

**MULTI-STAKEHOLDER PERSPECTIVE OF
STRATEGIC PERFORMANCE MANAGEMENT:
A STUDY OF E-LEARNING PROVIDERS IN NON-FORMAL EDUCATION
DOMAIN IN INDIA**

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A STUDY OF E-LEARNING PROVIDERS IN NON-FORMAL EDUCATION
DOMAIN IN INDIA**

by

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Submitted

in fulfillment of the requirements of the degree of Doctor of Philosophy
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CERTIFICATE

This is to certify that the thesis titled '**Multi-Stakeholder Perspective of Strategic Performance Management: A Study of E-learning Providers in Non-formal Education Domain in India**' being submitted by **Srikanta Acharya** to the Indian Institute of Technology Delhi for the award of the degree of **Doctor of Philosophy (Ph.D.)** is a record of bona fide original research work carried out by him. He has worked under my guidance and supervision, and has fulfilled the requirements for the submission of the thesis, which has attained standard required for a Ph.D. degree of the Institute. The results presented in this thesis have not been submitted elsewhere for the award of any degree or diploma.

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Abstract

Multi-stakeholder approaches are being adopted by many progressive organizations for better strategic performance outcomes but when it comes to technology based learning service providers in non-formal education domain, the default focus has been on the student only and learning outcomes are seen as the only drivers for strategic performance objectives. This research is to enquire if businesses operating in non-formal education segment have to visualize the students more as important stakeholders and also if other stakeholders need to be brought into the decision making variables, thereby expanding the scope of business performance from achieving learning outcomes to overall stakeholder expectation management.

The research objective is divided into two parts. The first part of the objective is to establish if specific intervention variables adopted by e-learning providers result into higher strategic performance indicators. The next part of the objective is to assess if meeting stakeholder expectations is directly related to success level of e-learning providers and what expectation perspectives impact the overall meeting of stakeholder expectations.

The literature review has been grouped in three sections – studies related to e-learning, stakeholder theory, and strategic performance management. Based on the literature review, various path-breaking concepts and theoretical frameworks articulated by reputed academicians in the domain of online education, a conceptual framework was developed to test the research hypotheses and find answers to various research questions. The complexity of the subject of study necessitated the division of the overall activity into three phases – an action research to test the hypotheses built around the first part of the objective, an empirical research based on opinion survey of multiple stakeholders to test the hypotheses built around the second part of the objective, and a multiple-case based explanatory or interpretive study to identify all common linkages and patterns of behavior.

The action research segment investigates if responsiveness towards learners affects short-term as well as long-term business performance indicators of the learning providers. It also assesses if difference in responsiveness between e-learning providers result into corresponding difference in enrollment figures, growth in enrollments, continuity in growth rate of enrollments and also the course and

teacher ratings. Finally, it attempts to find linkages between responsiveness, course rating and teacher rating on the one hand and learner satisfaction on the other. The action research segment utilizes various statistical analysis tools like t-test, ANOVA, Chi-Square test, Logistics Regression, etc.

The empirical research segment consists of development of questionnaire for three identified stakeholders of e-learning providers and collects data about the attainment of perspective-specific expectations and the overall meeting of their expectations. The various analyses conducted on this data try to decipher if the attainment level of expectations is a function of success of the e-learning provider by comparing the levels between more successful and less successful e-learning providers. Analyses are also conducted to establish correlations and specific predictor variables to link perspective-specific expectations and attainment of overall expectations of each stakeholder. The empirical research segment utilizes statistical tools like Factor Analysis, Reliability Analysis, Independent Sample t-test, various Non-Parametric tests, Pearson Correlation tests, and Multi-Variate Regression techniques.

The multi-case study segment tracks the online learning delivery business of three organizations over a period of two to five years to identify linkages between various research variables and patterns of relationships while taking into account various qualitative narratives and finds holistic interpretations corroborating the other two research findings.

The synthesis of all the research segments – action research, empirical research and case-study research – was done keeping in mind the research questions that this study wanted to address. The conceptual framework was validated to establish that multiple stakeholder expectations play a vital role in impacting strategic performance management of organizations. The study lists major findings, recommends implementation items and also specifies limitations which need to be kept in mind before expanding the scope of the research in further studies.

सारांश

मल्टी-स्टेकहोल्डर दृष्टिकोण कई प्रगतिशील संगठनों द्वारा बेहतर स्ट्रेटेजिक निष्पादन परिणामों के लिए अपनाया जा रहा है। लेकिन जब गैर-औपचारिक शिक्षा क्षेत्र में प्रौद्योगिकी आधारित शिक्षण सेवा प्रदाताओं की बात आती है, तो डिफ़ॉल्ट फोकस केवल छात्रों के सीखने के परिणाम पर ही होता है; और केवल सीखने के परिणाम ही स्ट्रेटेजिक प्रदर्शन की उद्देश्य के रूप में देखे जाते हैं। यह अनुसंधान गैर-औपचारिक शिक्षा क्षेत्र में काम कर रहे व्यवसायों में विद्यार्थियों को अधिक महत्वपूर्ण हितधारकों के रूप में देखने की आवश्यकता है या नहीं, यह पूछता है। और यह भी पूछता है कि अन्य हितधारकों को निर्णय लेने वाले चर में लाया जाना चाहिए या नहीं - जिससे समग्र हितधारक उम्मीद प्रबंधन के लिए सीखने के परिणामों को प्राप्त करने से व्यावसायिक प्रदर्शन का दायरा विस्तार किया जा सके।

