ERP IMPLEMENTATION IN CHINA: SUCCESS INDICATORS AND CRITICAL SUCCESS FACTORS IN CHINESE TELECOM SOEs FROM THE PROJECT MANAGEMENT PERSPECTIVE

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ABSTRACT

Based upon a thorough literature review and ten years of professional Enterprise Resource Planning (ERP) experience in China, I have developed a practical ERP Success Model. The model includes six success indicators and fifteen critical success factors (CSFs). To ensure its comprehensiveness, the model has been tested through in-depth interviews with six Chinese ERP experts. After some revisions as a result of this, three top success indicators and eight top CSFs have been identified to form a simplified ERP Success Model.

The four state-owned enterprises (SOEs) of the Chinese telecom industry have been among the pioneers implementing ERP systems in China since 2000. Studies of these early birds’ successes in ERP implementation in China will certainly offer great insights into the development of ERP.

In view of the above, this paper reports on an in-depth study of the ERP systems implemented by the telecom industry in China. The particular focus is on all the four telecom SOEs that have implemented SAP or Oracle ERP systems from 2002 to 2007. In-depth semi-structured interviews using the ERP Success Model framework have been conducted with project managers of six ERP implementation cases in the four telecom SOEs.

Based on the project ratings obtained from the six telecom ERP implementation cases, the ERP Success Model was tested for its practicality. A rating analysis was formulated from the correlations between two sets of average performance ratings based separately on the six success indicators and the fifteen CSFs. The high correlations suggest that the ERP Success Model can be a valuable tool to guide practitioners towards a successful ERP implementation in China by focusing on the variables introduced in the model.

Furthermore, based on the interviews conducted and information collected, comprehensive analysis has produced answers to the following research questions.
Q.1: What are the key success indicators that can define a successful ERP implementation in China?

Q.1a: How do Chinese Telecom state-owned enterprises (SOEs) define ERP success?

Q.2: What are the critical success factors that lead to a successful ERP implementation in China?

Q.2a: Why are some ERP implementations in Chinese Telecom SOEs more successful than others?

Q.3: From a project management’s perspective, how do implementation processes affect the likelihood of ERP implementation success or failure in Chinese Telecom SOEs?

Finally, through the detailed analysis of all the six target cases, I make the following practical recommendations for ERP implementation in China particularly for Chinese Telecom SOEs, hoping they may contribute to the future success of ERP development in China.

1. Importance of Establishing “Nationwide Templates”
2. Importance of Top Management Support
3. Necessity of User Involvement
4. Users’ need for Education and Training
5. Value of Finance Led ERP Projects
6. Minimal Software Customization plus the Need for Localization
7. More Attention to Culture and People related CSFs
8. The Need to Deal with Personal Interest
9. The Need to Deal with Fears of Losing Job
10. Balancing the Need for Controls with Security Loading
11. Addressing Functional Needs
The findings from this research have broad implications for ERP implementation in China, particularly for SOEs.

**Keywords:** ERP Implementation in China, ERP Critical Success / Failure Factors, ERP Success Indicators, ERP Success Model, Telecommunication Companies, State-Owned Enterprise.
# TABLE OF CONTENTS

## 1. INTRODUCTION

1.1 Research Background ................................................................. 1
   1.1.1 ERP and its Significance ...................................................... 1
   1.1.2 ERP Cases in the Telecom Industry ...................................... 3
   1.1.3 Need for Distributed Implementation ................................. 4
   1.1.4 Focus on Administrative ERP ............................................ 7

1.2 High Demand of ERP Implementation in China ................................. 9
   1.2.1 Growth of ERP Market in China ....................................... 9
   1.2.2 ERP Market Analysis of Telecom Industry in China .......... 11

1.3 Problem of High Failure Rate ..................................................... 16
   1.3.1 Statistics about Global ERP Failure ................................. 16
   1.3.2 Statistics about ERP Failure in China ............................... 18

1.4 Research Purposes and Scope ................................................... 20

1.5 Dissertation Organization ......................................................... 25

## 2. LITERATURE REVIEW

2.1 ERP Definitions ........................................................................ 28

2.2 ERP: Benefits & Limitations .................................................... 32

2.3 Definitions of Successful ERP Implementation ............................ 33
   2.3.1 Information Systems Literature ........................................ 34
   2.3.2 ERP related Literature .................................................... 37

2.4 ERP: Reasons for Failure ......................................................... 40

2.5 Critical Success Factors for ERP Implementation ....................... 44

2.6 Impact of Chinese Culture on ERP Implementation .................. 51
2.6.1 Hofstede National Culture Model ................................................................. 51
2.6.2 Hofstede Organizational Culture Model ....................................................... 53
2.6.3 Five Culture Failure Reasons ...................................................................... 55
2.6.4 Relationship Between IT Implementation and Chinese Culture ................. 57
2.7 Process Based Perspective of ERP Implementation ........................................ 58

