

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

An Exploratory Study of the Strategic Marketing Practices of
ICT Firms in India

A thesis presented in partial fulfilment of the requirements for the Degree of

Doctor of Philosophy
in
Marketing

Massey University, Wellington,
New Zealand

Thelma Pauline Moses
2015

ABSTRACT

India is one of the fastest growing economies in the world. Even though the economic growth rate is attributed to tremendous progress across all industries, the information and communication sector (ICT) in particular holds significant promise. The rapid developments in this sector coupled with the country's efforts to capitalise on the ICT revolution have propelled India into the global arena as a leader in this sector.

Marketing is a crucial element for the success of all high technology firms, including ICT firms. Given the importance of ICT firms to the Indian economy and the importance of marketing for the success of these firms, there is a need to examine the marketing practices adopted by these firms and their influence on firm performance. In view of the limited research in this area, this study aims to address the gap in literature and intends to enhance the understanding of the marketing practices of the ICT firms in India.

This research seeks to answer the question: how do the marketing practices adopted by the ICT firms in India contribute to firm performance? In order to answer this question, a conceptual framework was developed based on extant review of related literature. An integrated approach was employed to develop this framework in which the marketing management perspective, relationship marketing perspective and social media were integrated. Data was collected through Web survey using structured questionnaires from the marketing decision makers in these ICT firms. Then the data was analysed using a range of statistical methods.

The analysis revealed a wide variety of marketing practices that are adopted by the ICT firms in India. Empirical evidence supports the emergence of social media as a new construct and the use of social media for marketing purposes. Social media has been embraced by the ICT firms in India as it is intertwined with relationship marketing and market research practices thereby supporting the marketing activities of these ICT firms. The results also brought to light unique product practices that appear to be exclusive to these firms.

An examination of the influence of the identified marketing practices on customer satisfaction and firm performance yielded significant results. Relationship marketing practices, product practices positioning practices and promotional practices significantly

influences firm performance; Relationship marketing practices, product practices positioning practices, targeting practices, social media practices and pricing practices have significant influence on customer satisfaction in the ICT firms in India. It is also evident that relationship marketing practices, product practices, targeting practices and social media practices have an indirect effect on firm performance through customer satisfaction in these firms.

The findings of this study contribute to theoretical and practical knowledge in the field of marketing in the ICT sector in India. The research is significant in that it identifies and documents industry-specific marketing practices that influence firm performance. It makes a contribution to the existing social media literature by enhancing the understanding of the use of social media by the ICT firms and clarifies the role of social media in relationship marketing and market research. The research also provides a framework that can guide an examination of the marketing practices of ICT firms in the context of other economies in the world.

ACKNOWLEDGEMENTS

I thank my beloved husband Moses and my two wonderful children, Cheryl and Johann for their consistent support and encouragement. You are a joy to me and I cherish every moment I live with you. Thank you, Moses for helping me with my work. I also thank my parents, my mother-in-law, my extended family and all of my friends for their prayerful support.

I would like to express my gratitude to my supervisors, Dr Raja Peter and Dr Barbara Crump for their excellent guidance, enthusiasm and prolonged patience. I offer my sincere appreciation for their dedicated involvement throughout the process and for all the help they provided during these years.

Above all, I thank my Lord and Saviour Jesus Christ. His grace was sufficient for me; His love sustained me; His favour surrounded me; His goodness and mercy over took me; His strength was made perfect in my weakness. To HIM be all the glory and honour.

TABLE OF CONTENTS

ABSTRACT	I
ACKNOWLEDGEMENTS	III
LIST OF TABLES	IX
LIST OF FIGURES	XI
CHAPTER ONE: INTRODUCTION TO THE STUDY	1
Background to the Research Study	2
ICT Sector Overview	2
ICT Sector in India	5
Marketing Scenario in India.....	8
High Technology Marketing.....	10
Marketing of high technology is different.	12
Different marketing environment requires different marketing strategies.	14
Importance of marketing to high technology firms.	14
Need for the study of marketing practices of ICT firms.	15
Research Question and Objectives	17
Significance of the Study	18
Organisation of the Dissertation	18
CHAPTER TWO: LITERATURE REVIEW	20
Theoretical Background	21
Historical Developments in Marketing	21
Neoclassical microeconomic theory.	23
Period of formative marketing.....	24
Marketing management perspective.	25
Relationship marketing theory.....	28
Approaches to Understanding Marketing Practices in Firms.....	31
Social Media	35
Strategic Marketing Practices and Firm Performance	39
Customer Satisfaction	41
Preliminary Conceptual Framework of the Strategic Marketing Practices of ICT Firms and their Influence on Firm Performance.	43
Social Media	44
Relationship Marketing.....	47
Market Research	50
Segmentation	53
Targeting.....	57
Differentiation.....	61