अनुसंधान का उद्देश्य दो भागों में विभाजित है। उद्देश्य के पहला भाग में यह निर्धारित करना है कि ई-लर्निंग प्रदाताओं द्वारा अपनाई गई विशिष्ट हस्तक्षेप उच्च स्ट्रेटेजिक प्रदर्शन के संकेतक हैं। उद्देश्य का अगला भाग यह आकलन करना है कि हितधारक की अपेक्षाओं को प्राप्त करना सीधे ई-लर्निंग प्रदाताओं की सफलता के स्तर से संबंधित होती है; और कौन कौन से उम्मीद दृष्टिकोण हितधारक की उम्मीदों की समग्र प्राप्ति पर प्रभाव डालती हैं।

साहित्य समीक्षा को तीन खंडों में समूहीकृत किया गया है - ई-लर्निंग, स्टेकहोल्डर सिद्धांत और स्ट्रेटेजिक प्रदर्शन प्रबंधन से संबंधित अध्ययन। साहित्य की समीक्षा के आधार पर, ऑनलाइन शिक्षा के क्षेत्र में प्रतिष्ठित शिक्षाविदों द्वारा व्यक्त किए जाने वाले विभिन्न महत्वपूर्ण विचारों और सैद्धांतिक ढांचा, अनुसंधान अवधारणाओं का परीक्षण करने और विभिन्न अनुसंधान प्रश्नों के उत्तर पाने के लिए एक वैचारिक रूपरेखा तैयार किया गया था। अध्ययन के विषय की जटिलता ने तीन चरणों में समग्र गतिविधि का विभाजन आवश्यक बना दिया - उद्देश्य के पहले भाग में बनाए गए अनुमानों का परीक्षण करने के लिए एक एक्शन रिसर्च, कई हितधारकों के सर्वेक्षण के आधार पर एक अनुभवजन्य शोध के आधार पर निर्मित अनुमानों का परीक्षण करना उद्देश्य के दूसरे भाग, और तीसरे भाग में सभी सामान्य संबंधों और व्यवहार के पैटर्न की पहचान करने के लिए एक बहु-केस आधारित व्याख्यात्मक अध्ययन।

एक्शन रिसर्च सेगमेंट जांचता है कि शिक्षार्थियों के प्रति जवाबदेही सीखने के प्रदाताओं के अल्पकालिक और लंबी अवधि के व्यावसायिक प्रदर्शन संकेतकों को प्रभावित करती है। यह भी मूल्यांकन करता है कि ई-लर्निंग प्रदाताओं के बीच जवाबदेही में अंतर नामांकन के आंकड़ों, दाखिले में वृद्धि, नामांकन की वृद्धि दर में निरंतरता और पाठ्यक्रम और शिक्षक रेटिंग के बीच अंतर भी हो सकता है। अंत में, एक तरफ यह जवाबदेही, कोर्स रेटिंग और टीचर रेटिंग और दूसरे पर सीखने वाले संतुष्टि के बीच संबंध ढूंढने का प्रयास करता है। एक्शन रिसर्च सेगमेंट टी-टेस्ट, एनोवा, कार्ई -स्क्रायर टेस्ट, लॉजिस्टिक्स रिग्रेसन, आदि जैसे विभिन्न सांख्यिकीय विश्लेषण टूल का इस्तेमाल करते हैं।

अनुभवजन्य अनुसंधान खंड में ई-लर्निंग प्रदाताओं के तीन पहचाने हितधारकों के लिए प्रभावली का विकास होता है और परिप्रेक्ष्य-विशिष्ट उम्मीदों की पूर्ति तथा समेकित उम्मीद की समग्र

प्राप्ति के बारे में आंकड़े एकत्र किया जाता है। अधिक सफल और कम सफल ई-लर्निंग प्रदाताओं के बीच के स्तरों की तुलना करके इस डेटा पर किए गए विभिन्न विश्लेषण स्थापित करने की कोशिश करते हैं यदि अपेक्षाओं की प्राप्ति स्तर ई-लर्निंग प्रदाता की सफलता से संबंधित है। परिप्रेक्ष्य-विशिष्ट उम्मीदों और प्रत्येक हितधारक की समग्र उम्मीदों की प्राप्ति के बीच सहसंबंध स्थापित करने के लिए विश्लेषण भी किए जाते हैं। अनुभवजन्य शोध खंड में फैक्टर विश्लेषण, विश्वसनीयता विश्लेषण, स्वतंत्र नमूना टी-परीक्षण, विभिन्न गैर-पैरामीट्रिक परीक्षण, पियर्सन सहसंबंध परीक्षण और बहु-विविध प्रतिगमन तकनीकों जैसे सांख्यिकीय टूल का इस्तेमाल होता है।

मल्टी-केस स्टडी सेगमेंट दो से पांच साल की अवधि में तीन संगठनों के ऑनलाइन सीखने की डिलीवरी कारोबार को ट्रैक करते हैं ताकि कई शोध चर और संबंधों के पैटर्न के बीच संबंधों की पहचान की जा सके। यह कई गुणात्मक कथनों को ध्यान में रखता है और अन्य दो शोध निष्कर्षों की पुष्टि करने वाली समग्र व्याख्याएं पाता है।

सभी शोध क्षेत्रों के संश्लेषण - एक्शन रिसर्च, अनुभवजन्य अनुसंधान और केस-स्टडी अनुसंधान - उन अनुसंधान सवालियों को ध्यान में रखते हुए किया गया था जो इस अध्ययन को संबोधित करना चाहते थे। अवधारणात्मक रूपरेखा को स्थापित करने के लिए मान्य किया गया था कि संगठनों के स्ट्रेटेजिक प्रदर्शन प्रबंधन को प्रभावित करने में कई हितधारक की उम्मीदें महत्वपूर्ण भूमिका निभाती हैं। अध्ययन प्रमुख निष्कर्षों को सूचीबद्ध करता है, कार्यान्वयन के मद्दों की सिफारिश करता है और सीमाओं को भी निर्दिष्ट करता है, जो आगे के अध्ययनों में शोध के दायरे को विस्तारित करने से पहले ध्यान में रखा जाना चाहिए।

