

**MANAGEMENT OF CONTINUITY AND CHANGE FORCES
IN PRIVATE HIGHER TECHNICAL EDUCATION**

by

UMESH CHANDRA PRASAD

Department of Management Studies

Submitted

In fulfillment of the requirements of the degree of

Doctor of Philosophy

to the



Indian Institute of Technology Delhi

July, 2011

Dedicated to my father

Late Shri Laljee Prasad

Who always used to inspire us to think out of the box.

CERTIFICATE

This is to certify that the thesis entitled “**Management of Continuity and Change Forces in Private Higher Technical Education**”, which is being submitted by Mr. Umesh Chandra Prasad 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 our 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.

(Dr. R K Suri)
Research Supervisor
CEO, PR Media Pvt Ltd.
Ex-DG & VC Monad University,
803 New Cosmopolitan
Plot-33, Sector- 10, Dwarka,
New Delhi, India- 110075

(Prof. Sushil)
Research Supervisor
Department of Management Studies
Indian Institute of Technology Delhi
Hauz Khas, New Delhi – 110016
India

ACKNOWLEDGEMENTS

Completing this research has been a long journey for me helped by many hands. First and foremost, I would like to convey my gratitude to my thesis advisors Prof. Sushil and Dr. RK Suri. I sincerely express my indebtedness and deep sense of gratitude to Prof. Sushil, a dedicated researcher himself, for his invaluable guidance and inputs. Without his encouragement and timely, valuable suggestions, this thesis would have remained incomplete. But for his sustained questioning, patient listening and seeding thoughts, this work would not have been possible. I specially thank him for his patient listening to my arguments. I appreciate his idealistic, long term, big picture thinking thought processes in the field of strategic management and this thesis in particular and hope to simulate his way of thinking. . I thank him for reinforcing the need for perfection in every thing that is to be done. I hope to carry these lessons forward in my life.

I extend my heartfelt thanks to Dr. R.K. Suri, who helped me in different ways in shaping my understanding. He was instrumental in getting me into topic of this research. His patience, ability to switch between multiple topics, positive guidance and encouragement and his attention to detail has influenced me tremendously. I specially thanks external expert Dr Shyam Sethi for his valuable suggestion for inclusion of few area of work in this research. I am also thankful to the members of my Student Research Committee (SRC), Prof DK Banwet; chairman, Prof SS Yadav, Prof. S. K. Jain and Prof. Kanika T. Bhal for critically appraising this research and giving valuable inputs. I thank the other faculty members for their suggestions and support from time to time.

My acknowledgement would be incomplete without mentioning the motivation and unstinting support extended by my wife Mrs. Suyashwani Sheel Prasad. She has been a critique, guide and moral support in my various attempts at research. My deepest gratitude to Prof. S.K. Dey, Prof. A.K. Sinha, without their support, data collection would have been very difficult. They have been giving me continuous suggestions and remarks to improve my work. A special thanks to my elder daughter Ms. Pratiksha, for her assistance and support in various activities of this research. Her help and tremendous efforts for this research are

immensely valuable. My second daughter Ms. Samiksha has been a source of joy and happiness. I thank her for the inspiration which she rendered unknowingly.

I am grateful to the Chairman, Directors, Professors and Faculty members who have spared their valuable time in providing me with useful data and information required for the study. I would like to express my gratitude to all who helped me culling out secondary data.

My parents have been a source of encouragement in all my academic efforts. Their blessings and moral support has been critical input. Words are inadequate for expressing my gratitude to them. I also thank my brothers, especially elder brother Mr MN Prasad and late Bhabhi who has supported me in critical times.

I should not forget to place my sincere thanks to all my fellow Ph.D. scholars, especially Mr. Ramashankar, Mr. Amit and Mr. Sumant for their support, invaluable inputs in methodology, Dr. (Mrs.) Saboohi for brainstorming and valuable suggestions. I would also like to extend my sincere thanks to Mrs Haimanti Dey and Mr. Ribhu for editing the thesis and Mr. Anil for printing this thesis.