Positioning	65
Marketing Mix	68
Product mix.	69
Pricing mix.	72
Place mix.	75
Promotion mix.	77
Customer Satisfaction	79
Customer satisfaction and firm performance.	81
Firm Performance	82
Conclusion	84
CHAPTER THREE: RESEARCH DESIGN	85
Research Design.....	85
Data Collection Method	88
Questionnaire design.	88
Sampling design.	90
Survey method.....	91
Sources of errors in web surveys.....	92
Measurement and Scaling of Constructs.....	95
Measurement scales for Social Media practices.	97
Measurement scales for Relationship Marketing practices.	98
Measurement scales for Market Research practices.	99
Measurement scales for Segmentation practices.	100
Measurement scales for Targeting practices.....	100
Measurement scales for Differentiation practices.	101
Measurement scales for Positioning practices.	101
Measurement scales for Product practices.....	101
Measurement scales for Pricing practices.....	102
Measurement scales for Distribution practices.....	103
Measurement scales for Promotional practices.	103
Measurement scales for Customer Satisfaction	104
Measurement scales for Firm Performance.	105
General questions.	105
Survey Implementation	105
Data Analysis	106
Ethical Issues	106
Conclusion	107
CHAPTER FOUR: RESULTS OF THE DESCRIPTIVE ANALYSIS	108
Descriptive Analysis.....	108
Social Media practices	109
Relationship Marketing practices	113
Market Research practices	117

Segmentation practices	120
Targeting practices.....	123
Differentiation Practices	125
Positioning practices	127
Product practices.....	128
Pricing practices.....	132
Distribution Practices.....	134
Promotion practices	136
Customer satisfaction.....	138
Firm Performance	141
General Information.....	143
Respondents' position in the organisation.	143
Respondents' Length of Service in the ICT sector.	144
Respondents' length of service in the current organisation.	145
Highest level of formal education of the respondents.	145
Ownership nature of the organisation.	145
Conclusion	146
CHAPTER FIVE: DATA ANALYSIS AND DISCUSSION OF RESULTS.....	147
Multivariate Data Analysis.....	147
Cleaning the Data	149
Identifying and handling missing data.....	149
Identifying and handling outliers.....	150
Normality.....	151
Factor Analysis	152
Key Terms and Statistics Associated with Factor Analysis	152
Variance.	152
Correlation.....	153
Correlation matrix.	153
Factor loadings.	153
Communality.....	153
Cronbach's alpha.....	154
Factor Analysis Model.....	154
Assumptions in Factor Analysis	155
Steps in Factor Analysis	156
Formulate the problem.	157
Construct the correlation matrix.	158
Determine the method of factor analysis.	158
Determine the number of factors.	159
Rotate factors.....	160
Interpret factors.	161
Calculate factor scores or summated scores	161
Determine the model fit.....	161
Results of the Exploratory Factor Analysis	162
Discussion of the EFA Results	172
Key findings from the results of the EFA.....	173
Social Media in Relationship Marketing practices.....	173
Social Media in Market Research practices.	174

Social Media practices	175
Unique Product practices	176
Average summated scores	178
Reliability and Validity	179
Reliability	179
Validity	180
Multiple Regression Analysis	182
Multiple Regression Model	183
Key Terms and Statistics in Multiple Regression Analysis	184
Predictor variables	184
Outcome variable.	184
Residuals.	184
Standard error.	184
Coefficient of determination (R^2) and adjusted R^2	184
Regression coefficient.	185
F-statistic.	186
t-statistic.	187
Assumptions in Multiple Regression Analysis	187
Linearity of the phenomenon.....	188
Constant variance of the error term (homoscedasticity).	188
Independence of the error terms.	188
Normality of the error term distribution.	189
Other Practical Considerations	189
Ratio of cases to IVs.....	189
Multicollinearity.....	190
Choice of the IVs, DV and the MV for regression analysis.....	191
Estimating the Regression Model.....	192
Testing the Conceptual Framework Using Stepwise Regression Analysis.....	192
Results of the Regression Analysis.....	194
Mediation Analysis	200
Mediation Model	200
Results of the Mediation Analysis	203
Discussion of the Results of the Mediation Analysis.....	204
Relationship Marketing practices.	204
Product practices.	204
Targeting practices.	205
Social Media practices.....	205
Summary of the Data Analysis	205
Revised Framework of the Strategic Marketing Practices of the ICT Firms in India	207
Relationship Marketing practices.	208
Product practices.	208
Positioning practices.....	209
Promotional practices.	209
Targeting practices.	209
Social Media practices.....	210
Pricing practices.	210