Contents

<i>Certificate</i>	<i>i</i>
<i>Acknowledgements</i>	<i>iii</i>
<i>Abstract</i>	<i>v</i>
<i>Contents</i>	<i>vii</i>
<i>List of Figures</i>	<i>xiii</i>
<i>List of Tables</i>	<i>xvii</i>
<i>List of Appendices</i>	<i>xxiii</i>
<i>Nomenclature</i>	<i>xxvii</i>
Chapter 1	1
Introduction to the Study	1
1.1 Preamble	1
1.2 Background and Brief Perspective	2
1.2.1 Online Learning and Non-formal Education.....	2
1.2.2 Stakeholder Perspective.....	4
1.2.3 Strategic Performance Management	4
1.3 Need for this Study	5
1.4 Research Questions	6
1.5 Research Objectives.....	7
1.6 Scope of Work	7
1.7 Overview of Methodology	8
1.7.1 Action Research	9
1.7.2 Empirical Research.....	9
1.7.3 Case Study Research.....	10
1.7.4 Synthesis	10
1.8 Organization of the Thesis.....	10
1.9 Concluding Remarks	13
Chapter 2	15
Literature Review	15
2.1 Introduction	15

2.2 Scope, Methodology and Stages of Literature Review	16
2.3 Literature Review on E-learning	17
2.3.1 The World of E-learning.....	17
2.3.2 The Market for E-learning.....	28
2.3.3 Non-formal Education and Linkages to E-learning	32
2.4 Literature Review on Stakeholder Theory	36
2.4.1 The Original Stakeholder Model – Star Network.....	36
2.4.2 The Adapted Version of Stakeholder Model – Extended Star Network	37
2.4.3 Refinements to the Stakeholder Model.....	37
2.4.4 Contemporary Industry Leaders’ Thoughts on Stakeholder Theory	43
2.4.5 Criticisms of Stakeholder Theory	44
2.5 Literature Review on Strategic Performance Management.....	47
2.5.1 Strategic Flexibility as a Measure of Strategic Performance.....	51
2.5.2 Adaptation to Continuity and Change as a Measure of Strategic Performance	53
2.6 Learning from Literature Review	58
2.7 Research Gaps.....	59
2.8 Concluding Remarks	59
Chapter 3	61
Conceptual Framework and Research Methodology	61
3.1 Introduction	61
3.2 Guiding Research Questions and Research Objectives	61
3.3 Elements of Research Propositions and Constructs	63
3.4 Development of the Conceptual Framework of Research.....	66
3.4.1 SAP-LAP Framework.....	68
3.4.2 Porter’s Competitiveness and Strategic Positioning Framework	70
3.4.3 Flexible Strategy Framework for Managing Continuity and Change.....	72
3.4.4 The Balanced Scorecard	73
3.5 Company-Stakeholder Interaction	75
3.6 Company’s Strategic Perspectives.....	76
3.7 Stakeholder’s Expectation Perspectives	77
3.8 Research Methodology	79
3.9 Conceptual Framework and Methodology for Action Research.....	80
3.9.1 Research Variables for Action Research	82
3.9.2 Hypotheses Formulation for Action Research	83
3.9.3 Methodology of Data Collection and Sampling Plan for Action Research.....	86

3.10 Conceptual Framework and Methodology for Empirical Research	86
3.10.1 Research Variables for Empirical Research	89
3.10.2 Hypotheses Formulation for Empirical Research.....	91
3.10.3 Methodology of Data Collection and Sampling Plan for Empirical Research.....	92
3.11 Conceptual Framework for Case Study Research.....	92
3.12 Data Analysis Techniques	93
3.13 Synthesis of Findings from Action, Empirical and Case Study Researches	95
3.14 Research Roadmap.....	95
3.15 Concluding Remarks	97
Chapter 4	99
Action Research.....	99
4.1 Introduction	99
4.2 Data Collection and Tools Used for Analysis	100
4.3 Testing Hypotheses of Difference for the Macro Variables used as Interventions	102
4.3.1 Hypothesis-1.....	102
4.3.2 Hypothesis-2.....	104
4.4 Testing Hypotheses of Difference for the Outcome Variables – Active Enrollments	106
4.4.1 Hypothesis-3.....	106
4.4.2 Hypothesis-4.....	108
4.4.3 Hypothesis-5.....	110
4.5 Testing Hypotheses of Difference for the Outcome Variables – Growth Rate of Active Enrollments.....	111
4.5.1 Hypothesis-6.....	111
4.5.2 Hypothesis-7.....	113
4.6 Testing Hypotheses of Difference for the Outcome Variables – Continuity of Growth Rates of Active Enrollments for LPs	114
4.6.1 Hypothesis-8.....	114
4.6.2 Hypothesis-9.....	116
4.7 Testing Hypotheses of Difference for the Outcome Variables – Course Ratings and Teacher Ratings by Learners for LPs.....	117
4.7.1 Hypothesis-10.....	118
4.7.2 Hypothesis-11.....	120
4.8 Testing Hypotheses of Association for the Outcome Variables – Association between LP Responsiveness and Learner-Satisfaction.....	122
4.8.1 Hypothesis-12.....	122
4.9 Testing Hypotheses of Association for the Outcome Variables – Association between Course and Teacher Ratings and Learner-Satisfaction	124

