inroads in the JOEM markets." Frustration over the lack of joint venture control and unsatisfactory performance contributed to Epsilon's decision to terminate its involvement in the venture. After three years, Saikin bought out Epsilon's joint venture share. Nevertheless, the joint venture plant manager described the joint venture as a "tremendous learning experience for Epsilon." Specifically:

1. As the primary raw materials supplier to the joint venture, Epsilon had first hand experience with the problems their materials defect rates were causing the joint venture.
2. Although perhaps not to the extent anticipated, Epsilon managers could visit and get exposure to a state-of-the-art facility.

3. Epsilon gained an awareness of the competitive realities of supplying materials and finished product to the JOEMs.

Following the termination of the joint venture, Saikin established another plant and began to develop business with the domestic automakers. The Epsilon rep in the joint venture became a plant manager in an Epsilon manufacturing facility.

Vignette 6 - Strategic Importance (1)

Kappa Corp. (Kappa), had extensive international operations in Europe and South America. The company had sales of more than \$1 billion in 1990 and 10,500 employees. The automotive division had sales of more than \$650 million. Kappa's goal was to be a major automotive supplier worldwide. However, until the formation of a joint venture with the Japanese company, Jiten Ltd. (Jiten), Kappa had a very limited presence in, and knowledge of, the Japanese market.

Kappa initially saw a joint venture with Jiten as a means of getting access to the JOEM market. However, Kappa also viewed the joint venture from a long-term perspective and saw it as a first step towards greater internationalization of Kappa. For example, after forming the joint venture, Kappa and Jiten signed an agreement to cooperate in Europe as a JOEM supplier. Donald Smith, Kappa's vice president manufacturing, indicated that Kappa was willing to work with Jiten in other areas of the world and had made this clear to Jiten.

The joint venture, a 50-50 agreement, was to remain primarily a JOEM supplier. Smith acknowledged that although Jiten probably would like to see the joint venture develop some Big 3 work, "it probably would never happen." Smith was adamant that the joint venture would not be allowed to compete against Kappa. He commented, "I know the implications of having a joint venture competing against its parents and I don't not want to see it happen here." The joint venture agreement specified that the venture would not be allowed to compete directly against the American parent. The joint venture was, however, allowed to introduce new products into the North American market for both domestic and JOEM customers.

Initially, Jiten was concerned that an American partner would not have the necessary patience for a long-term relationship. Jiten thought that areas such as training would be sacrificed to get quick profitability. Smith assured them that "we know the joint venture is different and

we will look at the joint venture differently." Smith assigned top Kappa managers to the joint venture and made his commitment to the venture known to Jiten.

Initial pro-forma financial statements were prepared with the expectation that there would be at least three years of losses. The original total investment by both partners was \$14 million. The joint venture began operations in early 1988 and was profitable within 18 months. The startup was one of Kappa's best and according to Smith, "Jiten was amazed by the speed of the startup and its quick profitability." A major expansion took place in 1990 and joint venture sales of more than \$100 million were anticipated within a few years.

For Kappa, the joint venture was an important learning experience. The primary learning focus was in the area of production. Kappa made an effort to give all its senior manufacturing personnel access to the joint venture and to send them to Japan to observe Japanese management firsthand. The second learning area involved marketing to Japanese companies. Since the joint venture was formed, Kappa had developed new business with two JOEMs. Smith emphasized that the new business was for Kappa, not the joint venture and that without the knowledge gained from the joint venture, the new business could not have been developed.

Vignette 7 - Strategic Importance (2)

In 1984, the Japanese firm, Noro Inc. (Noro), was encouraged by its primary Japanese customer to establish a plant in North America. Noro had some experience with joint ventures and decided a joint venture would be the best strategy for a North American investment. Noro management made several trips to North America in search of a suitable partner.

Meanwhile, Sigma Ltd. (Sigma), an automotive supplier based in Detroit, had been scouting around Japan for potential joint venture partners and sales contracts. Sigma was currently involved in a small, low-tech job for Noro's main JOEM customer's North American division. Noro, aware that the JOEM was satisfied with its relationship with Sigma, contacted Sigma about the possibility of forming a joint venture. A joint venture agreement with Sigma holding a 60 percent interest was signed and the joint venture began operations in 1985. The joint venture was established initially to supply a single JOEM, Noro's main Japanese customer. The partners agreed that Noro would supply all the technical resources and Sigma would take care of the management.

After two years of operations, Sigma became very concerned that the joint venture was still losing money. According to the joint venture general manager, "Sigma wanted to make a quick buck; they were sceptical of making long-term investments. They saw the joint venture as a way to make some money and expected a profit in two years." Noro, however, had a very different perspective. "Noro expected the joint venture to lose money for about five or six years. Unfortunately, they never communicated this to Sigma and no explicit business plan was prepared."

Despite continuing to lose money, the joint venture was increasing its market share and attracted several new customers, including Ford and General Motors. When an expansion became necessary, Sigma declined to contribute any new capital. Thus, Noro financed the

expansion and increased its joint venture interest from 40 percent to 45 percent. After a second expansion a short time later, Noro's interest increased to 49 percent. Sigma, in the meantime

was going berserk because the joint venture was losing much more money than was anticipated. They were also concerned that Noro did not seem nearly as upset about the financial situation as they were. Sigma did not really understand Noro's expectations about the business.

In 1990, it became obvious that a major expansion would be necessary. Over the past four years, sales had increased from \$7 million to more than \$40 million. Plans were put in place to add another building that would double the size of the company from 300 to 600 employees. Sigma, however, was gradually withdrawing from the joint venture. With the latest expansion, Sigma's joint venture interest decreased to 30 percent and the general manager anticipated that soon the joint venture would be terminated. The general manager described Sigma's attitude toward the joint venture:

Sigma is in a different business than Noro. They are in the commodity business. Machines are run until they wear out. There is no capital reinvested. Noro is in a dynamic business in which capital must be reinvested to compete. There is always pressure to lower costs and to improve the product.