I appreciate the cooperation and aid extended by other staff members of DMS especially Mr. Bose and Mr. Tarjan and of course Ms Rejani.

The chain of my gratitude would definitely be incomplete if I would forget to thank the first cause of this chain, using Aristotle's words, 'The Prime Mover', deepest and sincere gratitude for inspiring and guiding this humble being.

(Umesh Chandra Prasad)

ABSTRACT

Education is one of the key determinants of human development. However, the role of education, especially higher education, as a facilitator and enabler for development is one thing on which diverse perspectives may be in agreement. Strategic thinkers in the field of education are carefully making their contribution in the shaping up of Private Higher education in India. In last decade, institutes of Private Higher Technical education have been mushrooming by a particular type of entrepreneurs. Quality education is a great concern for stake holders. Providing access to higher education is a mammoth task requiring huge capital and operational investment, hence participation of private sector is considered as one of the option by various Governments. On one side almost all strategic planners of India think that it is a social sector activity and must be provided by Government as a social responsibility. But independent (not in social service) thinkers not finding outcome in proportion of investments from government funded Institutions like IITs, IIMs. There is an essential need for paradigm shift in approach for governance of Institutes of Higher Education to be treated as service providers rather than simply a social system. This radical change while maintaining continuity is the requirement of the time to make institutions deliver so as to make India as Knowledge Hub. This research is aimed to find the continuity forces and change forces acting in private higher technical education system in India aimed at its better management.

Review of the literature gives a clearer picture of the paradoxical dilemma that private higher technical education institutions are facing in terms of continuity and change forces. The set of strategies discussed in the literature review gives types and levels of continuity and change forces in the field. Though the concerns of continuity and change are reflected in all the strategies, the confluence of continuity and change is strongest in case of 'Strategic Flexibility for Integrating Opposites'. The integration of two opposing forces, when both are high, is more challenging as compared to the cases when either or both the opposing forces are of low magnitude. Total Interpretive Structural Modeling has been used to prioritize the critical forces of continuity and change which are affecting the private higher technical education sector of India. Along with this the C-C (continuity-change) Matrix have been used

to determine the kind of strategy that would be required to efficiently manage the forces of continuity and change to make a successful and a profitable conceptual model of a private higher technical education institution in business domain of global standard.

Developed countries have most of the Higher Education in Private Sector domain and quality is being maintained as it is being maintained in the Industry and role of Government is to make policy and regulate. Most of the developing countries are trying to cope with the globalization and rising competition from Public institutions and foreign entrants. Indian education sector has been guided by historical forces, socio-economic trends and changing demographics. An innovative approach has been applied perhaps for the first time in the study for enhancing the reliability of the structural models developed. It is evident from the empirically validated model, performance was highly dependent and influenced by all the other micro constructs of continuity as well as change forces. In the final model, empirically strongest continuity forces were determined to be 'Core Competence' and 'Infrastructure', where as 'Global Standard' was main driving change force. The case study of two institutions also supports the validated model for private higher technical education.

Finally the developed frame work suggest that continuity forces and change forces can be managed at micro level to improve the performance of an institute where as it can be managed at macro level to improve the higher education system and also facilitate change processes in Government policy and legislation to enable private institution to become globally competitive.