Conclusion	210
CHAPTER SIX: CONTRIBUTIONS AND IMPLICATIONS OF THE RESEARCH	212
Overview of the Research	212
Contributions of this Research	214
Contribution to Marketing Literature.....	215
Contribution to Social Media literature.	218
Implications of this Research.....	219
Social Media practices.	219
Product practices.....	220
Relationship Marketing practices	221
Promotional practices.	222
Targeting practices.....	222
Positioning practices	222
Pricing practices.....	223
Limitations of this Research	223
Directions for Future Research	225
Conclusion	227
REFERENCES	229
APPENDICES.....	276
APPENDIX A.....	276
WEB SURVEY INVITATION LETTER.....	276
APPENDIX B	278
WEB SURVEY QUESTIONNAIRE	278
APPENDIX C.....	296
LIST OF PUBLICATIONS.....	296

LIST OF TABLES

Tables	Page
3.1 International Standard Industrial Classification (ISIC) codes.....	91
4.1 Social Media practices: frequencies and percentages.....	112
4.2 Relationship Marketing practices: frequencies and percentages.....	116
4.3 Market Research practices: frequencies and percentages.....	119
4.4 Segmentation practices: frequencies and percentages.....	122
4.5 Targeting practices: frequencies and percentages.....	124
4.6 Differentiation practices: frequencies and percentages.....	126
4.7 Positioning practices: frequencies and percentages.....	128
4.8 Product practices: frequencies and percentages.....	131
4.9 Pricing practices: frequencies and percentages.....	133
4.10 Distribution practices: frequencies and percentages.....	135
4.11 Promotion practices: frequencies and percentages.....	138
4.12 Customer Satisfaction: frequencies and percentages.....	141
4.13 Firm Performance: frequencies and percentages.....	143
4.14 Respondents' Position in the organisation.....	144
4.15 Respondents' Length of Service in the ICT sector.....	144
4.16 Respondents' Length of Service in the current organisation.....	145
4.17 Highest level of formal education of the respondents.....	145
4.18 Ownership nature of the organisation.....	146
5.1 KMO and Bartlett's Test.....	156
5.2 Summary of the extracted factors.....	163
5.3 Relationship Marketing practices, Factor Loadings and Communalities.....	164
5.4 Product practices, Factor Loadings and Communalities.....	166
5.5 Distribution practices, Factor Loadings and Communalities.....	167
5.6 Promotion practices, Factor Loadings and Communalities.....	168
5.7 Market Research practices, Factor Loadings and Communalities.....	168
5.8 Social Media Factor, Loadings and Communalities.....	169
5.9 Segmentation practices, Factor Loadings and Communalities.....	170
5.10 Targeting practices, Factor Loadings and Communalities.....	171

5.11	Pricing practices, Factor Loadings and Communalities.....	171
5.12	Positioning practices, Factor Loadings and Communalities.....	172
5.13	Summary the factors used in the subsequent analysis	178
5.14	Correlations between the composite measures.....	182
5.15	Multiple Regression Analysis.....	193
5.16	Regression 1: Coefficients, t and p values, tolerance and VIF.....	195
5.17	Regression 2: Coefficients, t and p values, tolerance and VIF.....	196
5.18	Regression 3: Coefficients, t and p values, tolerance and VIF.....	197
5.19	Regression 4: Coefficients, t and p values, tolerance and VIF.....	199
5.20	Results of the mediation analysis.....	203

LIST OF FIGURES

Figures	Page
1.1. World ICT market value 2008-2012.....	4
1.2. Indian ICT market value 2008-2012.....	6
2.1. Historical developments in marketing	20
2.2. Preliminary conceptual framework of the Strategic Marketing Practices of the ICT firms and their influence on firm performance...	44
4.1. Social Media practices.....	110
4.2. Relationship Marketing practices.....	115
4.3. Market Research practices.....	118
4.4. Segmentation practices.....	121
4.5. Targeting practices.....	123
4.6. Differentiation practices.....	125
4.7. Positioning practices.....	127
4.8. Product practices.....	130
4.9. Pricing practices.....	133
4.10. Distribution practices.....	135
4.11. Promotion practices.....	137
4.12. Customer Satisfaction.....	139
4.13. Firm Performance.....	142
5.1. Steps in conducting factor analysis.	157
5.2a Illustration of the direct effect. IV affects DV.....	201
5.2b Illustration of a mediation design. IV affects DV through MV.....	201
5.3 Revised model of the Strategic Marketing Practices of the ICT firms and their influence on Firm Performance.....	207