Because Sigma is in a different business than Noro, it's hard for them to understand the joint venture business. Sigma would have liked to get involved with the joint venture but they don't understand what the joint venture does. They got in over their heads financially. Even if they knew what they had to do to change, they could not afford to do it.

Vignette 8 - Strategic Integration

Omega Ltd. (Omega) was a large American automotive supplier with several product divisions. Omega was involved in a joint venture with Saito Corp. (Saito), a family-controlled Japanese company closely related to two of the largest JOEMs. The joint venture president, assigned to the venture by Omega, explained why the joint venture was formed:

The joint venture was formed because Omega wanted a greater international presence in an industry that was rapidly becoming more international in scope. Omega wanted to be a supplier with a window to the world; the joint venture helps give them that window. In fact, we feel that alliances are critical to an international strategy. Saito also recognized the need to internationalize; a first step was moving into the North American market.

The president maintained that while the joint venture was formed to supply JOEMs, access to the transplant market was only a short-term objective and one that succeeded in bringing the partner firms together. The longer term objective was to become a world leader in _____ technology and be the best manufacturing company in the joint venture's defined business segment. The president interpreted the objective to mean the best at supplying not only the transplants, but any other automotive OEMs. The president added, "A relationship with Saito will help Omega achieve that objective. Without a partner it would be difficult for Omega to become the best."

Early in the venture relationship, Omega management made an effort to be involved in the joint venture management. Omega's objective was to manage the joint venture like other Omega plants, from a long-term perspective and with the goal of becoming a top competitor in its market segments. A joint venture corporate office was established and physically located within Omega's head office. This facilitated an exchange of ideas between Omega and joint venture personnel and ensured that Omega was actively involved in joint venture management. Omega planned to rotate its joint venture managers back to the parent and explicitly focused on

the joint venture learning opportunity. Omega also intended to develop further cooperative relationships with Saito.

The joint venture president explained his and Omega's philosophy regarding the management of the joint venture:

The joint venture should not be viewed any differently than another corporate division or company [of Omega]. Standard business practice should be the norm. Even though it is a joint venture, it is still an organization with goals and objectives. The joint venture managers should focus on the objectives of the organization and not on the East\West differences.

Both partners should be involved in the management. Our joint venture partner does not want a hands-off approach in which the only interaction between the partners occurs at the twice-a-year board meetings. For a joint venture to be successful, upper management [of the partners] must take an interest in its performance.

In my opinion, a key criteria for joint venture success is the degree to which the joint venture is integrated with its parents and with its parent's upper management. The joint venture is a young organization; its essential that the parents provide the corporate culture. The joint venture is a child that needs a lot of care to survive.

Vignette 9 - Performance and Learning (1)

Joint venture discussions between Theta Ltd. (Theta), based in Cleveland, and Tokyo-based Miyuki Corp. (Miyuki) started in 1987. A joint venture was formed a year later and began operations in 1988. Neither partner was a clear initiator of the venture; both firms were interested in forming a joint venture to serve the North American JOEM market.

The joint venture was regarded as an important strategic opportunity by Theta senior management, both from market share and learning perspectives. The joint venture executive vice president (EVP) commented, "Theta, and especially the Chairman, saw the joint venture as a shining star and the wave of the future for Theta."

For Miyuki, the joint venture helped resolve some uncertainty about a U.S. operation. Miyuki had never operated outside Japan and had little international market experience. The EVP also thought that Miyuki was encouraged by their largest JOEM customer to form a joint venture, since the JOEM was anxious to increase domestic content in its North American-produced cars. Although Miyuki could have established a wholly-owned North American subsidiary and still contributed to the JOEM's domestic content, a joint venture with an American firm created domestic content that did not originate entirely with a Japanese company.

The joint venture agreement gave majority ownership to Theta (60 percent) and operating management control to Miyuki. Unfortunately, the first management team had to be replaced after a short period because it was obvious to both partners that serious problems had developed. The Japanese and American managers had largely stopped talking to each other and were making few joint decisions. Large financial losses and operating inefficiencies compounded the problem. The EVP (not part of the initial management team) explained:

The initial management teams were second rate. Theta selected a retired Theta plant manager as its senior joint venture representative and Miyuki did not send any good people. Both partners decided that the second time, they had to put in top people. The new management team improved communication between the partners and gave Theta access to more

information than with the old team. Unfortunately, the new information was mostly bad news.

The joint venture's financial situation became a major cause of concern to Theta management. When the joint venture started losing money and missing its business plans, "panic set in at Theta." Theta management began to question Miyuki about why the losses were occurring and how long before the joint venture would become profitable. Theta wanted to see a plan in place that would take the joint venture to profitability or at least breakeven. The EVP explained:

The discussions with Miyuki frustrated Theta because they believed that Miyuki was withholding information from them. Miyuki was unable to be specific about when the joint venture would become profitable. Miyuki was focused on different aspects of the business. Theta wanted to know about profit; Miyuki was more concerned with making the operation more efficient and satisfying their customer's needs.

Unfortunately, during the joint venture discussions, no specific profit margins were known or established prior to the formation of the joint venture. Consequently, what Theta thought they were going in with and the reality were two different things. There would never be a meeting of minds on profit. Theta's initial expectations about profit were not even close to being met.

Theta management felt that they were being forced to ask questions because of all the problems. Miyuki would not or could not provide any answers. And, Miyuki regarded the questions as a breach of trust and inappropriate in a working relationship based on trust. The two partners became alienated from each other. Theta began to think that everyone in the joint venture was nuts. They also began to question Miyuki's credibility and thought, "Are they [Miyuki] doing this to force us out of the joint venture?"

The EVP provided a perspective on why the two partners failed to agree on the joint venture objectives.

