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Validity of Business Excellence Models: A Conceptual and Empirical Analysis

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Validity of Business Excellence Models: A Conceptual and Empirical Analysis

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Abstract

The validity of three key Business Excellence (BE) models used in the Asia Pacific—the Australian Business Excellence Framework (Australia), the Baldrige Criteria for Performance Excellence (New Zealand) and the Singapore Quality Award Criteria (Singapore)—was examined from a *conceptual* as well as a *predictive* standpoint.

Unlike in many past studies, in this study the validity of the measurement criteria stipulated in BE models have been directly assessed. The conceptual validity of the three BE models was studied through a generic theoretical model using the partial least squares-based structural equation modelling (PLSBSEM) method. Apart from measurement validity, the strengths of the hypothesised causal relationships between the constructs of the BE models and their practical implementations were also examined under conceptual validity. The predictive validity of the three BE models was examined through linear predictive models involving *enablers*—being measures in BE models that cover what organisations actually do in order to achieve business outcomes—as predictors and *business outcomes* as responses. Alongside predictive validity, the reasonableness of the stipulated weights of the enablers was also examined. Other empirical and pragmatic inquiries covered in this study included: (a) a study of the effect of “industry attractiveness” on financial and market performance, and (b) a study of the relationship between BE constructs and “national cultural dimensions”.

Results revealed that although the three BE models fulfilled the basic requirements of measurement validity, against more stringent criteria such as those used in psychometrics, they showed low levels of validity. The possible reasons for this were examined and the ways of overcoming the shortcoming were suggested. The generic theoretical model was found to be statistically significant across all three settings: Australia, New Zealand and Singapore. As regards predictive validity, it was observed that enablers appear to be good predictors of business outcomes (thus establishing predictive validity) although there was scope for improvement of the existing weighting scheme of the enablers. This study is important because many organisations in the region use BE models with the expectation of improving their performance in key results areas and hence there is a need to demonstrate that the BE models are based on sound concepts.

Table of Contents

	Page
Acknowledgements	i
Abstract	iii
List of Acronyms	ix
List of Figures	x
List of Tables	xiii
CHAPTER 1: INTRODUCTION	1
1.1 INTRODUCTION	1
1.2 AN OVERVIEW OF BUSINESS EXCELLENCE MODELS AND ISSUES SURROUNDING THEM	2
1.3 KEY RESEARCH THEMES, CRITERIA FOR RESEARCH AND THE IMPORTANCE OF THIS RESEARCH	6
1.3.1 Key Research Themes Relevant to the Study	6
1.3.1.1 The First Theme: The Conceptual Aspects of Validity	6
1.3.1.2 The Second Theme: The Empirical Aspects of Validity	9
1.3.1.3 The Third Theme: The Cultural Aspects	11
1.3.2 Criteria for the Research and Assumptions on the Assessors.....	12
1.3.3 Data Availability	13
1.3.4 Importance of this Study	14
1.4 AIM AND OBJECTIVES OF THE RESEARCH	15
1.5 A ROADMAP OF THE RESEARCH	16
1.6 DELIMITATIONS AND LIMITATIONS OF THE RESEARCH	20
CHAPTER 2: LITERATURE REVIEW PART I - MEASUREMENT, TESTING AND ASSESSMENT OF THEORETICAL MODELS	21
2.1 INTRODUCTION	21
2.2 PRINCIPLES OF MEASUREMENT AS APPLIED TO SOCIAL SCIENCES	21
2.2.1 Definition and Enumeration of Key Terms	21
2.2.2 Modelling of Constructs	23
2.2.2.1 The Standard Form of a Construct	23
2.2.2.2 Alternative Forms of a Construct	25
2.3 MEASUREMENT VALIDITY	27
2.3.1 Content Validity	27
2.3.2 Predictive Validity	28
2.3.3 Construct Validity	29
2.3.3.1 Widely Used Methods of Establishing Construct Validity	30
2.3.3.2 Conditions that Threaten Construct Validity	31
2.4 OTHER FACETS OF VALIDITY	33
2.4.1 Internal Validity	33
2.4.2 Statistical Conclusion Validity	33
2.4.3 External Validity	34

