THE EFFECT OF
STRATEGIC ORIENTATION AND ADAPTABILITY
ON
ORGANIZATIONAL BEHAVIORS AND PERFORMANCE:

The Case of
Electronic Commerce in the Hosiery Industry

R. Barth Strempek

Dissertation submitted to the Faculty of the
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree of

Doctor of Philosophy
in
Management

Larry D. Alexander, Chairman
James R. Lang
Carroll U. Stephens
Donald E. Hatfield
James O. Hicks, Jr.

June 10, 1997
Blacksburg, Virginia

Key Words: Strategy, Adaptability, Electronic Commerce, Implementation
THE EFFECT OF STRATEGIC ORIENTATION AND ADAPTABILITY ON ORGANIZATIONAL BEHAVIORS AND PERFORMANCE:

The Case of Electronic Commerce in the Hosiery Industry

R. Barth Strempek

(ABSTRACT)

Research into the interrelationship between firm strategy and firm performance is fairly common. Not as common is the examination of firm behaviors as an intermediate construct between strategy and performance. Additionally, the construct of adaptability, found in previous research to be highly correlated with performance, has been inadequately examined as an important macro-level construct. This study develops a theoretical model of the interrelationships among these variables and individually tests each of the links in that model with data drawn from the hosiery industry and its experience with the adoption of Electronic Commerce.

The use of the Strategic Orientation of Business Enterprises (STROBE) construct (Venkatraman, 1989a) and a rigorous development of an adaptability index are important components of this research. The STROBE construct has been used only twice before for comparative analysis of firm characteristics. Specification of adaptability has been inconsistent and non-rigorous in past research.

Specifically, the study model hypothesizes relationships between (1) strategic orientation and adaptability, (2) strategic orientation and firm performance, (3) adaptability and firm performance, (4) strategic orientation, adaptability and the adoption of Electronic Commerce, and (5) the adoption of Electronic Commerce and performance. To assess the model a field study of executives and managers from twenty-one firms in the sock segment of the hosiery industry was conducted.

Results of the study point to several important conclusions. STROBE appears to be a useful strategic construct with which to compare firms in an industry and to identify valid strategic groups. Adaptability was found to be insignificantly correlated with any individual STROBE dimension and a potentially useful managerial variable. Additionally, as in past research, adaptability is correlated with general measures of firm performance. Although the adoption of
Electronic Commerce appears to be related to specific indicators of firm performance, the interrelationship among strategic orientation, adaptability, and the adoption of Electronic Commerce yielded ambiguous results. Further research is indicated to more clearly sort out these complex relationships.
ACKNOWLEDGMENTS

The mid-career transition from an executive to an academic life has been both challenging and enlightening. Many individuals have provided encouragement and support in this effort. I am grateful for their help and support over the last few years and would like to acknowledge their contributions here.

First, I would like to thank my parents, Walter and Viola Strempek, for their constant and continuing love and support. Their encouragement and guidance have been instrumental in my ability to sustain the effort required to complete my career transition.

Thank you to my committee; Jim Lang, Carroll Stephens, Don Hatfield, Jim Hicks, and especially my chairman, Larry Alexander, for their guidance and assistance. The experience of working with these fine professionals has been one of the highlights of my academic career. Somehow, this group even helped make my oral comprehensive exams an enjoyable experience.

Special thanks to Larry Alexander, whose friendship and guidance has made the Ph.D. experience a rewarding and valuable one for me. Larry’s dedication to his students is truly exemplary and I, for one, am very thankful that he goes beyond the call of duty when it comes to taking care of students’ needs.

I would like to express my deepest thanks and friendship to Bob Guffey who was instrumental in this difficult transition from executive to academic life. It helped immensely to have a close role model who had paved the way before me. I would like to thank Bob and his wife, Joyce, for their unwavering friendship and support.

Many people provided important input during certain parts of this process. Those people include my colleagues at Elon College; John Burbridge, Smith Jackson, Kevin O’Mara, Ken Paul, George Taylor, Tom Tiemann, Linda Weavil; and my friends and classmates at Virginia Tech; Maureen Bezold, Bill DeMoranville, Bob D’Intino, Will Lamb, and Neill Kipp.

Also, thanks to the following individuals who provided support and encouragement during the evolutionary process of designing and implementing this study: Jeff LeRose (President, Research Triangle Consultants); Sid Smith (President, National Association of Hosiery Manufacturers); John Maynard (Vice President, Tower Mills). I especially want to thank the Piedmont EDI Business Forum who provided funding for this research.