4.9.1 Hypothesis-13.....	124
4.9.2 Hypothesis-14.....	126
4.10 Summary of Action Research Findings	128
4.10.1 Hypotheses Testing Summary.....	128
4.10.2 Logistic Regression Summary	130
4.11 Discussion on Action Research Findings	131
4.12 Concluding Remarks	132
Chapter 5	133
Empirical Research.....	133
5.1 Introduction	133
5.2 Data Collection and Tools Used for Analysis	134
5.2.1 Questionnaire Design, Validation, Testing and Administration	134
5.2.2 Statistical Tests used for Empirical Research Analyses	137
5.3 Confirmatory Factor Analysis	137
5.3.1 Factor Analysis for Macro Variables	137
5.3.2 Factor Analysis for Micro Variables	139
5.4 Reliability Analysis on Primary Measures	141
5.5 Comparative Analyses between More Successful and Less Successful Learning Providers.....	141
5.6 Testing Hypotheses of Difference for the Micro and Macro Variables	143
5.6.1 Hypothesis of Difference of Micro Variables for SH1: Hypothesis-1	143
5.6.2 Hypothesis of Difference of Macro Variables for SH1: Hypothesis-2.....	145
5.6.3 Hypothesis of Difference of Micro Variables for SH2: Hypothesis-3	147
5.6.4 Hypothesis of Difference of Macro Variables for SH2: Hypothesis-4.....	148
5.6.5 Hypothesis of Difference of Micro Variables for SH3: Hypothesis-5	150
5.6.6 Hypothesis of Difference of Macro Variables for SH3: Hypothesis-6.....	151
5.7 Testing Hypotheses of Association for Micro and Macro Variables of Stakeholders	153
5.7.1 Correlation and Regression Analysis of Micro Variables of SH1: Hypothesis-7	153
5.7.2 Correlation and Regression Analysis of Macro Variables of SH1: Hypothesis-8	156
5.7.3 Correlation and Regression Analysis of Micro Variables of SH2: Hypothesis-9	159
5.7.4 Correlation and Regression Analysis of Macro Variables of SH2: Hypothesis-10	162
5.7.5 Correlation and Regression Analysis of Micro Variables of SH3: Hypothesis-11	165
5.7.6 Correlation and Regression Analysis of Macro Variables of SH3: Hypothesis-12	168
5.8 Summary of Empirical Research Findings	170
5.8.1 Factor Analysis, Reliability Analysis, and Hypotheses Testing Summary.....	170
5.8.2 Correlation and Regression Summary.....	173
5.9 Discussion on Empirical Research Findings	174

5.10 Concluding Remarks	176
Chapter 6	177
Case Study Research	177
6.1 Introduction	177
6.2 Research Methodology and Research Variables	177
6.3 Selection of Cases.....	178
6.4 Case Study-1: CII-Institute of Quality (CII-IQ)	179
6.4.1 History of the formation of CII	179
6.4.2 About Institute of Quality (IQ)	180
6.4.3 E-learning Business of CII-IQ	182
6.4.4 Online Course Performance Metrics of CII-IQ	184
6.4.5 Summarizing CII-IQ's E-learning Business.....	189
6.5 Case Study 2: Knowledge Spark Consultancy (Ecopoint)	190
6.5.1 The Initial Period of Technology Based Learning Delivery	191
6.5.2 The Other Business Challenges	192
6.5.3 Discovery of an Appropriate E-learning Solution	192
6.5.4 Strategic Achievements and Future Plans of Ecopoint.....	193
6.5.5 Online Course Performance Metrics of Ecopoint.....	194
6.5.6 Summarizing Ecopoint's E-learning Business	200
6.6 Case Study-3: IzenBridge.....	200
6.6.1 IzenBridge's Foray into Online Education	201
6.6.2 Product Portfolio of IzenBridge	202
6.6.3 Strategic Achievements and Future Plans of IzenBridge.....	203
6.6.4 Online Course Performance Metrics of IzenBridge.....	204
6.6.5 Summarizing IzenBridge's E-learning Business	209
6.7 Comparative Summary of the Case Studies	209
6.8 Summary of Findings for Case Study Research	210
6.9 Concluding Remarks	211
Chapter 7	213
Synthesis of Learning and Conclusions	213
7.1 Introduction	213
7.2 Key Learning from Action Research.....	214
7.3 Key Learning from Empirical Research	214
7.4 Key Learning from Case-Study Research.....	215

7.5 Triangulation of Studies and Synthesis of Learning.....	216
7.6 Revisiting Research Questions, Objectives and Propositions	217
7.7 Major Recommendations.....	219
7.8 Implications and Relevant Research Audience.....	220
7.9 Significant Research Contributions	220
7.10 Limitations of the Study	221
7.11 Suggestions for Further Research.....	222
7.12 Concluding Remarks	223
References.....	225
Appendix I.....	A1
Appendix II.....	A19
Appendix III.....	A23

List of Figures

Figure 1.1: Organization of the Thesis	12
Figure 2.1: E-learning Convergence.....	18
Figure 2.2: E-learning Value Chain	18
Figure 2.3: Circumplex Model of Affect	19
Figure 2.4: A 3D Model of Transactional Distance.....	20
Figure 2.5: Learning Spiral Model	21
Figure 2.6: Meta-Cognitive Perspectives of Student E-learning.....	21
Figure 2.7: Global E-learning Market Growth	29
Figure 2.8: E-learning Market Trends and Forecast 2014 - 2016 Report by Docebo	31
Figure 2.9: Top Drivers for Migration to E-learning - Report by Docebo	31
Figure 2.10: Conner's Informal Learning Scheme.....	33
Figure 2.11: The Stakeholder Model	36
Figure 2.12: The Adapted Version of Stakeholder Model	37
Figure 2.13: The Triangular Relationship among Stakeholder Groups.....	39
Figure 2.14: The Stake Model of the Firm	39
Figure 2.15: Types of Stakes.....	40
Figure 2.16: Three Aspects of Stakeholder Theory.....	41
Figure 2.17: Revised Typology of Stakeholder Class	42
Figure 2.18: Difference between Crisis Management, Stakeholder Management and Stakeholder Engagement	43
Figure 2.19: Performance Measurement Matrix.....	48
Figure 2.20: Results and Determinants Framework.....	49
Figure 2.21: Types of Strategic Flexibility.....	53
Figure 2.22: Continuity-Change (C-C) Matrix.....	56
Figure 2.23: Independent Impact of Continuity and Change Forces.....	57
Figure 2.24: Concurrent Impact of Continuity and Change Forces	57
Figure 2.25: Mediating Impact of Continuity and Change Forces	58
Figure 2.26: Moderating Impact of Continuity and Change Forces.....	58