CONTENTS

Contents	Page No
<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>xv</i>
<i>List of Tables</i>	<i>xix</i>
<i>List of Appendices</i>	<i>xxv</i>
<i>Nomenclature</i>	<i>xxvii</i>
Chapter 1 Introduction	1
1.1 Introduction	1
1.2 Higher Education from Public Goods to Service Sector	4
1.3 Continuity and Change in Private Higher Education	5
1.4 Need for Study of Education as Service Sector	7
1.5 Objectives of Study	8
1.6 Scope of the Study	9
1.7 Organization of Thesis	9
1.8 Concluding Observations	11
Chapter 2 Literature Review	13
2.1 Introduction	13
2.2 Change Management	13
2.2.1 Prominent Views on Change Management	15
2.3 Change Forces	18
2.4 Continuity Management	20
2.4.1 Continuity Forces	20
2.5 Management of Strategic Change Verses Continuity	23
2.5.1 Convergence of Continuity and Change	24

2.6 Change Management in Private Higher Education	26
2.6.1 Changing Trends in Private Higher Education	27
2.6.2 Scott's Model of Change Management in Higher Education	28
2.6.3 The Thomas and Postlethwaite Framework	30
2.7 Flexible Strategies for Continuity-Change Management	31
2.8 Gaps in the Literature	36
2.9 Concluding Observations	37
 Chapter 3 Design of Study	 39
3.1 Introduction	39
3.2 Need for Study and Research Questions	39
3.3 Research Variables	40
3.3.1 Continuity Forces in Private Higher Education Sector	40
3.3.2 Change Forces in Private Higher Education Sector	43
3.4 Justification of Selection of the Variables	45
3.5 Research Propositions	45
3.6 Proposed Conceptual Framework/Model for Research	46
3.7 Hypotheses	47
3.8 Scope of the Research	50
3.9 Research Methodology	50
3.9.1 Phase I: Preliminary Groundwork	51
3.9.2 Phase II: Conceptual Framework and Hypotheses Formulation	52
3.9.3 Phase III: Empirical Study for Hypotheses Testing	55
3.9.4 Phase IV: Case Study-Interpreting the Research Model	59
3.9.5 Phase V: Synthesis of Results	60
3.9.6 Justification for the Research Methodology Chosen	62
3.10 Concluding Observations	64
 Chapter 4 Private Higher Education Sector: A Global Perspective	 65
4.1 Introduction	65
4.2 An Overview of Global Trends in Education Sector	66

4.3 Private Higher Education in Malasia	68
4.3.1 Introduction	68
4.3.2 Issues of Continuity and Change	70
4.3.3 Changes Planned	70
4.4 Private Higer Education in South Africa	72
4.4.1 Introduction	72
4.4.2 Issues of Continuity and Change in Private Higher Education	73
4.4.3 Measures Taken for Reforms	75
4.5 Private Higher Education in Philippines	75
4.5.1 Introduction	75
4.5.2 Issues in Private Higher Education	78
4.5.3 Strategic Changes Undertaken	79
4.6 Private Higher Education in China	80
4.6.1 Introduction	80
4.6.2 Transformation of the Higher Education in China	82
4.7 Private Higher Education in Australia	84
4.7.1 Introduction	84
4.7.2 Issues to be Addressed	85
4.7.3 Significant Changes	86
4.8 Comparative Analysis of the Countries	87
4.9 Concluding Observations	92
 Chapter 5 Private Higher Education: Indian Perspective	 95
5.1 Introduction	95
5.2 Structure of Indian Higher Education System	96
5.3 Regulatory and Statutory Bodies for Higher Education	99
5.4 Important Reports on Management of Education	100
5.5 Recent Bills Passed for Higher Education (2010-2011)	104
5.6 Expansion of Higher Education Institutional Capacity	105
5.7 Role of Private Higher Education Institutions	109
5.8 Government Initiatives : XIth Five Year Plan	112

5.9 Macro View: Management of Continuity and Change	113
5.10 Concluding Observations	119

Chapter 6 Validation And Interpretive Modeling Of Continuity And Change In Private Higher Technical Education	121
6.1 Introduction	121
6.2 Validating Continuity and Change Forces	122
6.2.1 The Need for Validation of Forces	122
6.2.2 Expert Survey Methodology	122
6.2.3 Results and Discussion	125
6.2.4 Synthesis of the Expert Survey	128
6.3 Interpretive Modelling of Continuity and Change Forces	129
6.3.1 Introduction to TISM (Total Interpretive Structure Modeling)	130
6.3.2 Methodology Adopted for Modelling (TISM)	130
6.3.3 TISM for Change Forces Affecting Private Higher Technical Education	134
6.3.4 TISM for Continuity Forces Affecting Private Higher Technical Education	140
6.4 Concluding Observations	144