The Japanese look at everything from a longer term perspective. They saw that the joint venture would go through various stages, with profitability being several years away. The Americans wanted the profitability stage to occur much faster. This attitude upset the Japanese order because their view is if you can satisfy the customer and get costs under control, you will eventually make a profit. But, that profit probably would not be at the level expected by an American company.

Theta started doubting both its original motives for being in the joint venture and the capabilities of its Japanese partner. Meanwhile, financial performance showed no signs of improving. Despite forming the joint venture with an explicit learning objective, the joint venture's large losses lead Theta to believe that there was no expertise to be learned. The EVP described the learning situation:

Theta's emphasis on the profitability of the joint venture clouded their judgement. They just could not see past the startup period. The losses distorted the attitudes of Theta. Learning was never allowed to surface. Their attitude became, they [Miyuki] don't know anything so how can we learn from these people?

The EVP was convinced that even if the joint venture was in a breakeven position, Theta would have said, "Let's hope for the future." However, that did not seem likely in the foreseeable future so Theta decided to end the joint venture. They offered their share of the venture to Miyuki. Miyuki was somewhat surprised that Theta wanted to end the relationship since the joint venture had been in operation less than three years. However, Theta management had had enough and wanted out.

Miyuki agreed to purchase its joint venture partner's interest and operate the joint venture as a wholly-owned company. Subsequent to the joint venture termination, Miyuki went to its two largest JOEM customers and negotiated large price increases, which were, according to the EVP, "Much larger than you could ever get with a Big 3 company." Miyuki also brought over 12 engineers from Japan to help sort out operational problems. The EVP agreed to remain with the company for a year to manage the transition from joint venture to full ownership. From the EVP's perspective, "Miyuki will not let this company fail. It will be a good JOEM supplier, help the JOEMs get local content, but never make much money."

Vignette 10 - Performance and Learning (2)

Iota Limited (Iota) and Yakyu Inc. (Yakyu) had a relationship going back 25 years. The firms had various licensing agreements and an agreement not to compete against each other. Iota concentrated on its North American home market plus most of Europe while Yakyu focused on Japan and other Asian countries.

The president of Iota initiated the joint venture. He was close to Yakyu management and knew the firm wanted a North American operation. He also knew that Yakyu's primary JOEM customer wanted Yakyu to invest in North America. Prior to forming the joint venture, the JOEM shipped parts from Japan. However, because of the shipping costs and the JOEM's objective of increasing domestic content, the JOEM sought North American suppliers. The JOEM did not believe it could get satisfactory quality from a North American supplier and therefore, wanted to deal with Yakyu or another Japanese supplier. Because Yakyu and Iota had a non-competing agreement, Yakyu had little choice but to form a joint venture with Iota or lose the market to their Japanese competitors who had already formed a U.S. joint venture.

The joint venture, a 50-50 agreement, began operating in 1986 in a new plant. The joint venture president was also the president of Iota. The joint venture president selected an Iota manager to be the executive vice president (EVP) of the joint venture and the senior operating manager in the venture. According to the (EVP):

The presidency effectively gives Iota managerial control. But, Yakyu tries to influence me in the way I manage the joint venture. Our main customer is Yakyu's main customer in Japan so Yakyu wants to make sure that the joint venture does not screw up.

The EVP went on to describe the management style in the joint venture.

This is not a Japanese company, it is an American company that has adopted aspects of Japanese and American management. Originally, our objective was to run the plant like a Japanese company. There would be uniforms, an open-office concept, etc. That did not last long. The first team of Japanese was replaced entirely. The open office concept did not

work because there was not enough space and it was too disconcerting because there was no privacy.

The joint venture began operations strictly as a JOEM supplier but after three years, developed some business with two domestic automakers. The joint venture had large losses in its first four years of operation. From Iota's perspective, the major factor contributing to the losses was pricing with the primary JOEM customer. The American firm considered the price structure unreasonable and pressed Yakyu to make some changes. The EVP explained:

It took us about one year to convince the Japanese that they had to renegotiate prices with the JOEM. It involved some real battles but we knew we were doing a good job with the JOEM. Finally, we went to the JOEM and said enough is enough. We were able to settle on new price levels with genuine margins that are comfortable for us. We have taken over estimation from Yakyu and are now doing it in the joint venture. The bleeding has been stopped and soon the joint venture will be profitable. Iota is now satisfied with the joint venture performance and is willing to put some more money into the joint venture. Yakyu was never really concerned and was always willing to contribute additional capital. With them everything was always okay.

The EVP was convinced that the joint venture represented an excellent learning opportunity for Iota. He identified some key learning areas:

- 1) The importance of a complete customer orientation at all levels of the organization. Our JOEM customers have created that philosophy in the joint venture. As a result, the joint venture product is far superior to anything that Iota can produce.
- 2) The improvement in quality that is possible when the customer demands continual improvement and is willing to help the supplier achieve it. Iota talks about quality but in the joint venture, we do it.
- 3) Simple things like training the workforce before they operate machines and the importance of maintenance and cleanliness in the plant.
- 4) How to run a JIT plant. This is the only true JIT plant that Iota has. We makes four shipments a day to our major JOEM customer. They talk about a four hour window for shipment.
- 5) Information distribution in the joint venture. Everybody right down to the bottom of the organization gets more information [than in Iota]. They are given information on business plans, profit and loss, and other areas.

People may not understand it but they appreciate that they are being given the opportunity to get involved.

Initially, Iota management seemed reluctant to learn from the joint venture. The EVP indicated that parent managers were given an open invitation to visit and tour the joint venture operation. While there was some response, "There was apparently some resentment against Japanese companies in Iota."