Figure 3.1: Sequential Relationship between Stakeholder Perspectives and Company's Strategic Performance	67
Figure 3.2: SAP-LAP Framework	68
Figure 3.3: Porter's Five Forces Framework	71
Figure 3.4: Sample List of Continuity and Change Forces.....	72
Figure 3.5: Balanced Scorecard as a Strategic Framework for Action	74
Figure 3.6: Conceptual Value Exchange Model between the Stakeholder and the Firm in the Context of Firm-Stakeholder Interaction.....	75
Figure 3.7: Expanded Value Exchange Model between the Stakeholder and the Firm in the Context of Firm-Stakeholder Interaction.....	76
Figure 3.8: Company's Strategic Perspectives	77
Figure 3.9: Stakeholder's Expectation Perspectives	78
Figure 3.10: Stakeholders Identified for this Research Study	79
Figure 3.11: Different Phases of Research	80
Figure 3.12: Broad Conceptual Framework for Action Research.....	81
Figure 3.13: Refined Action Research Framework	82
Figure 3.14: Broad Conceptual Framework for Empirical Research.....	87
Figure 3.15: Refined Empirical Research Framework.....	88
Figure 3.16: An Orbital-Distance-Direction Representation of Stakeholder Positions	89
Figure 3.17: Research Roadmap	96
Figure 5.1: Comparison of Mean for Micro and Macro Variables of SH1 across G1 and G2	143
Figure 5.2: Comparison of Mean for Micro and Macro Variables of SH2 across G1 and G2	143
Figure 5.3: Comparison of Mean for Micro and Macro Variables of SH3 across G1 and G2	143
Figure 6.1: Month-wise Active Learner Numbers for CII-IQ	184
Figure 6.2: Course Rating by Learners for CII-IQ	185
Figure 6.3: Teacher Rating by Learners for CII-IQ.....	187
Figure 6.4: Score Card Distribution Pattern by % for CII-IQ.....	188
Figure 6.5: Active Enrollments in Ecopoint Courses over 4-year Period - Hybrid Delivery.....	195
Figure 6.6: Active Enrollments in Ecopoint Courses over 4-year Period - Fully Online Delivery	195
Figure 6.7: Course Rating by Ecopoint Learners over 4-year Period - Hybrid Delivery.....	196
Figure 6.8: Course Rating by Ecopoint Learners over 4-year Period - Fully Online Delivery	197

Figure 6.9: Teacher Rating by Ecopoint Learners over 4-year Period for Teacher-1	197
Figure 6.10: Teacher Rating by Ecopoint Learners over 4-year Period for Teacher-2	198
Figure 6.11: Satisfied vs. Dissatisfied Learners - Ecopoint - Hybrid Delivery	199
Figure 6.12: Satisfied vs. Dissatisfied Learners - Ecopoint - Fully Online Delivery.....	199
Figure 6.13: Active Enrollments in IzenBridge's Courses over 2 and Half Year Period.....	205
Figure 6.14: Active Enrollments in IzenBridge's Priced Courses over 2 and Half Year Period	205
Figure 6.15: Course Rating by IzenBridge Learners over 2 and Half Year Period - Flagship Course-1	206
Figure 6.16: Course Rating by IzenBridge Learners over 2 and Half Year Period - Flagship Course-2	206
Figure 6.17: Teacher Rating by IzenBridge Learners over 2 and Half Year Period.....	207
Figure 6.18: Learner Satisfaction for IzenBridge - Flagship Course 1	208
Figure 6.19: Learner Satisfaction for IzenBridge - Flagship Course 2	208

List of Tables

Table 2.1: A Snap-Shot of Selected Studies and Summary of Conclusions related to E-learning	26
Table 2.2: A Snap-Shot of Selected Studies and Summary of Conclusions related to Stakeholder Theory	46
Table 2.3: A Snap-Shot of Selected Studies and Summary of Conclusions related to Strategic Performance Management.....	50
Table 2.4: A Snap-Shot of Selected Studies and Summary of Contributions related to Continuity and Change	56
Table 3.1: Linkages between Research Gaps and Research Questions.....	62
Table 3.2: Linkages between Research Objectives and Research Methods.....	63
Table 3.3: Research Constructs and Data Sources	65
Table 3.4: Linkages among Research Questions – Research Objectives – Research Propositions	66
Table 3.5: VDB Analysis of Continuity Forces for E-learning Providers.....	73
Table 3.6: Impact Analysis of Change Forces for E-learning Providers.....	73
Table 3.7: Research Variables and their Significance in Action Research	83
Table 3.8: Macro and Micro Research Variables for the Empirical Research.....	90
Table 3.9: Summary of Data Analysis Techniques and the Application Areas	94
Table 4.1: Macro and Micro Variables for Action Research	100
Table 4.2: Statistical Tests for Action Research.....	102
Table 4.3: Group Statistics of Customer Care Responsiveness for LP1 and LP2.....	103
Table 4.4: Levene’s Test for Equality of Variances of Customer Care Responsiveness for LP1 and LP2.....	103
Table 4.5: Findings of t-test for Difference in Sample Means of Customer Care Responsiveness for LP1 and LP2	104
Table 4.6: Group Statistics of Teacher Responsiveness for LP1 and LP2	105
Table 4.7: Levene’s Test for Equality of Variances of Teacher Responsiveness for LP1 and LP2.....	105
Table 4.8: Findings of t-test for Difference in Sample Means of Teacher Responsiveness for LP1 and LP2	105
Table 4.9: Descriptive Statistics of Active Enrollments of LP1 for P1, P2 and P3	106
Table 4.10: ANOVA for Active Enrollments of LP1 for P1, P2 and P3.....	107