	Page
2.5 STRUCTURAL EQUATION MODELLING	34
2.5.1 The Covariance Approach	35
2.5.1.1 Path Analysis	36
2.5.2 The Partial Least Squares Approach	36
2.6 PARTIAL LEAST SQUARES REGRESSION	40
2.7 CHAPTER CONCLUSION	41
CHAPTER 3: LITERATURE REVIEW PART II—PRIMARY LITERATURE	42
3.1 INTRODUCTION	42
3.2 QUALITY, TOTAL QUALITY MANAGEMENT AND BUSINESS EXCELLENCE	43
3.2.1 The Concept of ‘Quality’	43
3.2.2 The Deming Management Method	45
3.2.3 Other Operationalisations of Total Quality Management (TQM)	51
3.2.4 TQM and Management Theory	51
3.2.5 TQM vs. Business Excellence (BE)	58
3.2.6 Key Areas of Debate on the Goodness of Business Excellence Models	59
3.3 STRATEGIC MANAGEMENT CONCEPTS RELEVANT TO BUSINESS EXCELLENCE MODELS	61
3.3.1 The Industry-Based View of a Competitive Strategy	62
3.3.1.1 The Value Chain Model.....	63
3.3.2 The Resource-Based View of a Competitive Strategy	65
3.3.3 Human Resources as Strategic Assets	67
3.3.3.1 Strategic HRM Concepts and Best Practice HRM	69
3.3.4 Individual and Organisational Knowledge as Strategic Assets	72
3.4 VALIDITY EVIDENCE OF THE BCPE	74
3.4.1 Direct Evidence of the Validity of the BCPE	76
3.4.1.1 Studies on Measurement Validity	76
3.4.1.2 Studies on Statistical Conclusion Validity	78
3.4.1.3 Other Explanations on the Relationships Between the Constructs	83
3.4.2 Indirect Evidence of the Validity of the BCPE	84
3.5 VALIDITY EVIDENCE OF THE ABEF AND THE SQAC	87
3.6 STUDIES ON CRITERION WEIGHTS OF BUSINESS EXCELLENCE MODELS	89
3.7 BUSINESS EXCELLENCE AND NATIONAL CULTURE	93
3.7.1 Quantitative Studies	93
3.7.2 Qualitative Studies	96
3.8 CHAPTER CONCLUSION	98
CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY	99
4.1 INTRODUCTION	99
4.2 RESEARCH PARADIGMS AND PHILOSOPHICAL ASSUMPTIONS	99
4.2.1 The Positivistic Paradigm	99
4.2.2 The Interpretive Paradigm	101
4.2.3 Alternative Paradigms	101
4.2.4 Commensurability of Paradigms	102
4.2.5 The Author’s Stance	104
4.3 THE PROPOSITIONS	105