Chapter 7 Opinion Survey, Questionnaire Development and Univariate Analysis	147
7.1 Introduction	147
7.2 Design of the Questionnaire	148
7.3 Validity of the Questionnaire	151
7.3.1 Validity	151
7.4 Questionnaire Testing and Final Questionnaire	154
7.5 Data Collection	155
7.6 Respondent's Profile	156
7.7 Factor Analysis	157
7.7.1 Factor Analysis for Macro Variables	157
7.7.2 Factor Analysis for Micro Variables	159

7.8 Reliability of the Questionnaire	160
7.9 Univariate Analysis	161
7.10 Cluster Analysis and Discriminant Analysis	164
7.11 Concluding Observations	167
Chapter 8 Empirical Validation of Proposed Research Framework	169
8.1 Introduction	169
8.2 Testing Hypotheses of Association	170
8.2.1 Methodology Adopted for Testing Hypotheses of Association	170
8.2.2 Correlation Analysis	170
8.3 Testing Hypotheses of Association for Continuity and Change Forces	172
8.3.1 Interdependence of Continuity Forces	173
8.3.2 Interdependence of Change Forces	177
8.4 Hypothesis of Interrelation between Continuity and change	181
8.4.1 Continuity Forces as Dependent Variables	182
8.4.2 Change Forces as Dependent Variables	185
8.4.3 Impact on Performance with Change and Continuity Forces taken Together	192
8.5 Discussion on Hypotheses Testing of Macro Variables	194
8.6 Concluding Observations	197
Chapter 9 Case Studies – Interpreting the Research Model	199
9.1 Introduction	199
9.2 Methodology of the Case Study	201
9.3 Case Study: ABC Institute of Engineering and Technology	203
9.3.1 Background of the Institution	203
9.3.2 Continuity Forces affecting ABC Institute	204
9.3.3 VDB Analysis of the Continuity Forces: ABC Institute	207
9.3.4 Change Forces affecting ABC Institute	208
9.3.5 Impact Analysis of the Change Forces: ABC Institute	211
9.3.6 Discussion of Present Strategy of ABC Institute	213
9.3.7 Interpretation of Model	214

9.4 Case Study 2: XYZ Institute of Engineering and Technology	215
9.4.1 Background	215
9.4.2 Continuity Forces affecting XYZ Institute	218
9.4.3 VDB Analysis of the Continuity Forces: XYZ Institute	221
9.4.4 Change Forces affecting XYZ Institute	222
9.4.5 Impact Analysis of the Change Forces: XYZ Institute	225
9.4.6 Discussion of Present Strategy of XYZ Institute	227
9.4.7 Interpretation of Model	228
9.5 Cross Validation of Empirical Model	229
9.6 Comparative Study and Learning from the Case Studies	231
9.7 Concluding Observations	234
 Chapter10 Synthesis of Learning and Conclusion	 235
10.1 Introduction	235
10.2 Summary of Major Findings	235
10.2.1 Identification, Validation, Expert Survey and TISM	236
10.2.2 Learning from Opinon Survey	237
10.2.3 Learning from Case Study	238
10.3 Revisiting Research propositions	240
10.4 Revisiting Research Hypotheses	241
10.5 Major Recommendations	242
10.6 Implications for Key Stakeholders	243
10.6.1 Implications for Practitioners	243
10.6.2 Implications for the Academia	245
10.7 Significant Research Contributions	245
10.8 Limitations of Study	246
10.9 Directions for Future Research	247
10.10 Concluding Observations	247
References	249
 Appendices	 A1-A64