Table 4.11: Contrast Tests to test Difference in Sample Means of Active Enrollments between P1, P2 and P3 periods for LP1	107
Table 4.12: Descriptive Statistics of Active Enrollments of LP2 for P1, P2 and P3	108
Table 4.13: ANOVA for Active Enrollments of LP2 for P1, P2 and P3.....	108
Table 4.14: Contrast Tests to test Difference in Sample Means of Active Enrollments between P1, P2 and P3 periods for LP2	109
Table 4.15: Descriptive Statistics of Active Enrollments of LP2 for P-1, P0 and P1	110
Table 4.16: ANOVA for Active Enrollments of LP2 for P-1, P0 and P1.....	110
Table 4.17: Contrast Tests to test Difference in Sample Means of Active Enrollments between P-1, P0 and P1 periods for LP2	111
Table 4.18: Group Statistics of Growth Rates of Active Enrollments of LP1 and LP2 during P1 - P2.....	111
Table 4.19: Levene's Test for Equality of Variances for Growth Rates of Active Enrollments of LP1 and LP2 during P1-P2.....	112
Table 4.20: Findings of t-test for Difference in Sample Means of Growth of Active Enrollments of LP1 and LP2 during P1-P2.....	112
Table 4.21: Group Statistics of Growth Rates of Active Enrollments for LP1 and LP2 during P2-P3.....	113
Table 4.22: Levene's Test for Equality of Variances for Growth Rates of Active Enrollments for LP1 and LP2 during P2-P3.....	113
Table 4.23: Findings of t-test for Difference in Sample Means of Growth Rates of Active Enrollments for LP1 and LP2 during P2-P3.....	114
Table 4.24: Group Statistics of Growth Rates of Active Enrollment for LP1 during P1-P2 and P2-P3.....	114
Table 4.25: Levene's Test for Equality of Variances for Growth Rates of Active Enrollments for LP1 during P1-P2 and P2-P3.....	115
Table 4.26: Findings of t-test for Difference in Sample Means of Growth Rates of Active Enrollments for LP1 during P1-P2 and P2-P3.....	115
Table 4.27: Group Statistics of Growth Rates of Active Enrollments for LP2 during P1-P2 and P2-P3.....	116
Table 4.28: Levene's Test for Equality of Variances for Growth of Active Enrollment for LP2 during P1-P2 and P2-P3.....	116
Table 4.29: Findings of t-test for Difference in Sample Means of Growth Rates of Active Enrollments for LP2 during P1-P2 and P2-P3.....	117
Table 4.30: Group Statistics for Difference in Course Rating Elements between LP1 and LP2....	118
Table 4.31: Levene's Test of Homogeneity of Variance for Difference in Course Rating Elements between LP1 and LP2	118

Table 4.32: Findings of t-test for Difference in Course Rating Elements between LP1 and LP2.....	119
Table 4.33: Group statistics for Difference in Teacher Rating Elements between LP1 and LP2.....	120
Table 4.34: Levene’s Test of Homogeneity of Variance for Difference in Teacher Rating Elements between LP1 and LP2	120
Table 4.35: Findings of t-test for Difference in Teacher Rating Elements between LP1 and LP2.....	121
Table 4.36: Chi-Square Test to Establish Relation between LP Responsiveness and Learner-Satisfaction.....	123
Table 4.37: Initial Regression Model for Association between Course Rating and Learner Satisfaction	125
Table 4.38: Final Regression Model for Association between Course Rating and Learner Satisfaction	125
Table 4.39: Initial Regression Model for Association between Teacher Rating and Learner Satisfaction	126
Table 4.40: Final Regression Model for Association between Teacher Rating and Learner Satisfaction	127
Table 4.41: Summary of Action Research Findings	128
Table 4.42: Summary of Logistic Regression Results for Action Research.....	130
Table 5.1: Macro and Micro Variables and Corresponding Question Numbers for each Stakeholder for Empirical Research	136
Table 5.2: Pattern of Responses to Opinion Survey	136
Table 5.3: Statistical Tests for Empirical Research.....	137
Table 5.4: Factor Analysis Result Summary for Macro Variables of all Stakeholders	138
Table 5.5: Factor Analysis Result Summary for Micro Variables of all Stakeholders	140
Table 5.6: Reliability Analysis Result Summary for Stakeholder Responses on Primary Measures	141
Table 5.7: Comparison of Mean of Micro and Macro Variables for SH1, SH2 and SH3 across groups G1 and G2	142
Table 5.8: Group Statistics of Micro Variables for SH1 across G1 and G2.....	144
Table 5.9: Findings of t-test for Difference in Sample Means of Micro Variables across G1 and G2 for SH1	144
Table 5.10: Non-Parametric Tests for Difference in Sample Means of Micro Variables across G1 and G2 for SH1	145
Table 5.11: Group Statistics of Macro Variables for SH1 across G1 and G2	145

