UNDERSTANDING DYNAMICS OF KMS ADOPTION IN INDIAN ITES ORGANIZATIONS

Amit Vikram
Manager, Cognizant Technology Solutions

Mohammad Israrul Haque
Professor, Department of Business Administration, Aligarh Muslim University

Ganesh Singh
Director, PhD program in Business Administration
All India Management Association- Centre for Management Education

Sathya Swaroop Debasish
Associate Professor, Dept. of Business Administration
Utkal University, Bhubaneshwar, Odisha, INDIA
sathyaswaroop2000@yahoo.com

ABSTRACT

The design of Knowledge management adoption depicts similarity to the design proposed in 'Technology Acceptance Model (TAM)' and 'Extended Technology Acceptance Model (TAM2)' holding varied adoption enablers, suggested by Davis 1989. The purpose of this paper is to identify the relationship between KM adoption enablers and demographic variables prevalent in Indian ITES organizations within Delhi NCR. Due to ordinal nature of data, 'multiple-ordinal regression' was applied. The demographic variables are considered independent while KM adoption variables/ enablers are considered dependent for this research.

The outcomes from of 'multiple-ordinal regression' showcase that maximum number of statistically significant outcomes were in case of the KM adoption enabler 'Perceived Usefulness' holding likelihood of lower cumulative scores in most cases with lowest scores from the independent variables '18-28 years' age group and 'Admin' department.

This research study has proposed a knowledge management adoption framework for Indian ITES organization that can be used as guidelines to develop KM adoption and augmentation strategies.

INTRODUCTION

Knowledge is the spine of any operation related to business and commerce since centuries. The need and usage of knowledge observed changes during past few decades. The advent of internet augmented the significance of knowledge based commerce. At present, it is accepted that the capability of any business concern is exceedingly dependent on management of knowledge *(Prieto & Revilla, 2004).* Even in case of future, the models of knowledge flow and its administration is destined to play an important role in building and sustaining competitive advantage *(Keskin, 2005).*Varied studies on knowledge management*(Earl, 1994; Nonaka, 1994; Davenport and Prusak, 1998; Tuomi, 2000; Swanson, 2000),* its processes*(Leonard-Barton, 1995; Nonaka and Takeuchi, 1995; Grant, 1996; Lee, 1999; Malhotra, 2000; Davenport and Grover, 2001; Kim and Lee, 2001),* design*(Wiig et al., 1997)* and other academic explorations*(Edvinsson, 1997; Roos and Roos, 1997; Sveiby, 1997; Han et al., 2000)*have authenticated the theoretical understanding.

As most of the corporates could not successfully use the knowledge-based resources, the number of failed initiatives are considerably more than successful initiatives *(Perez &Pablos, 2003).* Business organizations may get intertwined in various efforts while implementing KM *(Junnarkar, 1997).* However, some corporate organizations have endeavored to control knowledge assets either through concentration of KM related tasks or by way of hefty investment in information technology infrastructure *(Hansen and Oetinger, 2001).* Majority of cases have showcased that the problem faced by business concerns is identification of pertinent reasons for adoption and implementation of knowledge management systems. An observation of research studies showcased that the variables were treated within limited scope that included either single organization *(Yinglei Wang, Darren B. Meister, Peter H. Gray, 2013)*, single sector *(Michael Brandt Jones, Bahaudin G. Mujtaba, Albert Williams and Regina A. Greenwood, 2011)* or by relying on just one case study *(Satyendra C. Pandey, 2013).* None of the previous studies took into account the differentiation in operations of organizations belonging to varied industry sectors (Anli Suresh, 2013).As an example, the operations of an IT organization may be dissimilar from an organization belonging to Telecom. Hence, research studies taking into account varied industry sectors would produce sufficient results and insights for validation of existing results. In concurrence, this study aims to focus on Indian ITES sector within Delhi NCR.

1.1. About Indian Corporate Sectors

As per the annual report of corporate affairs ministry (2013-14), there are approximately 1.4 million registered organizations from varied business segments in Indian corporate sector. These organizations belong to sectors like manufacturing, business services, trading, construction and finance. The 2013-14 annual report from Ministry of Corporate Affairs showcases that service sector holds 61% of total share. It is observed that within service sector the IT and ITES forms a considerable.

Indian IT software and service companies have generated $31 billion in 2007 with major clientele from United States and European countries. Mostly, the management of information and knowledge persists in companies that deal in back-end operations, data warehousing and consulting services using IT tools etc. Hence, focus on ITES sector for this research seems appropriate.