3. DESIGN OF THE ERP SUCCESS MODEL ...................................................... 62

3.1 Developing the New Critical Success / Failure Factor Model ....................... 62
3.1.1 Combining the Models of Zhang et al. and Umble & Umble ...................... 66
3.1.2 Expanding Zhang et al. Model in terms of Cultural Factors ...................... 68
3.1.3 Summary of the New Critical Success / Failure Factor Model .................. 71
3.2 Design of the Success Indicator Model .......................................................... 77
3.3 Summary of the Newly Created ERP Success Model .................................... 82

4. RESEARCH METHOD ...................................................................................... 84

4.1 Methods and Tools Used: Case Study and Content Analysis ....................... 84
4.2 Unit of Analysis: Provincial ERP Implementation .......................................... 85
4.3 Target Respondent: Project Manager ............................................................. 87
4.4 Scope of Study: Six ERP Implementation Cases ........................................... 90
4.5 Design of Interview Protocol ...................................................................... 91
4.6 Data Collection Procedure ......................................................................... 101

5. RESEARCH PLAN AND MILESTONES ......................................................107

6. TESTING AND ENHANCING THE ERP SUCCESS MODEL ................. 110

6.1 Success Indicators Analysis with H/M/L Ratings ........................................ 113
6.1.1 Comprehensive Model: the Six Success Indicators .................................. 113
6.1.2 “Nationwide Templates” as the Top Success Indicator ............................ 114
6.1.3 “Organizational Impact” Ranks 2nd ....................................................... 114
6.1.4 “On Time” and “Within Budget” Rank 3rd and 4th ................................. 115
6.1.5 “User Satisfaction” and “Individual Impact” are of Least Concern ............ 115
6.2 Success Indicators Analysis with H/M/L Ratings Plus Top 3 Ranking .............. 117

6.2.1 “Nationwide Templates” is the “Top of the Top” ............................................ 117

6.2.2 “On Time” Becomes the Second Highest Success Indicator ..................... 118

6.2.3 “Organizational Impact” Continues to Show High Importance .................... 118

6.2.4 “Within Budget” – Remains the 4th MOST Important Indicator ............... 118

6.2.5 “User Satisfaction” and “Individual Impact” Remain the Two Least Important Indicators ......................................................................................................................... 119

6.2.6 A List of Top 3 Success Indicators is Formed ............................................. 119

6.3 CSF Analysis with H/M/L Ratings ................................................................. 121

6.3.1 Comprehensive Model with 15 CSFs .......................................................... 121

6.3.2 List of Top 7 CSFs .......................................................................................... 122

6.3.3 Top Management Support ............................................................................ 122

6.3.4 Company-wide Support .............................................................................. 122

6.3.5 Business Process Reengineering ................................................................. 123

6.3.6 Education and Training ............................................................................... 123

6.3.7 User Involvement ......................................................................................... 124

6.3.8 Information Quality ...................................................................................... 124

6.3.9 ERP implementation Vendor Quality .......................................................... 124

6.4 CSF Analysis with H/M/L Ratings Plus Top 3 Ranking .................................. 126

6.4.1 “Project Management” is added to the list of Top 7 ..................................... 126

6.4.2 “Top Management Support” as Top of the Top .......................................... 127

6.4.3 “User Involvement” is the 2nd Most Important CSF .................................... 128