Table 5.12: Findings of t-test for Difference in Sample Means of Macro Variables across G1 and G2 for SH1	146
Table 5.13: Non-Parametric Tests for Difference in Sample Means of Macro Variables across G1 and G2 for SH1	146
Table 5.14: Group Statistics of Micro Variables for SH2 across G1 and G2.....	147
Table 5.15: Findings of t-test for Difference in Sample Means of Micro Variables across G1 and G2 for SH2.....	147
Table 5.16: Non-Parametric Tests for Difference in Sample Means of Micro Variables across G1 and G2 for SH2.....	148
Table 5.17: Group Statistics of Macro Variables for SH2 across G1 and G2	149
Table 5.18: Findings of t-test for Difference in Sample Means of Macro Variables across G1 and G2 for SH2.....	149
Table 5.19: Non-Parametric Tests for Difference in Sample Means of Macro Variables across G1 and G2 for SH2	149
Table 5.20: Group Statistics of Micro Variables for SH3 across G1 and G2.....	150
Table 5.21: Findings of t-test for Difference in Sample Means of Micro Variables across G1 and G2 for SH3.....	151
Table 5.22: Non-Parametric Tests for Difference in Sample Means of Micro Variables across G1 and G2 for SH3.....	151
Table 5.23: Group Statistics of Macro Variables for SH3 across G1 and G2	152
Table 5.24: Findings of t-test for Difference in Sample Means of Macro Variables across G1 and G2 for SH3.....	152
Table 5.25: Non-Parametric Tests for Difference in Sample Means of Macro Variables across G1 and G2 for SH3	153
Table 5.26: Pearson Correlation Analysis of Micro Variables for the Total Sample of SH1 (N=296).....	154
Table 5.27: Non-Parametric Correlation Analysis of Micro Variables for the Total Sample of SH1 (N=296).....	154
Table 5.28: Model Summary for Regression Analysis of Micro Variables of SH1	155
Table 5.29: ANOVA for Regression Analysis of Micro Variables of SH1	156
Table 5.30: Coefficient Summary for Regression Analysis of Micro Variable of SH1	156
Table 5.31: Pearson Correlation Analysis of Macro Variables for the Total Sample of SH1 (N=298).....	157
Table 5.32: Non-Parametric Correlation Analysis of Macro Variables for the Total Sample of SH1 (N=298).....	157
Table 5.33: Model Summary for Regression Analysis of Macro Variables of SH1	158
Table 5.34: ANOVA for Regression Analysis of Macro Variables of SH1	158

Table 5.35: Coefficient Summary for Regression Analysis of Macro Variable of SH1.....	159
Table 5.36: Pearson Correlation Analysis of Micro Variables for the Total Sample of SH2 (N=27).....	160
Table 5.37: Non-Parametric Correlation Analysis of Micro Variables for the Total Sample of SH2 (N=27).....	160
Table 5.38: Model Summary for Regression Analysis of Micro Variables of SH2	161
Table 5.39: ANOVA for Regression Analysis of Micro Variables of SH2	161
Table 5.40: Coefficient Summary for Regression Analysis of Micro Variable of SH2.....	161
Table 5.41: Pearson Correlation Analysis of Macro Variables for the Total Sample of SH2 (N=27).....	162
Table 5.42: Non-Parametric Correlation Analysis of Macro Variables for the Total Sample of SH2 (N=27).....	163
Table 5.43: Model Summary for Regression Analysis of Macro Variables of SH2	164
Table 5.44: ANOVA for Regression Analysis of Macro Variables of SH2.....	164
Table 5.45: Coefficient Summary for Regression Analysis of Macro Variable of SH2.....	164
Table 5.46: Pearson Correlation Analysis of Micro Variables for the Total Sample of SH3 (N=9).....	165
Table 5.47: Non-Parametric Correlation Analysis of Micro Variables for the Total Sample of SH3 (N=9).....	166
Table 5.48: Model Summary for Regression Analysis of Micro Variables of SH3	167
Table 5.49: ANOVA for Regression Analysis of Micro Variables of SH3	167
Table 5.50: Coefficient Summary for Regression Analysis of Micro Variable of SH3.....	167
Table 5.51: Pearson Correlation Analysis of Macro Variables for the Total Sample of SH3 (N=9).....	168
Table 5.52: Non-Parametric Correlation Analysis of Macro Variables for the Total Sample of SH3 (N=9).....	169
Table 5.53: Model Summary for Regression Analysis of Macro Variables of SH3	169
Table 5.54: ANOVA for Regression Analysis of Macro Variables of SH3.....	170
Table 5.55: Coefficient Summary for Regression Analysis of Macro Variable of SH3.....	170
Table 5.56: Summary of Empirical Research Findings	171
Table 5.57: Pearson Correlation Summary for Micro and Macro Variables of All Stakeholders....	173
Table 5.58: Regression Summary for Micro and Macro Variables of All Stakeholders	174
Table 6.1: Research Variable for Case Study Research.....	178
Table 6.2: Learner Remarks on E-learning Course by CII-IQ	185

Table 6.3: Learner Feedbacks on Faculty Members of CII-IQ Online Course	187
Table 6.4: Opinions of External Stakeholders of CII-IQ	189
Table 6.5: Opinions of External Stakeholders of Ecopoint	200
Table 6.6: List of Online Courses Offered by IzenBridge	202
Table 6.7: Comparative Summary of the Case Studies	210
Table 7.1: Synthesis of Learning from Action Research, Empirical Research, and Case-study Research	216
Table 7.2: Research Questions, Objectives, Propositions and Corresponding Research Findings	217