Finally, I wish to thank those companies and individuals who participated in this research. Many people were very generous with their time and support. Needless to say, without their help this research would not have been possible.
# TABLE OF CONTENTS

## CHAPTER 1: INTRODUCTION

- Study Objectives and Research Questions ................................................................. 4
- Study Significance ........................................................................................................ 4
- Study Overview ............................................................................................................ 5

## CHAPTER 2: LITERATURE REVIEW

- Selection of Strategy Concept .................................................................................. 7
- Adaptability ................................................................................................................ 8
- Performance Evidence .............................................................................................. 10
  - Strategy and Performance ...................................................................................... 10
  - Adaptability and Performance .............................................................................. 12
- Strategy and Adaptability ......................................................................................... 14
  - The Strategic Choice Lense ................................................................................. 14
  - Organizational Culture Lense .............................................................................. 15
  - Organizational Inertia Lense ................................................................................ 16
  - Organizational Learning Lense ............................................................................ 16
  - A Multi-Perspective Approach to Adaptability ...................................................... 17
- Organizational Behaviors: Strategic Implications/Actions ........................................ 19
- The Influence of Context ......................................................................................... 21
- A Strategy-Adaptability-Behavior-Performance Model ........................................... 23

## CHAPTER 3: RESEARCH METHODS

- Research Setting and Sample .................................................................................. 26
- Data Collection Methods ......................................................................................... 28
- Variables ................................................................................................................... 28
- Analytical Methods ................................................................................................. 35
CHAPTER 5: DISCUSSION ......................................................................................... 72

Significance of Results .......................................................................................... 72
The Nature of Strategic Orientation in the Hosiery Industry ............................... 72
The Nature of Adaptability .................................................................................... 73
Behavioral Relationships ...................................................................................... 75
Interrelationship with Performance ...................................................................... 76
The Hosiery Industry Story - Final Words .......................................................... 77
Limitations of the Research .................................................................................. 77
Implications for Practitioners .............................................................................. 78
Directions for Future Research ........................................................................... 78

BIBLIOGRAPHY ...................................................................................................... 80

APPENDICES .......................................................................................................... 90

Appendix A - Definitions and Measurements of Adaptability .............................. 90
Appendix B - Survey of the Hosiery Industry: The Adoption and Use of Electronic Commerce (Senior Executives) ................................................................. 94
Appendix C - Survey of the Hosiery Industry: The Adoption and Use of Electronic Commerce (MIS Executives) ............................................................. 100
Appendix D - Survey of the Hosiery Industry: The Adoption and Use of Electronic Commerce (Sales/Marketing Executives) ...................................................... 108

PROFILE .................................................................................................................. 113
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>Strategy-Adaptability-Behavior Model</td>
<td>2</td>
</tr>
<tr>
<td>Figure 2</td>
<td>General Strategy-Adaptability-Behavior Model (fgr2.pdf)</td>
<td>23</td>
</tr>
<tr>
<td>Figure 3</td>
<td>Specific Strategy-Adaptability-Behavior-Performance Model (fgr3.pdf)</td>
<td>24</td>
</tr>
<tr>
<td>Figure 4</td>
<td>STROBE Dimensions (fgr4.pdf)</td>
<td>29</td>
</tr>
<tr>
<td>Figure 5</td>
<td>Study Hypotheses</td>
<td>38</td>
</tr>
<tr>
<td>Figure 6</td>
<td>Study Hypotheses - Summary of Results</td>
<td>68</td>
</tr>
<tr>
<td>Figure 7</td>
<td>Research Questions - Summary of Results</td>
<td>71</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 1  Comparison of Strategy Approaches (tbl1.pdf) ......................................................... 8
Table 2  Elements of Culture Related to Performance (tbl2.pdf) ............................................... 12
Table 3  Levels of Culture (tbl3.pdf) .................................................................................... 16
Table 4  Summary of Strategy Implementation Models (tbl4.pdf) .......................................... 20
Table 5  Strategic Orientation Factor Analysis (tbl5.pdf) ....................................................... 47
Table 6  Comparison of STROBE Dimensions Found in Three Studies (tbl6.pdf) ............... 49
Table 7A  Adaptability Factor Analysis - Individual Level (tbl7a.pdf) .................................. 50
Table 7B  Adaptability Factor Analysis - Firm Level (tbl7b.pdf) ........................................... 50
Table 8  Behavior Variables and Indicators (tbl8.pdf) .......................................................... 53
Table 9  Relationship with Performance: Bivariate Correlations (tbl9.pdf) ....................... 54
Table 10 Strategic Orientation: Cluster Analysis ................................................................. 55
Table 11 Performance Implications: Cluster Profiles (tbl11.pdf) ....................................... 57
Table 12 Strategic Clusters and Adaptability: Profile Analysis ........................................... 59
Table 13 Strategic Orientation and Behaviors: Bivariate Correlations ............................... 62
Table 14 Strategic Orientation and Behaviors: Cluster Analysis – Profiles ......................... 63