	Page
4.3.1 Propositions Linked to the First Theme [P1 and P2]	106
4.3.1.1 The Theoretical Model	106
4.3.2 Propositions Linked to the Second Theme [P3, P3a, and P4]	117
4.3.2.1 The Correlation Between Enablers and Business Results	118
4.3.2.2 The Effect of Industry Attractiveness	118
4.3.2.3 The Fairness of Weights	121
4.4 DATA COLLECTION AND SCREENING	122
4.4.1 Australian Data	124
4.4.2 New Zealand Data	126
4.4.3 Singaporean Data	128
4.4.4 Data Screening	131
4.5 PROCEDURES USED TO TEST THE PROPOSITIONS	134
4.5.1 Procedure of Testing Proposition P1	134
4.5.2 Procedure of Testing Proposition P2	140
4.5.3 Procedure of Testing Propositions P3 and P3a	141
4.5.4 Procedure of Testing Proposition P4	142
4.6 ANALYSIS OF THE THIRD RESEARCH THEME	143
4.7 CHAPTER SUMMARY AND CONCLUSION	145
CHAPTER 5: DESCRIPTIVE STATISTICS	145
5.1 INTRODUCTION	145
5.2 AUSTRALIAN BUSINESS EXCELLENCE AWARD APPLICANTS	145
5.2.1 Statistics on General Performance	145
5.2.2 General Statistics of the Applicants	149
5.2.3 Correlations Involving Measurement Items and Categories	150
5.3 NEW ZEALAND BUSINESS EXCELLENCE AWARD APPLICANTS	154
5.3.1 Statistics on General Performance	154
5.3.2 General Statistics of the Applicants	158
5.3.3 Correlations Involving Measurement Items and Categories	159
5.4 SINGAPOREAN QUALITY CLASS APPLICANTS	161
5.4.1 Statistics on General Performance	161
5.4.2 General Statistics of the Applicants	164
5.4.3 Correlations Involving Measurement Items and Categories	165
5.5 CHAPTER SUMMARY	168
CHAPTER 6: FINDINGS PART I—THE EVIDENCE OF CONCEPTUAL VALIDITY	170
6.1 INTRODUCTION	170
6.2 THE MEASUREMENT VALIDITY OF THE BUSINESS EXCELLENCE MODELS	170
6.2.1 The Scale Reliability	170
6.2.2 The Evidence of Construct Validity	172
6.2.3 Possible Reasons for Low Construct Validity	185
6.2.3.1 The Highly Standardised Nature of BE Models	186
6.2.3.2 Existence of a Single Construct That Reflects the Enabler Criteria	189
6.2.3.3 Formative Constructs	191
6.2.3.4 The Hawthorne Effect	195
6.2.4 Conclusions on the Issue of Low Construct Validity	196
6.2.5 The Position with Regard to the First Proposition	198

	Page
6.3 THE STATISTICAL CONCLUSION VALIDITY OF THE BUSINESS EXCELLENCE MODELS	199
6.3.1 The Overall Goodness of Fit of the Models	199
6.3.2 Practical Implications of the Structural Models	200
6.3.2.1 Relationships Pertaining to the ABEF	201
6.3.2.2 Relationships Pertaining to the BCPE	204
6.3.2.3 Relationships Pertaining to the SQAC	207
6.3.3 Modified Structural Models	208
6.3.3.1 Practical Implications of the Modified Structural Models	210
6.3.4 The Position with Regard to the Second Proposition	212
6.4 COMPARISON AGAINST A VALIDATED SELF-ASSESSMENT INSTRUMENT	212
6.4.1 Construct Validity	213
6.5 CHAPTER SUMMARY AND CONCLUSION	214
CHAPTER 7: FINDINGS PART II—EVIDENCE OF PREDICTIVE VALIDITY AND RELATED MATTERS	216
7.1 INTRODUCTION	216
7.2 RELATIONSHIP BETWEEN THE TOTAL ENABLER SCORE AND BUSINESS RESULTS	216
7.2.1 Results of the Test on the Variables of the ABEF	217
7.2.2 Results of the Test on the Variables of the BCPE	218
7.2.3 Results of the Test on the Variables of the SQAC	219
7.2.4 Position with Regard to the Third Proposition	219
7.3 EFFECT OF INDUSTRY ATTRACTIVENESS ON FINANCIAL AND MARKET RESULTS	220
7.3.1 The Results of SQC Applicants	220
7.3.2 Position with Regard to the Subproposition of the Third Proposition	222
7.4 THE LINEAR RELATIONSHIP BETWEEN ENABLERS AND BUSINESS RESULTS	223
7.4.1 Results Pertaining to the ABEF	224
7.4.1.1 Determination of the Optimum Number of Components	224
7.4.1.2 Regression Coefficients	227
7.4.1.3 Practical Implementations for the ABEF	229
7.4.1.4 The Question of Weights for the Enabler Criteria	231
7.4.2 Results Pertaining to the BCPE	234
7.4.2.1 Determination of the Optimum Number of Components	234
7.4.2.2 Regression Coefficients	236
7.4.3 Results Pertaining to the SQAC	238
7.4.3.1 Determination of the Optimum Number of Components	238
7.4.3.2 Regression Coefficients	239
7.4.3.3 Practical Implementations for the SQAC	240
7.4.3.4 The Question of Weights for the Enabler Criteria	241
7.4.4 Position with Regard to the Fourth Proposition	242
7.5 BUSINESS EXCELLENCE CATEGORIES AND NATIONAL CULTURE	243
7.6 CHAPTER SUMMARY AND CONCLUSION	245
CHAPTER 8: CONCLUSIONS	247
8.1 INTRODUCTION	247
8.2 CONCLUSIONS ON THE FINDINGS UNDER EACH SPECIFIC RESEARCH OBJECTIVE	248