6.4.4 The Top 8 CSFs .......................................................................................... 129

7. CASE STUDIES SUMMARY ............................................................................. 130

7.1 Case 1: RJMO ................................................................................................. 134

7.1.1 Case Background ......................................................................................... 134

7.1.2 Implementation Methodology ..................................................................... 136
7.1.3 Findings Summarized by Success Indicators and CSFs .................................. 137
7.2 Case 2: RSNO ..................................................................................................... 141
7.2.1 Case Background ............................................................................................ 141
7.2.2 Implementation Methodology .......................................................................... 143
7.2.3 Findings Summarized by Success Indicators and CSFs .................................. 144
7.3 Case 3: PGTS ...................................................................................................... 149
7.3.1 Case Background ............................................................................................. 149
7.3.2 Implementation Methodology .......................................................................... 151
7.3.3 Findings Summarized by Success Indicators and CSFs .................................. 153
7.4 Case 4: PZUO ...................................................................................................... 158
7.4.1 Case Background ............................................................................................. 158
7.4.2 Implementation Methodology .......................................................................... 160
7.4.3 Findings Summarized by Success Indicators and CSFs .................................. 161
7.5 Case 5: PBMO ..................................................................................................... 166
7.5.1 Case Background ............................................................................................. 166
7.5.2 Implementation Methodology .......................................................................... 167
7.5.3 Findings Summarized by Success Indicators and CSFs .................................. 169
7.6 Case 6: PLNO ..................................................................................................... 174
7.6.1 Case Background ............................................................................................. 174
7.6.2 Implementation Methodology .......................................................................... 175
7.6.3 Findings Summarized by Success Indicators and CSFs .................................. 177
8. DATA ANALYSIS OF THE SIX CASES ......................................................... 181
8.1 High Level Summary Of The Six Cases ............................................................ 182
8.1.1 Industry ............................................................................................................ 183
8.1.2 Project duration ............................................................................................... 183
8.1.3 Company Size .................................................................................................. 184
8.1.4 Pilot or Rollout .................................................................................................. 184
8.1.5 Project Objectives .................................................................................................. 184
8.1.6 Time Spent on Customization ............................................................................ 185
8.2 Rating Analysis of the Six Cases ............................................................................. 186
8.2.1 Conduct Correlation Analysis ............................................................................. 188
8.2.2 Use the Model to Predict Project Outcome .......................................................... 188
8.2.3 Projects with Overall Ratings of “+++” (i.e. RJMO, RSNO, PLNO) ................... 189
8.2.4 The Only Project with Negative Overall Rating (i.e. PZUO) ............................ 189
8.3 Rating Analysis of the Six Cases with Top 3 Ranking Bonus .................................. 191
8.3.1 “Education and Training” is the best Performed CSF ....................................... 192
8.3.2 “User Involvement” and “Company-wide Support” are Critical ....................... 192
8.3.3 “Culture” related CSFs are Poorly Performed .................................................... 193
8.3.4 Performance of “People” related CSFs are Polarized ........................................ 194
8.3.5 “Project Management” and “ERP Implementation Vendor Quality” ............... 195
9. DISCUSSION .............................................................................................................. 196
9.1 Answers to the Research Questions ....................................................................... 197
9.1.1 General Phenomena Discovered ....................................................................... 197
9.1.2 Answers to the Research Question 1 .................................................................. 202
9.1.3 Answers to the Research Question 1a ................................................................. 206
9.1.4 Answers to the Research Question 2 ................................................................. 211
9.1.5 Answers to the Research Question 2a ............................................................... 216
9.1.6 Answers to the Research Question 3 ................................................................. 223
9.2 Research Contributions .......................................................................................... 236
9.2.1 Establishment of an ERP Success Model ......................................................... 236
9.2.2 Special Success Indicator in SOEs ..................................................................... 237
9.2.3 Limited Studies Focusing on SOEs in China ..................................................... 238
9.2.4 Good References for Telecom Industry in China ............................................. 238
9.2.5 Application to Other Industries ........................................................................... 239
9.3 Limitations Of The Research

9.3.1 Only Pseudonyms Are Used

9.3.2 Only Focusing on Telecom Carriers

9.3.3 Only Six Cases were Analyzed

9.3.4 Only Project Managers were Interviewed

9.3.5 Minimal Study Has Been Conducted on Process Based Perspective

9.4 Further Work for Study

9.4.1 Extend the Study to the New China Unicom Group

9.4.2 Extend the Study to Equipment Providers

9.4.3 Extend the Study in China to the Banking Industry

9.4.4 More Comprehensive Quantitative Research

9.4.5 Include a Wider Range of Subjects

9.4.6 Conduct More In-depth Study on the Culture Effort in China

9.4.7 Conduct More In-depth Study on Process Based Perspective

9.4.8 Test the ERP Success Model Beyond China

10. PRACTICAL ADVICE FOR IMPLEMENTING ERP IN CHINA

10.1 Importance of Establishing “Nationwide Templates”

10.2 Importance of Top Management Support

10.3 Necessity of User Involvement

10.4 Users’ need for Education and Training

10.5 Value of Finance Led ERP Projects

10.6 Minimal Software Customization Plus the Need for Localization

10.7 More Attention to Culture and People Related CSFs

10.8 The Need to Deal with Personal Interest

10.9 The Need to Deal with Fears of Losing Job
10.10 Balancing the Need for Controls with Security Loading ........................................ 264
10.11 Addressing Functional Needs .............................................................................. 266

11. CONCLUSIONS ........................................................................................................ 270
11.1 ERP Success Model Created ............................................................................... 270
11.2 Answers to The Research Questions ..................................................................... 273
11.3 The Practical Advice for Implementing ERP in China ......................................... 276

REFERENCES ............................................................................................................ 281

APPENDIX1: 1ST ROUND RESPONSES TO THE QUALIFYING PANEL ..... 287
APPENDIX2: 2ND ROUND RESPONSES TO THE QUALIFYING PANEL.. 290
APPENDIX3: INTERVIEW PROTOCOL ........................................................................ 293
APPENDIX 4: ERP MARKET ANALYSIS OF BANKING INDUSTRY IN CHINA ................................................................. 306
APPENDIX 5: THE TELECOM AND BANKING INDUSTRIES COMPARISON 309