List of Appendices

Appendix I.....	A1
1.1 Independent Sample t-test for testing the difference between customer care response times between LP1 and LP2.....	A1
1.2 Independent Sample t-test for testing the difference between teacher response times between LP1 and LP2.	A1
1.3 One way ANOVA for testing the difference in active enrollments of LP1 among P1, P2 and P3 periods.....	A2
1.4 One way ANOVA for testing the difference in active enrollments of LP2 among P1, P2 and P3 periods.....	A3
1.5 One way ANOVA for testing the difference in active enrollments of LP2 among P-1, P0 and P1 periods.....	A5
1.6 Independent Sample t-test for testing the difference between growth of active enrollments of LP1 and LP2 during P1 and P2.	A7
1.7 Independent Sample t-test for testing the difference between growth of active enrollments of LP1 and LP2 during P2 and P3.	A7
1.8 Independent Sample t-test for testing the difference between growth of active enrollments of LP1 between P1-P2 and P2-P3 periods.	A8
1.9 Independent Sample t-test for testing the difference between growth of active enrollments of LP1 between P1-P2 and P2-P3 periods.	A8
1.10 Independent Sample t-test for testing the difference between the course ratings of LP1 and LP2.	A8
1.11 Independent Sample t-test for testing the difference between the teacher ratings of LP1 and LP2.	A9
1.12 Chi-Square test for testing the association between LP responsiveness and learner-satisfaction.	A10
1.13 Logistic Regression for testing the association between course rating elements and learner-satisfaction.	A11
1.14 Logistic Regression for testing the association between teacher rating elements and learner-satisfaction.	A14
Appendix II.....	A19
2.1 Questionnaire, Measures and Measurement Scale for Learners (SH-1)	A19
2.2 Questionnaire, Measures and Measurement Scale for Influencers (SH-2).....	A19
2.3 Questionnaire, Measures and Measurement Scale for Teachers (SH-3)	A20
Appendix III.....	A23
3.1 Factor Analysis for Macro Variable of SH1 (L_OPEX)	A23

3.2 Factor Analysis for Macro Variable of SH2 (I_OPEX)	A24
3.3 Factor Analysis for Macro Variable of SH3 (T_OPEX)	A25
3.4 Factor Analysis for Micro Variable of SH1 (L_EOP)	A26
3.5 Factor Analysis for Micro Variable of SH1 (L_QOS)	A27
3.6 Factor Analysis for Micro Variable of SH1 (L_DIF)	A28
3.7 Factor Analysis for Micro Variable of SH1 (L_OFI)	A30
3.8 Factor Analysis for Micro Variable of SH2 (I_QOS)	A31
3.9 Factor Analysis for Micro Variable of SH2 (I_DIF)	A32
3.10 Factor Analysis for Micro Variable of SH2 (I_OFI)	A33
3.11 Factor Analysis for Micro Variable of SH3 (T_QOS)	A34
3.12 Factor Analysis for Micro Variable of SH3 (T_DIF)	A36
3.13 Reliability Analysis on Primary Measures of SH1	A37
3.14 Reliability Analysis on Primary Measures of SH2	A38
3.15 Reliability Analysis on Primary Measures of SH3	A39
3.16 Independent Sample t-test for testing the difference of micro and macro variables of SH1 between G1 and G2.	A39
3.17 Non-parametric test for testing the difference of micro and macro variables of SH1 between G1 and G2.....	A41
3.18 Independent Sample t-test for testing the difference of micro and macro variables of SH2 between G1 and G2.	A42
3.19 Non-parametric test for testing the difference of micro and macro variables of SH2 between G1 and G2.....	A44
3.20 Independent Sample t-test for testing the difference of micro and macro variables of SH3 between G1 and G2.	A45
3.21 Non-Parametric test for testing the difference of micro and macro variables of SH3 between G1 and G2.....	A47
3.22 Correlation Analysis of Micro Variables for SH1	A49
3.23 Regression Analysis of Micro Variables for SH1	A50
3.24 Correlation Analysis of Macro Variables for SH1	A52
3.25 Regression Analysis of Macro Variables for SH1.....	A53
3.26 Correlation Analysis of Micro Variables for SH2	A54
3.27 Regression Analysis of Micro Variables for SH2.....	A56
3.28 Correlation Analysis of Macro Variables for SH2	A57

3.29 Regression Analysis of Macro Variables for SH2.....	A58
3.30 Correlation Analysis of Micro Variables for SH3	A59
3.31 Regression Analysis of Micro Variables for SH3.....	A61
3.32 Correlation Analysis of Macro Variables for SH3	A62
3.33 Regression Analysis of Macro Variables for SH3.....	A64

Nomenclature

Nomenclature used in Action Research

LP	Learner Provider	E-learning or online education/training providing organization
LP1	Learning Provider-1	Learning Provider-1 in Action Research
LP2	Learning Provider-2	Learning Provider-2 in Action Research
P1	Observation Period-1 during Action Research	July 2013-June 2014
P2	Observation Period-2 during Action Research	July 2014-June 2015
P3	Observation Period-3 during Action Research	July 2015-June 2016
P-1	Special Observation Period for LP2	July 2011-June 2012
P0	Special Observation Period for LP2	July 2012-June 2013

Nomenclature used in Empirical Research

G1	Learning Providers Group-1	More successful Learning Providers
G2	Learning Providers Group-2	Less Successful Learning Providers
SH1	Stakeholder Group-1	Learners
SH2	Stakeholder Group-2	Influencers (Parents of Student Learners and Department Heads of Employee Learners)
SH3	Stakeholder Group-3	Teachers responsible for delivering e-learning courses
OPEX	Operational Excellence	Macro Variable used for Stakeholders
SPCO	Strategic Positioning and Competitiveness	Macro Variable used for Stakeholders
FLEX	Strategic Flexibility	Macro Variable used for Stakeholders
COCH	Continuity and Change	Macro Variable used for Stakeholders

EXPT	Overall Stakeholder Expectation	Macro Variable used for Stakeholders
VAL	Value to Learner	Micro Variables used for Stakeholders
EOP	Ease of Operation	Micro Variables used for Stakeholders
QOS	Quality of Service	Micro Variables used for Stakeholders
DIF	Service Differentiation	Micro Variables used for Stakeholders
OFL	Operational Flexibility	Micro Variables used for Stakeholders
PFL	Process Flexibility	Micro Variables used for Stakeholders
NET	Adoption of New Technology	Micro Variables used for Stakeholders
EXP	Overall Stakeholder Expectation	Micro Variables used for Stakeholders
Prefix L_	Used in conjunction with Macro and Micro Variables to signify the specific Macro and Micro Variable for the Stakeholder where 'L' stands for 'Learner', 'I' stand for 'Influencer' and 'T' stands for 'Teacher'.	
Prefix I_		
Prefix T_		