However, as the joint venture performance improved and the domestic automotive industry experienced a downturn, Iota management began to express a greater interest in joint venture activities. The joint venture management wanted to expand the joint venture plant and were being supported by Iota. Iota, apparently willing to become more involved in the joint venture operation, asked the EVP to prepare some expansion plans. The EVP commented:

With the downturn in the auto industry, the joint venture is now starting to beat the other Iota plants. They are losing money and the joint venture is clearly superior in terms of quality and efficiency. Iota can no longer ignore the differences between the joint venture and the Iota plants.

Iota managers began to visit the joint venture and were slowly changing their minds about the joint venture. The plant manager for the largest Iota plant recently visited the joint venture. According to the EVP, "There is still some work to be done in terms of upper management's perception of the joint venture. But, the relationship between the joint venture and Iota is now a genuine partnership."

REFERENCES

- Aguilar, Francis J. 1967. *Scanning the business environment*. New York: MacMillan.
- Aldrich, Howard E. 1979. *Organizations and environments*. Englewood Cliffs, NJ: Prentice-Hall.
- Anderson, Erin. 1990. Two firms, one frontier: On assessing joint venture performance. *Sloan Management Review* 18 (Winter): 19-30.
- Anderson, James C. & James A. Narus. 1990. A model of distributor firm and manufacturer firm working partnerships. *Journal of Marketing* 54 (January): 42-58.
- Badaracco, Joseph L. 1991. *The knowledge link*. Boston: Harvard Business School Press.
- Balakrishnan, Srinivasan & Mitchell P. Koza. 1991. *Information asymmetry, adverse selection, and joint ventures*. Paper presented at the meeting of the Academy of Management, Miami.
- Barney, Jay. 1991. Firm resources and sustained competitive advantage. *Journal of Management* 17, no. 1: 99-120.
- Beamish, Paul W. 1988. *Multinational joint ventures in developing countries*. London: Routledge.
- _____. 1984. *Joint venture performance in developing countries*. Unpublished doctoral dissertation, University of Western Ontario.
- _____ & John C. Banks. 1987. Equity joint ventures and the theory of the multinational enterprise. *Journal of International Business Studies* (Summer): 1-16.
- Bedian, Arthur G. 1986. Contemporary challenges in the study of organizations. *Journal of Management* 12, no. 2: 185-202.
- Bettis, Richard A., Stephen P. Bradley, & Gary Hamel. 1992. Outsourcing and industrial decline. *Academy of Management Executive* 6, no. 1: 7-22.

- Beyer, Janice M. & Harrison M. Trice. 1982. The utilization process: A conceptual framework and synthesis of empirical literature. *Administrative Science Quarterly* 27: 591-622.
- Blau, Peter M. 1964. *Exchange and power in social life*. New York: Wiley.
- Bleeke, Joel & David Ernst. 1991. The way to win in cross-border alliances. *Harvard Business Review* 69 (November\December): 127-135.
- Boal, Kimberly B. & John M. Bryson. 1987. Representation, testing and policy implications of planning processes. *Strategic Management Journal* 8: 211-231.
- Borys, Bryan & David B. Jemison. 1989. Hybrid arrangements as strategic alliances: Theoretical issues in organizational combinations. *Academy of Management Review* 14, no. 1: 234-249.
- Bourgeois, L.J. 1985. Strategic goals, perceived uncertainty, and economic performance in volatile environments. *Academy of Management Journal* 28, no. 3: 548-574.
- _____ & Kathleen Eisenhardt. 1988. Strategic decision processes in high velocity environments. *Management Science*. 34: 816-835.
- Brewer, John & Albert Hunter. 1989. *Multimethod research: A synthesis of styles*. Newbury Park, CA: Sage Publications.
- Buckley, Peter J. & Mark Casson. 1988. A theory of cooperation in international business. In *Cooperative strategies in international business*, eds. Farok J. Contractor & Peter Lorange, 31-53. Toronto: Lexington Books.
- Burgelman, Robert A. 1988. Strategy making as a social learning process: The case of internal corporate venturing. *Interfaces* 18, May-June: 74-85.
- _____. 1983. Corporate entrepreneurship and strategic management: Insights from a process study. *Management Science* 29: 1349-1364.
- _____ & Richard S. Rosenbloom. 1989. Technology strategy: An evolutionary process perspective. In *Research on technological innovation, management, and policy, volume 4*, eds. Richard S. Rosenbloom & Robert A. Burgelman, 1-24. Greenwich, CT: JAI press.
- Calof, Jonathon L. 1991. *The internationalization process: An examination of mode change, mode choice, and performance*. Unpublished doctoral dissertation, University of Western Ontario.
- Calvet, A. L. 1981. A synthesis of foreign direct investment theories of the multinational firm. *Journal of International Business Studies* (Spring/Summer): 43-59.

- Chandler, Alfred D., Jr. 1962. *Strategy and structure: Chapters in the history of the industrial enterprise*. Cambridge, MA: MIT Press.
- Chowdhury, M. A. Jafor. 1989. *International joint ventures: Some interfirm- organization specific determinants of successes and failures—A factor analytic exploration*. Unpublished doctoral dissertation, Temple University.
- Churchill, Gilbert A. 1979. A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research* 16 (February): 64-73.
- Cohen, Michael D. & Lee S. Sproull. 1991. Editor's Introduction. *Organization Science* 2, no. 1.
- Cohen, Wesley M. & Daniel A. Levinthal. 1990. Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly* 35: 128-152.
- Collis, David J. 1991. A resource-based analysis of global competition: The case of the bearings industry. *Strategic Management Journal* 12 (special issue): 49-68.
- Conant, Jeffrey S., Michael P. Mokwa, & P. Rajan Varadarajan. 1990. Strategic types, distinctive marketing competencies, and organizational performance: A multiple measures-based study. *Strategic Management Journal* 11: 365-383.
- Contractor, Farok J. 1990. Contractual and cooperative forms of international business: Towards a unified theory of modal choice. *Management International Review* 30, no. 1: 31-54.
- _____ & Peter Lorange. 1988. Why should firms cooperate: The strategy and economics basis for cooperative ventures. In *Cooperative strategies in international business*, eds. Farok Contractor & Peter Lorange, 3-30. Toronto: Lexington Books.
- Cook, Thomas D. & Donald T. Campbell. 1979. *Quasi-experimentation: Design & analysis issues for field settings*. Boston: Houghton Mifflin.
- Cusamano, Michael & Akira Takeishi. 1991. Supplier relations and management: A survey of Japanese-transplant and U.S. auto plants. *Strategic Management Journal* 12: 563-588.
- Daft, Richard L. & George P. Huber. 1987. How organizations learn: A communications framework. In *Research in the sociology of organizations, volume 5*, eds. Samuel B. Bacharach & Nancy Ditomaso, 1-36. Greenwich, CT: JAI Press.
- _____ & Karl E. Weick. 1984. Towards a model of organizations as interpretation systems. *Academy of Management Review* 9, no. 2: 284-295.