	Page
8.2.1 Findings on Objective 1	248
8.2.2 Findings on Objective 2	250
8.2.3 Findings on Objective 3	252
8.2.4 Findings on Objective 4	253
8.2.5 Findings on Objective 5	254
8.3 HOW THE STUDY HAS INFLUENCED THE CURRENT UNDERSTANDING OF BE MODELS	254
CHAPTER 9: IMPLICATIONS, LIMITATIONS, AND FINAL THOUGHTS	259
9.1 INTRODUCTION	259
9.2 IMPLICATIONS FOR THEORY	259
9.3 IMPLICATIONS FOR PRACTICE	261
9.4 FURTHER RESEARCH	262
9.5 LIMITATIONS REVISITED	266
9.6 FINAL THOUGHT	267
REFERENCES	270
APPENDICES	
Appendix A: Details on the Business Excellence Models Covered in the Study	299
Appendix B: The Performance of the Eight Applicants Who Applied for the Australian Business Excellence Award Twice	325
Appendix C: Second Order Factor Model to Determine Category/Item Weights (Points) of the Baldrige Criteria for Performance Excellence (BCPE)	330
Appendix D: Industry Attractiveness Data on Singaporean Industries	337
Appendix E: The Relationship Between National Culture and Business Excellence: A Descriptive Study Based on Business Excellence Category Scores and Scores on National Cultural Dimensions	342
Appendix F: A Path Analysis Study: A Study of the Correlations Between the Categories of the Asia Pacific BE Models	350
Appendix G: Additional Tests of Goodness of Fit of Partial Least Squares Structural Equation Models: Tests on Predictive Relevance	358
Appendix H: The Author's Publications Related to His Doctoral Research	367
Appendix I: Tabulation of the Empirical Weights of the Enablers	382
Appendix J: New Zealand Business Excellence Award Winners: 2003-2006.....	390
Appendix K: Glosary of Key Terms	391

List of Acronyms

ABEA	Australian Business Excellence Award
ABEF	Australian Business Excellence Framework
AHP	Analytic Hierarchy Process
AMR	Academy of Management Review
APA	American Psychological Association
BCPE	Baldrige Criteria for Performance Excellence
BE	Business Excellence
CBSEM	Covariance Based Structural Equation Modelling
CFA	Confirmatory Factor Analysis
CPE	Criteria for Performance Excellence
DMM	Deming Management Method
EFQM	European Foundation for Quality Management
HR	Human Resource
HRM	Human Resource Management
KPIs	Key Performance Indicators
MBNQA	Malcolm Baldrige National Quality Award
MBNQAC	Malcolm Baldrige National Quality Award Criteria
NIST	National Institute of Standards and Technology
NZBEA	New Zealand Business Excellence Award
NZBEF	New Zealand Business Excellence Foundation
OLS	Ordinary Least Squares
OR	Operations Research
PCA	Principal Components Analysis
PLSBSEM	Partial Least Squares Based Structural Equation Modelling
PLSR	Partial Least Squares Regression
PRESS	Prediction Error Sum of Squares
RBV	Resource Based View
SEM	Structural Equation Modelling
SMEs	Small and Medium Enterprises
SPRING	Standards, Productivity and Innovation Board of Singapore
SQA	Singapore Quality Award
SQAC	Singapore Quality Award Criteria
SQC	Singapore Quality Class
TQM	Total Quality Management
VRIO	Valuable, Rare, Inimitable and Organised

