ACHIEVING ORGANIZATION VITALITY THROUGH STRATEGIC KNOWLEDGE MANAGEMENT AND VITALIZATION PROCESSES:

A STUDY OF SELECT INDUSTRIES

SUMANT KUMAR BISHWAS

DEPARTMENT OF MANAGEMENT STUDIES

INDIAN INSTITUTUE OF TECHNOLOGY DELHI

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Achieving Organization Vitality through Strategic Knowledge Management and Vitalization Processes:

A Study of Select Industries

by

Sumant Kumar Bishwas

Department of Management Studies

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CERTIFICATE

This is to certify that the thesis entitled **'Achieving Organization Vitality through Strategic Knowledge Management and Vitalization Processes: A Study of Select Industries'** being submitted by Mr. Sumant Kumar Bishwas 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 research work carried out by him. He has worked under my guidance and supervision and fulfilled the requirements for the submission of the thesis, which has attained the 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.

Prof. Sushil
(Research Supervisor)
Department of Management Studies,
Indian Institute of Technology Delhi

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Abstract

The rapid changing environment in the current knowledge era has increased the threat of survival and growth for organizations. Moreover, globalization and technology advancement are acting as a catalyst for threat of survival and growth. In this kind of environment, only good performance does not reflect the healthiness of the organization. Organization vitality is an issue that is important to survive and grow for longer period. A conceptual review of literature on organization vitality reflects that although this is a crucial issue but not taken significantly from research perspective. What may be the measures of vitality for the organization, what are those vitalization processes that can be used to achieve high vitality, remain unanswered. Drawing from the literature, the research under consideration, explores this emerging area of research.

Literature reflects that in this knowledge era, where organizations are facing rapid changes, strategic knowledge management is an important process that may help in managing the changes and achieving organizational objectives. The main objective of this study is, thus, to come up with a framework of vitality using strategic knowledge management and vitalization processes.

In Indian scenario, IT and automobile are the two industries that; i) have significant contribution in country's economy; ii) are working in rapid changing environment; and iii) have implemented strategic knowledge management processes up to a significant extent. Keeping these views, the scope of the study has been limited to these two industries in Indian context.

This study has been done in three phases. The first phase set a base of the study through literature review that highlighted the significance of the issues with identified gaps, and facilitated identification of research variables. Further, caselets study has been done, where 51 caselets have been analyzed to enrich the research variables and to see their reflections in real

industrial scenario. Finally, two conceptual models have been developed using qualitative method; Total Interpretive Structural Modeling (TISM) that gives insights about the interrelationships of the research variables have been taken for this study. Further, a research framework has been developed followed by hypotheses development.

During the second phase, the prime focus was to empirically test the hypotheses and develop a validated framework for achieving organization vitality using strategic knowledge management and vitalization processes. The empirical survey was conducted using a questionnaire - that was tested (reliability and validity) before going for final survey on IT and Automobile industry experts. Univariate analysis has been used to see the reflection of the research variables. Hypotheses of difference have been tested to check whether any difference exists between the respondents groups from IT and automobile industries. Step-wise regression analysis has been used to test hypotheses of association to see the effect of independent variables on dependent ones. Finally, structural equation modelling (SEM) has been used to develop a validated research model of vitality. The statistical analyses have been conducted using SPSS 20, and for developing SEM model, AMOS 20 has been used.

In the third phase of the study, four case studies have been conducted. Two cases from IT industry and two cases from automobile industry have been selected for detailed case analysis, which includes TCS and KPMG from IT industry, and Maruti Udyog Ltd. and Hero MotoCorp from automobile industry. A case template has been developed for the case studies. The case studies were discussed with focus on the reflections of the research variables in the selected organizations. Finally, a comparative analysis has been discussed.

As per the findings of the study, innovation and flexibility have emerged as the two most important vitalization processes that effect vitality of organizations. Strategic knowledge

management process is having a significant effect on the vitality through the vitalization processes.

The results of the study strengthen the basic idea of the research that organization vitality is an important issue for long-term survival, and growth. Learning, innovation, flexibility, and entrepreneurship are the four key vitalization processes that effect the vitality of organization in a significant manner, and strategic knowledge management plays a critical role in managing these processes. Besides the usual contribution of a validated research model, caselets data base, and case insights, the study makes a modest contribution to the theoretical assumptions of some of the theories like “population ecology theory”, living systems theory”, “knowledge management theory”, etc. The study is, therefore, a novel attempt towards providing a framework of vitality linking strategic knowledge management with vitalization processes.