- _____, Juhani Sormunen & Don Parks. 1988. Chief Executive scanning, environmental characteristics, and company performance: An empirical study. *Strategic Management Journal* 9: 123-139.
- Davies, Carole. 1990. Selling to the transplants. *Ward's Auto World* 26, no. 1: 62-63.
- De Geus, Arie P. 1988. Planning as learning. *Harvard Business Review* 66 (March\April): 70-74.
- Dimaggio, Paul J. & Walter W. Powell. 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review* 48: 147-160.
- Dodwell Marketing Consultants. 1990. *The structure of the Japanese auto parts industry*. Tokyo: Dodwell Marketing Consultants.
- Doz, Yves & C.K. Prahalad. 1991. Managing DMNCs: A search for a new paradigm. *Strategic Management Journal* 12 (special issue): 145-164.
- _____, & Gary Hamel. 1990. Control, change, and flexibility: The dilemma of transnational collaboration. In *Managing the global firm*, eds. Christopher A. Bartlett, Yves Doz, & Gunnar Hedlund, 117-143. London: Routledge.
- Duncan, Robert & Andrew Weiss. 1979. Organizational learning: Implications for organizational design. In *Research in organizational behavior*, ed. Barry Staw, 75-123. Greenwich, CT: JAI Press.
- Dwyer, F. Robert, Paul H. Schnurr, & Sejo Oh. 1987. Developing buyer-seller relationships. *Journal of Marketing* 51 (April): 11-27.
- Everitt, B.S. 1977. *The analysis of contingency tables*. London: Chapman & Hall. Referenced in Marija J. Norusis. *SPSS/PC+4.0 Base Manual*. Chicago: SPSS Inc., 1990.
- Fichman, Mark & Daniel A. Levinthal. 1991. Honeymoons and the liability of adolescence: A new perspective on duration dependence in social and organizational relationships. *Academy of Management Review* 16, no. 2: 442-468.
- Fiol, C. Marlene & Marjorie A. Lyles. 1985. Organizational learning. *Academy of Management Review* 10, no. 4: 803-813.
- Fornell, Claes, Peter Lorange, & Johan Roos. 1990. The cooperative venture formation process: A latent variable structural modeling approach. *Management Science*. 36, no. 10: 1246-1256.
- Gagne, Robert M. 1985. *The conditions of learning and theory of instruction*. New York: Holt, Rinehart and Winston.

- Galbraith, Jay R. & Robert K. Kazanjian. 1986. *Strategy implementation*. St. Paul, MN: West.
- Geringer, J. Michael. 1988. *Joint venture partner selection: Strategies for developed countries*. Westport, CT: Quorum.
- _____ & Louis Hebert. 1991. Measuring performance of international joint ventures. *Journal of International Business Studies* 22, No. 2: 253-267
- Ghemawat, Pankaj. 1991. *Commitment: The dynamic of strategy*. New York: Free Press.
- Ghoshal, Sumantra. 1987. Global strategy: An organizing framework. *Strategic Management Journal* 8: 425-440.
- _____ & Christopher A. Bartlett. 1988. Creation, adoption and diffusion of innovations by subsidiaries of multinational companies. *Journal of International Business Studies* (Fall): 365-388.
- Ginsberg, Ari. 1990. Connecting diversification to performance: A sociocognitive approach. *Academy of Management Review* 15, no. 3: 514-535.
- _____. 1988. Measuring and modelling changes in strategy: Theoretical foundations and empirical directions. *Strategic Management Journal* 9: 559-575.
- Glaser, Barney. 1978. *Theoretical sensitivity*. Mill Valley, CA: Sociology Press.
- Glick, William H., George P. Huber, C. Chet Miller, D. Harold Doty, & Kathleen M. Sutcliffe. 1990. Studying changes in organizational design and effectiveness: Retrospective event histories and periodic assessments. *Organization Science* 1, no. 3: 293-312.
- Goldenberg, Susan. 1988. *Hands across the ocean: Managing joint ventures with a spotlight on China and Japan*. Boston: Harvard Business School Press.
- Gomes-Casseres, Benjamin. 1989. Joint ventures in the face of global competition. *Sloan Management Review* 17 (Spring): 17-26.
- Grant, Robert M. 1991. The resource-based theory of competitive advantage: Implications for strategy formulation. *California Management Review* (Spring): 119-135.
- Greenwood, Royston, C. R. Hinings, & John Brown. 1990. "P²-form" strategic management: Corporate practices in professional partnerships. *Academy of Management Journal* 33, no. 4: 725-755.
- Grinyer, Peter & Peter McKiernan. 1990. Generating major change in stagnating companies. *Strategic Management Journal* 11: 131-146.