List of Figures

Figure	Title	Page
1.1	Baldrige criteria for performance excellence framework	2
1.2	The basic elements of a set of national quality/BE award criteria	3
1.3	The structure of the thesis	19
2.1	Illustration of a theoretical model involving two constructs	24
2.2	The conventional presentation of a second-order construct	26
2.3	Minimum CVR and the minimum number of votes required for avoiding a right conclusion by chance	28
3.1	The impact of product quality on the firm	45
3.2	The structural model underlying the DMM	48
3.3	The generic value chain of a firm	64
3.4	The author's model that was used to review past research on validity of BE models	75
3.5	The CFA model used by Eskildsen et al. (2001, 2002)	90
3.6	The elements of performance excellence and the weights, as determined by a steering committee of the EFQM	92
4.1	Generic structural model for testing conceptual validity	116
4.2	Techniques used to test construct validity of the BE models in schematic form	140
5.1	Normalised average category scores of the ABEA applicants	146
5.2	Standard deviation of the normalised category scores of the ABEA applicants	146
5.3	The relationship between the average normalised score and the weights stipulated in the ABEF	147
5.4	Frequency distribution of the total scores secured by the ABEA applicants	148
5.5	The relationship between the total score and organisation size for the ABEA applicants	148
5.6	Distribution of applicants for the ABEA by size	149
5.7	The distribution of the ABEA applicants by industry sector	150
5.8	Normalised average category scores of NZBEA applicants	155
5.9	Standard deviation of the normalised category scores of NZBEA applicants	155
5.10	The relationship between the average normalised score and the weights stipulated in the BCPE	156
5.11	The normalised average scores of the NZBEA applicants in the business results measurements items	157
5.12	Frequency distribution of the total scores secured by the NZBEA applicants	158
5.13	The distribution of the NZBEA applicants (winners only)	
5.14	Normalised average category scores of the SQC applicants	159
5.15	Standard deviation of the normalised category scores of the SQC applicants	162
5.16	Frequency distribution of the total scores secured by the SQC applicants	162

Figure	Title	Page
5.17	The relationship between the total score and organisation size for SQC applicants	163
5.18	Distribution of the SQC applicants by size	163
5.19	The distribution of SQC applicants by industry sector	164
6.1	The model that represents the theory of BE when the enabler criteria reflect a single concept	191
6.2	The traditional method of modelling constructs	192
6.3	Modelling constructs as formative constructs	193
6.4	The PLS structural model for the ABEF	202
6.5	The PLS structural model for the BCPE	205
6.6	Sensitivity analysis results on the PLS structural model for the BCPE	206
6.7	The PLS structural model for the SQA criteria	208
6.8	The expanded model for the BCPE	210
6.9	The expanded model for the SQAC	211
7.1	The distribution of SQC applicants based on industry attractiveness	221
7.2	The variation of prediction error of the score of the ‘Success and Sustainability’ category with number of components used	226
7.3	The variation of prediction error of the item scores in the ‘Success and Sustainability’ category with number of components used	227
7.4	The linear relationship between enabler categories of the ABEF and the items in Category 7	228
7.5	The linear relationship between enabler items of the ABEF and items in Category 7	229
7.6	A comparison of empirical weights of the enabler categories of the ABEF against the stipulated weights	232
7.7	A comparison of empirical weights of the enabler items of the ABEF against the stipulated weights	234
7.8	The variation of prediction error of the item scores in the ‘Business Results’ category with number of components used	235
7.9	The linear relationship between enabler categories of the BCPE and results	236
7.10	The linear relationship between enabler items of the BCPE and its results items	237
7.11	The variation of prediction error of the item/category scores in Category # 7 (Results) with number of components used	238
7.12	The linear relationship between enabler categories of the SQAC and results	239
7.13	The linear relationship between enabler items of the SQAC and its results items	240
7.14	The weights for the enabler categories of the SQAC based on the standardised regression coefficients for the enabler categories	241
7.15	The average normalised scores of the categories of the BE models in the three Asia Pacific countries	244
8.1	The logical flow of key steps from research themes to conclusions	247
8.2	The common theoretical model used for testing conceptual validity	249