Inception of IT Enabled Service (ITES) sector

Extensive usage of knowledge management systems has been observed in case of companies engaged in delivering services. They achieved overall cost reduction and augmentation of customer satisfaction. The companies engaged in delivering services are categorized in three broad groups:

- IT Service (ITS)

- IT Enabled Services (ITES)

- Non-IT Service (NITS)

The need to improve service quality through the tools of 'Information Technology' resulted in the term 'IT enabled services' *(ITI Info)*. These companies are involved in services like Research, Transaction processing, Data storage, analytics and consulting etc. Some prominent categories identified under IT enabled services are:

- Call Centres, BPOs, KPOs, LPOs etc.

- Back Office Operations

- Data Warehousing and Management Centres

- Logistics Management

- HR services

- GIS (Geographical Information System)

- Enterprise Resource Planning (ERP)

- Content Development, Documentation, Archiving, E-Publishing & Portals

- Business Intelligence& Consulting

The ITES sector contributes 77% towards total revenue while approximately 90% of its exports are from Hyderabad, Chennai, Kolkata, Mumbai, Delhi and Bangalore. The sector has improved their contribution in India's GDP from 1.2% to 7.5% during 1998 *(NASSCOM, 2012)*. Through numerous research studies and surveys conducted by research and consulting organizations it is found that ITES will witness massive growth in the upcoming decade. According to Mr. Sachin Pilot

(Union Minister of state for IT and Communications), the need for Indian IT and IT-enabled Services (ITES) is expected to be over $300 Billion by 2020 *(Economic Times, June 2012)*. This is bound to impact the level of information management. Hence, the need to recognize KM enablers that may trigger KM adoption is of pivotal importance.

## Literature Review

Knowledge Concept and Taxonomies

The definition of knowledge includes consciousness, awareness, data and information comprehension or understanding of anything. Gaining knowledge is the result of having experience of something, realization or discovery based on meaningful understanding of any subject or concept through theoretical or practical procedure *(Ein-Dor, 2006)*. During ancient times, the conception, procurement, storage and distribution of knowledge was done within a small section of a civilization. The arrival of internet in 1980s triggered explosion of knowledge with intensification of its usage in 1990s thereby making the management of knowledge became all the more important. The consulting companies were among the first to recognize that centralized and unified information through database would serve a product with capacity to generate good revenue source in future for all companies across industries.

Previous studies on KM adoption

Over the last decade it was observed that KM was being viewed as an integral function of a business concern. The performance of a business concern, was found comprehensively reliant on processes associated with knowledge management. Even though business strategies related to CRM, new product development, change management, innovation and governance are driven by KM processes, the effect of KMS adoption and its utilization has not been completely recognized. In majority of cases generality and guesstimate are used for establishing and validating theories. The lack of common framework with respect to KM gave way for this research with focus on Indian ITES organizations. Following the same it is important to first scrutinize prior research frameworks and theories.

Literature review includes understanding and identifying the enablers mentioned in prior research works and frameworks used in the earlier studies. Research works on adoption of KM during the last one decade are being considered at present for this research study. The technology acceptance model (TAM) with respect to user acceptance of any given system was conducted using 35 respondents during 2004 *(Money and Turner, 2004)*. Some important enablers came out of TAM that witnessed to have influence on the decision pertaining to adoption of any given new technology. The enablers were 'Perceived Usefulness', 'Perceived Ease-of-use', 'Intention to Use' and 'Attitude towards Use' etc. which are also shown in Figure-1.