- Gupta, Anil K. 1987. SBU strategies, corporate-SBU relations, and SBU effectiveness in strategy implementation. *Academy of Management Journal* 30, no. 3: 477-500.
- Hage, Jerald. 1967. Reply to the critique of Tausky. *American Sociological Review* 32: 118-120. Quoted in Catherine Alter. An exploratory study of conflict and coordination in interorganizational delivery systems. *Academy of Management Journal* 33, no. 3: 478-502, 1990.
- Hakansson, Hakon & Bjorn Wootz. 1979. A framework of industrial buying and selling. *Industrial Marketing Management* 8: 28-39.
- Hall, Richard H., John P. Clark, Peggy C. Giordano, Paul V. Johnson, & Martha Van Roekel. 1977. Patterns of interorganizational relationships. *Administrative Science Quarterly* 27: 457-474.
- Hallen, Lars, Jan Johansen, & Nazeem Seyed-Mohamed. 1991. Interfirm adaptation in business relationships. *Journal of Marketing*, 55 (April): 29-37.
- Hamel, Gary. 1991. Competition for competence and inter-partner learning within international strategic alliances. *Strategic Management Journal* 12 (special issue): 83-104.
- _____. 1990. Competitive collaboration: Learning, Power and Dependence in international strategic alliances. Unpublished doctoral dissertation, University of Michigan.
- _____ & C.K. Prahalad. 1989. Strategic intent. *Harvard Business Review* 67 (May/June): 63-76.
- _____, Yves L. Doz, & C.K. Prahalad. 1989. Collaborate with your competitors-- and win. *Harvard Business Review* 67 (January/February): 133-139.
- Harrigan, Kathryn Rudie. 1988. Strategic alliances and partner asymmetries. *Management International Review*. 28 (Special Issue): 53-72.
- _____. 1986. *Managing for joint venture success*. Lexington, MA: Lexington Books.
- _____. 1985. *Strategies for joint ventures*. Lexington, MA: Lexington Books.
- _____ & William H. Newman. 1990. Bases of interorganizational co-operation: Propensity, power, persistence. *Journal of Management Studies* 27, no. 4: 417-434.
- Hedberg, Bo. 1981. How organizations learn and unlearn. In *Handbook of organizational design*, eds. Paul. C. Nystrom & William H. Starbuck, 8-27. London: Oxford University Press.
- Henkoff, Ronald. 1989. What Motorola learns from Japan. *Fortune*, April 24: 157-168.

- Hennart, Jean-Francois. 1991. The transactions cost theory of joint ventures: An empirical study of Japanese subsidiaries in the United States. *Management Science* 37, no. 4: 483-497.
- _____. 1988. A transactions costs theory of equity joint ventures. *Strategic Management Journal* 9: 361-374.
- Hofer, Charles W. & Dan Schendel. 1986. *Strategy formulation: Analytic concepts*. St. Paul, MN: West.
- Hoffman, Kurt & Raphael Kaplinsky. 1988. *Driving force: The global restructuring of technology, labour, and investment in the automobile and components industries*. London: Westview Press.
- Huber, George P. 1991. Organizational learning: The contributing processes and a review of the literatures. *Organization Science* 2, no. 1: 88-117.
- _____. & Daniel J. Power. 1985. Retrospective reports of strategic-level managers: Guidelines for increasing their accuracy. *Strategic Management Journal* 6: 171-180.
- Jacobson, Gary & John Hillkirk. 1986. *Xerox: American samurai*. New York: MacMillan.
- Jarillo, J. Carlos. 1988. On strategic networks. *Strategic Management Journal* 9: 31-41.
- Jelinek, Marian. 1979. *Institutionalizing innovations: A study of organizational learning systems*. New York: Praeger.
- Johanson, Jan & Lars-Gunnar Mattsson. 1987. Interorganizational relations in industrial systems: A network approach compared with the transaction-cost approach. *International Studies of Management and Organizations* 17, no. 1: 24-48.
- John, George & Torger Reve. 1982. The reliability and validity of key informant data from dyadic relationships in marketing channels. *Journal of Marketing Research* 19 (January): 517-524.
- Kanter, Rosabeth Moss. 1989. *When giants learn to dance*. New York: Simon and Schuster.
- Keller, Maryann. 1989. *Rude awakening: The rise, fall, and struggle for recovery of General Motors*. New York: William Morrow.
- Kester, W. Carl. 1991. *Japanese takeovers: The global contest for corporate control*. Boston: Harvard Business School Press.
- _____. 1991a. *Governance, contracting, and investment time horizons*. Paper presented at the conference Time Horizons of American Management, Harvard Business School.

- Killing, J. Peter. 1988. Understanding alliances: The role of task and organizational complexity. In *Cooperative strategies in international business*, eds. Farok Contractor & Peter Lorange, 55-68. Toronto: Lexington Books.
- _____. 1983. *Strategies for joint venture success*. New York: Praeger.
- Kogut, Bruce. 1991. Joint ventures and the option to expand and acquire. *Management Science* 37, no. 1: 19-33.
- _____. 1988. Joint ventures: Theoretical and empirical perspectives. *Strategic Management Journal* 9: 319-322.
- Koh, Jeongsuk & N. Venkatraman. 1991. Joint venture formations and stock market reactions: An assessment in the information technology sector. *Academy of Management Journal* 34, no. 4: 869-892.
- Lawrence, Paul & Jay Lorsch. 1967. *Organization and environment: Managing differentiation and environment*. Boston: Division of Research, Harvard Business School.
- Lee, Allen S. 1991. Integrating positivist and interpretive approaches to organizational research. *Organization Science* 4: 342-365.
- Lee, Denis M.S. & Thomas J. Allen. 1982. Integrating new technical staff: Implications for acquiring new technology. *Management Science* 28: 1405-1420.
- Lenz, R. T. & Jack L. Engledow. 1986. Environmental analysis: The applicability of current theory. *Strategic Management Journal* 7: 329-346.
- Levinthal, Daniel A. 1991. Organizational adaptation and environmental selection-- Interrelated processes of change. *Organization Science* 2, no. 1: 140-145.
- Levitt, Barbara & James G. March. 1988. Organizational learning. *Annual Review of Sociology* 14: 319-340.
- Lewis, Jordan D. 1990. *Partnerships for profit: Structuring and managing strategic alliances*. New York: Free Press.
- Lyles, Marjorie A. 1988. Learning among joint venture-sophisticated firms. In *Cooperative strategies in international business*, eds. Farok Contractor & Peter Lorange, 301-316. Toronto: Lexington Books.
- March, James G., Lee S. Sproull, & Michal Tamaz. 1991. Learning from samples of one or fewer. *Organization Science* 2, no. 1: 1-13.