List of Tables

Table	Title	Page
1.1	General Statistics of the Study Samples	13
2.1	Statistical Measures Referred to in PLSBSEM Literature to Assess the Quality of a Model	39
3.1	Definitions of the Constructs and the Causal Propositions Underlying the DMM	47
3.2	The Core Conceptual Foundation of TQM	54
3.3	Controlled vs. Learning Oriented Approach of TQM	56
4.1	The Basic Beliefs Pertaining to the Positivistic and Interpretive Paradigms	103
4.2	Constructs of the Three Asia Pacific BE Models Arranged in a Conceptually Analogous Manner	105
4.3	Current US Industry Norms for Financial Ratios for Three Selected Industries	120
4.4	Results of Multiple <i>R</i> and Autocorrelation Diagnostics	138
5.1	Categorisation of the Strength of the Correlations	145
5.2	Correlations Between the ABEF Measurement Items	151
5.3	Correlations Between the ABEF Categories	153
5.4	Correlations Between the ABEF Categories Based on Factor Scores Derived From the PCA of the ABEF Items	154
5.5	Correlations Between the BCPE Measurement Items	160
5.6	Correlations Between the BCPE Categories	161
5.7	Correlations Between the BCPE Categories Based on Factor Scores Derived From the PCA of the BCPE Items	161
5.8	Correlations Between SQAC Items	166
5.9	Correlations Between the Categories of the SQAC	167
5.10	Correlations Between the Categories of the SQAC Based on Factor Scores Derived from the PCA of the SQAC Items	167
6.1	The Reliability Statistics	172
6.2	Loadings and Cross-Loadings for the ABEF	176
6.3	Loadings and Cross-Loadings for the BCPE (based on New Zealand data)	178
6.4	Loadings and Cross-Loadings for the SQAC	179
6.5	The Examination Areas/Check List Included Under Item 5.1 (Innovation Process) of the BEACON Instrument	180
6.6	Relative Level of Construct Validity of BE Models Based on the Heuristics	182
6.7	Loadings and Cross-Loadings for the SQAC Based on the Alternative (PCA) Method	184
6.8	Organisational Responses to the Requirements Stipulated for the Item 'Innovation Process' (Item 6.1) of the ABEF	187
6.9	Correlations of Latent Variables of the ABEF	202
6.10	Correlations of Latent Variables of the BCPE	205

Table	Title	Page
6.11	Correlations of Latent Variables of the SQAC	207
6.12	Loadings and Cross-Loadings for the BCPE Based on Self-Assessment Data in the Study Reported by Jayamaha et al. (2008a)	214
7.1	Regression Results of the Bivariate Regression Models Fitted to the Scores of the Applicants for the ABEA	218
7.2	Regression Results of the Bivariate Regression Models Fitted to the Scores of the Applicants for the NZBEA	218
7.3	Regression Results of the Bivariate Regression Models Fitted to the Scores of the SQC Applicants	219
7.4	Regression Results of the Model on Proposition P3a	222
9.1	Pros and Cons for BE Models	267