Figure 1: *Technology Acceptance Model (TAM), proposed by Davis (1989)*
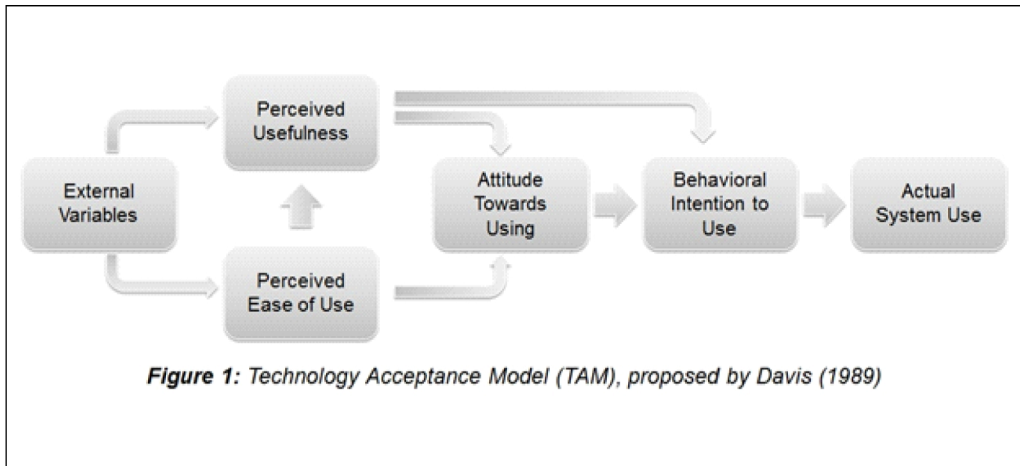
In concurrence, another model by the name 'Theory of Planned Behavior (TPB)' was introduced by Icek Ajzen in 2006 which supported TAM in creation of a KM adoption model. The enablers suggested in TPB were 'Subjective Norm', 'Attitude towards Use' etc. For exploring KM adoption in Indian ITES sector, this research study uses enablers from both TAM and TPB.

Figure 2: *Theory of Planned Behavior (TPB), proposed by Icek Ajzen (2006)*
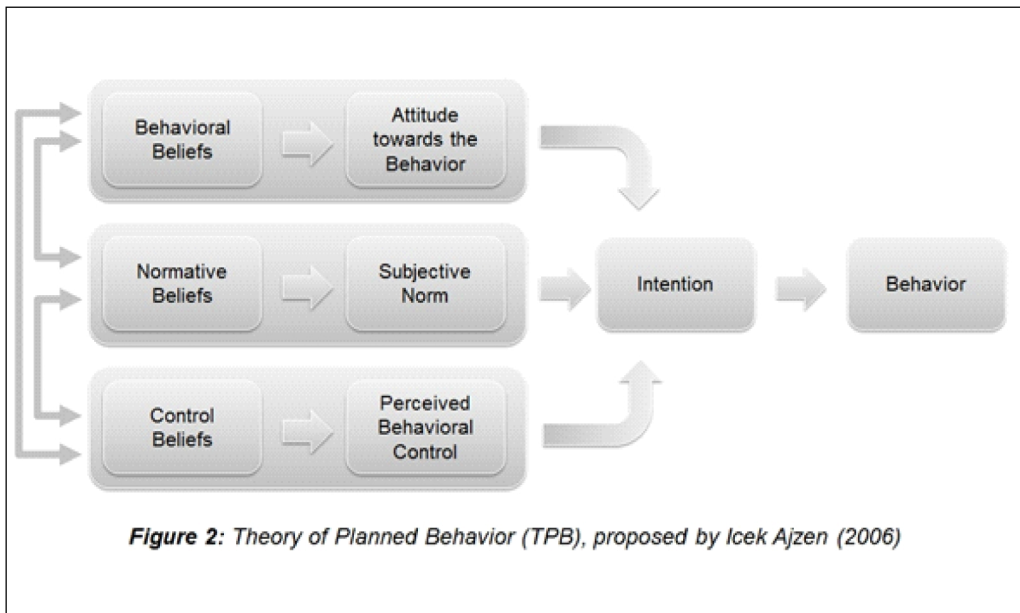
Research Framework

The framework of this research includes adaptations from prior research studies and theories for identification of relationship between dependent and independent variables with respect to KM adoption in Indian ITES organizations. The Technology Acceptance Model (TAM)is perceivedto be the most frequently used due to ease ofexpandability.   Forthis research,Technology Acceptance Model (TAM)and Theory of Planned behavior (TPB), shown in Figure-2,is used to evaluate their suitabilityin case of Indian ITES sector. The aptness of using such models was also validated by a similar research that was conducted by Luis Ernesto Prado Tamez during 2014 on KM adoption in Mexico. Since, KM adoption is not tested through the models in Indian ITES sector, it is anticipatedthat the insights generated fromthis research will be quite worthwhile within various components of ITES sector.

Methodology

With primary objective to recognize the relationship between KM adoption enablers and demographic variables prevalent in Indian ITES organizations within Delhi NCR, this study may support in identification of independent and dependent enabler sthat influence augmentation of KM adoption. The outcomes may also be used for assessing direct or indirect influence of KM based on the relationship of enablers on an organization's competitive advantage through appropriate investment strategies.