- Marrett, Cora Bagley. 1971. On the specification of interorganizational dimensions. *Sociology and Social Research* 56 (October): 83-99.
- Marshall, Catherine & Gretchen B. Rossman. 1989. *Designing qualitative research*. Newbury Park, CA: Sage.
- Merton, Robert K., Marjorie Fiske, & Patricia L. Kendall. 1956. *The focused interview*. New York: Free Press.
- Meyer, Alan D. 1982. Adapting to environmental jolts. *Administrative Science Quarterly* 27: 515-537.
- _____, Geoffrey R. Brooks, & James B. Goes. 1990. Environmental jolts and industry revolutions: Organizational responses to discontinuous change. *Strategic Management Journal* 11: 93-110.
- Miles, Matthew B. & A. Michael Huberman. 1984. *Qualitative data analysis: A sourcebook of new methods*. Newbury Park, CA: Sage.
- Miles, Raymond E., & Charles C. Snow. 1978. *Organizational strategy, structure and process*. New York: McGraw Hill.
- Miller, Edward K. & Drew Winter. 1991. The 'other big 3' are becoming all-American. *Ward's Auto World* 27, no. 2: 24-51.
- Milliken, Frances J. 1990. Perceiving and interpreting environmental change: An examination of college administrators' interpretation of changing demographics. *Academy of Management Journal* 33, no. 1: 42-63.
- Mintzberg, Henry. 1990. Strategy formation: Schools of thought. In *Perspectives of strategic management*, ed. James Frederickson, 105-235. New York: Harper Business.
- _____. 1979. An emerging strategy of direct research. *Administrative Science Quarterly* 24: 582-589.
- Nelson, Richard R. 1991. Why do firms differ, and how does it matter? *Strategic Management Journal* 12 (Special Issue Winter): 61-74.
- _____. & Sidney G. Winter. 1982. *An evolutionary theory of economic change*. Cambridge, MA: Harvard University Press.
- Oliver, Christine. 1990. Determinants of interorganizational relationships: Integration and future directions. *Academy of Management Review* 15, no. 2: 241-265.

- Osborn, Richard N. & C. Christopher Baughn. 1990. Forms of interorganizational governance for multinational alliances. *Academy of Management Journal* 33, no. 3: 503-519.
- Patton, Michael Quinn. 1987. *How to use qualitative methods in evaluation*. Newbury Park, CA: Sage.
- Penrose, Edith. 1968. *The theory of the growth of the firm*. Oxford: Basil Blackwell.
- Pfeffer, Jeffrey & Gerald R. Salancik. 1978. *The external control of organizations: A resource dependence perspective*. New York: Harper & Row.
- Pinder, Craig C. & Larry F. Moore. 1980. The inevitability of multiple paradigms and the resultant need for middle-range analysis in organizational theory. In *Middle range theory and the study of organizations*, eds. Craig C. Pinder & Larry F. Moore, 87-100. Boston: Martinus Nijhof.
- Porter, Michael E. 1991. Towards a dynamic theory of strategy. *Strategic Management Journal* 12 (Special Issue Winter): 95-117.
- _____. 1985. *Competitive advantage*. New York: Free Press.
- _____ & Mark B. Fuller. 1986. Coalitions and global strategy. In *Competition in global industries*, ed. Michael E. Porter, 315-343. Boston: Harvard Business School Press.
- Powell, Walter W. 1987. Hybrid organizational arrangements. *California Management Review*. 30, no. 1: 67-87.
- Prahalad, C. K. & Richard A. Bettis. 1986. The dominant logic: A new linkage between diversity and performance. *Strategic Management Journal* 7: 485-501.
- _____ & Gary Hamel. 1990. The core competence of the corporation. *Harvard Business Review* 68 (May/June): 79-91.
- Pucik, Vladimir. 1991. Technology transfer in strategic alliances: Competitive collaboration and organizational learning. In *Technology transfer in international business*, eds. Tamir Agmon & Mary Ann Von Glinow, 121-138. New York: Oxford University Press.
- Quinn, James Brian. 1980. *Strategies for change: Logical incrementalism*. New York: Irwin.
- Reed, Richard & Robert J. DeFillippi. 1990. Causal ambiguity, barriers to imitation, and sustainable competitive advantage. *Academy of Management Review* 15, no. 1: 88-102.