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Nomenclature

AMP	—	Automotive Mission Plan
BPO	—	Business Process Outsourcing
BPS	—	Best Practices Sharing
CADM	—	Custom Application Development and Maintenance
CBK	—	Center for Business Knowledge
CBN	—	Central Bank of Nigeria
CEO	—	Chief Executive Officer
CFA	—	Confirmatory Factor Analysis
CFI	—	Comparative Fit Index
CFT	—	Cross Functional Team
CKO	—	Chief Knowledge Officer
CMIN	—	Minimum Discrepancy Function (in SEM)
CoP	—	Community of Practice
CPC	—	Center for Productivity and Creativity
CSI	—	Customer Satisfaction Index
DF	—	Degree of Freedom
EFA	—	Exploratory Factor Analysis
EOs	—	Executive Officers
ERMC	—	Executive Risk Management Committee
ERP	—	Enterprise resource planning
EU_T	—	Environmental Uncertainty
FDI	—	Foreign Direct Investment
FSS	—	Financial System Strategy
GDP	—	Gross Domestic Product
GFI	—	Goodness of Fit
HR	—	Human Resources
IAMTs	—	Intellectual Asset Management Teams

ISM	—	Interpretive Structural Modeling
IDC	—	International Data Corporation
ICN	—	Information and Communication Networks
ICT	—	Information and Communication Technology
IT	—	Information Technology
JV	—	Joint Venture
KI	—	Knowledge Infrastructure
KIBS	—	Knowledge-Intensive Business Services
KM	—	Knowledge Management
KMO	—	Kaiser-Meyer-Olkin Test
LCV	—	Light Commercial Vehicle
L&D	—	Learning and Development
LEOV	—	Leadership
LIFE	—	Learning, Innovation, Flexibility, and Entrepreneurship
LOB	—	Line-Of-Business
LST	—	Living Systems Theory
MiDAS	—	Microbiological Design Approval
MIS	—	Management Information Systems
MMS	—	Maruti Mobile Support
MUL	—	Maruti Udyog Limited
MUVs	—	Multi-Utility Vehicles
NFI	—	Normed Fit Index
NSDC	—	National Skill Development Corporation
OC_T	—	Organization Culture
OKMS	—	Organizational Knowledge Management Systems
OCTAPACE	—	Standard Tool to Measure Culture
OV1P	—	Organization Vitality_Performance
OV2CS	—	Organization Vitality_Customer Orientation
OV3SC	—	Organization Vitality_Survival/Continuity

OV4GCh	—	Organization Vitality_Growth/Change
OV	—	Organization Vitality
PCA	—	Principal Component Analysis
PCFI	—	Parsimony Comparative Fit Index
PDCA	—	Plan-Do-Check-Act
PMCs	—	Product-Market Combinations
PMS	—	Performance Management System
PNFI	—	Parsimony Normed Fit Index
QLT	—	Quality Leadership Team
QPR	—	Quality Process Review
RBV	—	Resource-based View
R&D	—	Research and Development
RDSE	—	Resident Dealer Sales Executives
RMSEA	—	Root Mean Square Error of Approximation
SAE	—	Society of Automotive Engineers
SAP	—	Systems, Applications & Products in Data Processing
SECI	—	Socialization, Externalization, Combination, and Internalization
SEM	—	Structural Equation Modeling
SIAM	—	Society of Indian Automobile Manufacturers
SKM1	—	Knowledge Infrastructure
SKM2	—	Mutual Trust and Sharing
SKM3	—	Knowledge Awareness
SKM4	—	Knowledge Management Strategy Execution
SKM5	—	Top Management Support
SKM6	—	Knowledge Management Strategy Formation
SKM (_T)	—	Strategic Knowledge Management
SMC	—	Suzuki Motor Company
SPI	—	Software Process Improvement

SSA	—	State Support Agreement
SVP	—	Senior Vice President
TISM	—	Total Interpretive Structural Modelling
USD	—	US Dollar
VP	—	Vice President
VPL1	—	Work Learning
VPL2	—	Organizational Learning
VPL3	—	Learning Structure
VPL (_T)	—	Vitalization Process _Learning
VPI1	—	Collaborative Environment
VPI2	—	Access to Facility and Resources
VPI3	—	Skills Variety
VPI (_T)	—	Vitalization Process _Innovation
VPF1	—	Strategic Flexibility
VPF2	—	Flexible Resources Usage
VPF3	—	Adaptive Capacity of Leadership
VPF (_T)	—	Vitalization Process _Flexibility
VPE1	—	Proactiveness
VPE2	—	Risk Taking Orientation
VPE3	—	Entrepreneurial Intensity
VPE (_T)	—	Vitalization Process _Entrepreneurship