- Reich, Robert B. & Eric D. Mankin. 1986. Joint ventures with Japan give away our future. *Harvard Business Review* 64 (March\April): 78-86.
- Robins, James A. 1987. Organizational economics: Notes on the use of transaction-cost theory in the study of organizations. *Administrative Science Quarterly* 32: 68-86.
- Rumelt, Richard P., Dan Schendel, & David J. Teece. 1991. Strategic management and economics. *Strategic Management Journal* 12 (Special Issue Winter): 5-29.
- Schatzman, Leonard & Anselm Strauss. 1973. *Field research: Strategies for a natural sociology*. Englewood Cliffs, NJ: Prentice-Hall.
- Schmidt, Stuart M. & Thomas A. Kochan. 1977. Interorganizational relationships: Patterns and motivations. *Administrative Science Quarterly* 22: 220-234.
- Shan, Weijian. 1990. An empirical analysis of organizational strategies by entrepreneurial high-technology firms. *Strategic Management Journal* 11: 129-139.
- _____ & William Hamilton. 1991. Country-Specific advantages and international competition. *Strategic Management Journal* 12: 419-412.
- Shortell, Stephan M. & Edward J. Zajac. 1988. Internal corporate joint ventures: Development processes and performance outcomes. *Strategic Management Journal* 9: 527-542.
- Shrivastava, Paul. 1986. Learning structures for top management. *Human Systems Management* 6: 35-44.
- _____ & Susan Schneider. 1986. Organizational frames of reference. *Human Relations* 37, no. 10: 795-809.
- Simons, Robert. 1991. Strategic orientation and top management attention to control systems. *Strategic Management Journal* 12: 49-62.
- Smith, David C. 1989. Whatever happened to teamwork? *Ward's Auto World* 25, no. 7: 3-44.
- Smith, Ken G. & Curtis M. Grimm. 1987. Environmental variation, strategic change and firm performance. *Strategic Management Journal* 8: 363-376.
- Snow, Charles C. & Lawrence Hrebiniak. 1980. Strategy, distinctive competence, and organizational performance. *Administrative Science Quarterly* 2: 317-336.
- Stata, Ray. 1989. Organizational learning: The key to management innovation. *Sloan Management Review* 17 (Spring): 63-74.

- Stinson, Marian. 1991. Stelco galvanizes a new order. *The Globe and Mail Report on Business*, June 3: 1-2.
- Sullivan, Jeremiah & Richard B. Peterson. 1982. Factors associated with trust in Japanese-American joint ventures. *Management International Review* 22, no. 2: 30-40.
- Teece, David. 1984. Economic analysis and strategic management. *California Management Review* 26, no. 3: 87-110.
- _____. 1982. Towards an economic theory of the multiproduct firm. *Journal of Economic Behavior and Organization* 3, no. 1: 39-64.
- Thompson, James D. 1967. *Organizations in action*. New York: McGraw Hill.
- Toyne, Brian. 1989. International exchange: A foundation for theory building in international business. *Journal of International Business Studies* (Spring): 1-18.
- Tsoukas, Hardimos. 1989. The validity of idiographic research explanations. *Academy of Management Review* 14, no. 4: 551-561.
- Tushman, Michael. 1977. Special roles in the innovation process. *Administrative Science Quarterly* 22: 587-605.
- _____ & Elaine Romanelli. 1985. Organizational evolution: A metamorphosis model of convergence and reorientation. In *Research in organizational behavior, volume 7*, eds. L. L. Cummings & Barry M. Staw, 171-222. Greenwich, CT: JAI Press.
- _____ & Thomas J. Scanlon. 1981. Boundary-scanning individuals: Their role in information transfer and their antecedents. *Academy of Management Journal* 24, no. 2: 289-305.
- Van de Ven, Andrew H. 1976. On the nature, formation, and maintenance of relations among organizations. *Academy of Management Review* 1, no. 4: 24-36.
- _____ & George P. Huber. 1990. Longitudinal field research methods for studying processes of organizational change. *Organization Science* 1, no. 3: 213- 219.
- Vogel, Todd. 1990. Can UPS deliver the goods in a new world? *Business Week*, June 4: 80-82.
- Weick, Karl E. 1979. *The social psychology of organizing*. New York: Random House.
- Weiss, Stephan E. 1987. Creating the GM-Toyota joint venture: A case in complex negotiation. *Columbia Journal of World Business* 22, no. 2: 23-38.

- Westney, D. Eleanor. 1988. Domestic and foreign learning curves in managing international cooperative strategies. In *Cooperative strategies in international business*, eds. Farok Contractor & Peter Lorange, 339-346. Toronto: Lexington Books.
- Whetten, David A. 1987. Interorganizational relations. In *Handbook of organizational behavior*, ed. Jay W. Lorsch, 172-189. Englewood Cliffs, NJ: Prentice-Hall.
- _____. 1982. Issues in conducting research. In *Interorganization coordination: Theory, research, and implementation*, eds. David L. Rogers, David A. Whetton & Associates, 97-121. Ames, IA: Iowa State University Press.
- Williamson, Oliver E. 1981. The Economics of organization: The transaction cost approach. *American Journal of Sociology* 87, no. 3: 548-577.
- _____. 1975. *Markets and hierarchies: Analysis and antitrust implications*. New York: Free Press.
- Winter, Sidney G. 1990. Survival, selection, and inheritance in evolutionary theories of organization. In *Organizational evolution: New directions*, ed. Jitendra Singh, 269-297. Newbury Park, CA.: Sage.
- _____. 1987. Knowledge and competence as strategic assets. In *The competitive challenge: Strategies for industrial innovation and renewal*, ed. David J. Teece, 159-184. Cambridge, MA.: Ballinger.
- _____. 1986. The research program of the behavioral theory of the firm: Orthodox critique and evolutionary perspective. In *Handbook of behavioral economics 1*, ed. Benjamin Gilad & Stanley Kaish, 151-187. Greenwich, CT: JAI Press.
- Womack, James P. 1988. Multinational joint ventures in motor vehicles. In *International collaborative ventures in U.S. manufacturing*, ed. David C. Mowery, 301-348. Cambridge, MA: Ballinger.
- _____, Daniel T. Jones, & Daniel Roos. 1990. *The machine that changed the world*. New York: Rawson Associates.
- Wright, Lorna L, Henry W. Lane, & Paul W. Beamish. 1988. International management research: Lessons from the field. *International Studies of Management and Organization* 18, no. 3: 55-71.
- Yin, Robert. 1984. *Case study research*. Beverly Hills, CA: Sage Publications.
- Zajac, Edward J. & Stephan M. Shortell. 1989. Changing generic strategies: Likelihood, direction, and performance implications. *Strategic Management Journal* 10: 413-430.
- Zand, Dale E. 1972. Trust and managerial problem solving. *Administrative Science Quarterly* 17: 229-239.