Data collection and sampling

Voluntary response surveys were used as the selection of respondents were based on non-random sampling further categorized into systematic, convenience, stratified and cluster sampling techniques. The population considered for this research includes members working in Indian ITES companies with minimum employee base of 1000. Within Delhi/NCR region it is assumed that the target population size would be over 100,000 if the survey is rolled out in 10 ITES companies. Therefore as per *Yamane's* rule the minimum sample size for guaranteeing satisfactory coverage of nominal 95% confidence intervals will be 400.

Formula

$n_0 = N / [1+N (e)^2]$

$n_0 = 100,000 \quad / [1+100,000*(0.05)^2] = 398.4$

An online survey questionnaire was created on Google-Forms to convert research objectives into well-defined questions alongside appropriate categories of responses to reassure cooperation and motivation of participants. This research study employs 5-point Likert's scale for collection of data with range from 'Strongly Disagree' as point 1, 'Disagree' as point 2, 'Neutral' as point 3, 'Agree' as point 4 and 'Strongly Agree' as point 5.

Variables

Data for this research was collected using 5-point Likert's scale which is ordinal in nature; hence 'Ordinal Regression' is used.

As a part of predictive study, ordinal regression illustrates the association between one dependent variable with two or more independent variables. In this research, logit function is seems most appropriate. Therefore, impact on dependent variables *(KM adoption enablers as well as KM utilization areas)* will be evaluated based on the independent variables *(Gender, Age Group, Educational Qualification, Employment in the Organization and Department)*.

On processing the data through SPSS (Version 13), two important tables were generated. The first table to be used for analysis is the one that holds parameter estimates. Major components of this table are 'Threshold' and 'Location'. The first order effect in ordinal regression are showcased in 'Thresholds' while coefficients of independent variables *(Gender, Age Group, Educational Qualification, Employment in the Organization and Department, used in this research)* are depicted in 'Location' estimates. The 'Location' estimates hold coefficients for the predictor variables.

Since the ten KM adoption enablers are treated dependent variables along with eight dependent variables of KM utilization, SPSS generated tables and charts that are used for analysis. Conducting ordinal regression on the data collected for this research generated output as shown in Table-2, Table-3 and Table-4.

Data analysis

Descriptive Statistics

As part of descriptive statistics, the data obtained from online survey showcase that in most cases the median scores obtained from KM adoption are either 4 (45% of responses are 'Agree') or 5 (45% of responses are 'Strongly Agree') with 2 (10% of responses are 'Disagree'), while an observation of mode scores depict that prominence of the option 5 (65% of responses are 'Strongly Agree') while option 4 (20% of responses are 'Agree') with few in option 1 (10% of responses are 'Strongly Disagree').

KMO and Bartlett's Test

To ensure that the factor analysis is suitable for research data collected, Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Barlett's test of sphericitywas also calculated. The Kaiser-Meyer-Olkin (KMO) sampling adequacy statistics ranges between '0' and '1'. An outcome of '0' indicates that there is high number of inequitable correlations as against the sum of correlations; this means distribution of pattern correlations. On the other hand, if the outcome is close to '1', it would mean that the correlations are packed together thereby the analysis can provide suitable and consistent factors. It was recommended by Kaiser (1974) to have values above 0.5.

The outcome of the Kaiser-Meyer-Olkin (KMO), shown in Table-1 measure of sampling adequacy is 0.802, while the

outcome of Barlett's test of Sphericity is highly significant with (p<0.001). Hence, the outcomes of both these statistical tests suggest that the factor analysis is suitable to carry out from the data collected through the online survey.

Bartlett's test is used for identifying if 'k' samples are from populations with identical variances. Identical variances across samples are known as homogeneity of variances. Statistical tests like analysis of variance presume that variances are identical across samples. Here, the Bartlett test can be used to validate the supposition. To be significant, the output needs to be a value less than 0.05 and to be highly significant the output value (p) should be less than 0.001 *(Field, 2005)*.

The outcome of the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is 0.802, while the outcome of Barlett's test of Sphericity is highly significant with (p<0.001). Hence, the outcomes of both these statistical tests suggest that the factor analysis is suitable to carry out from the data collected through the online survey.

Ordinal Regression Analysis

While correlation analysis of ordinal variables focuses on strength of the association between two or more variables, the ordinal regression analysis focuses on identifying reliance or causal association between a dependent variable and one or more independent variables. The correct way to conduct ordinal regression analysis is to use ordinal variables as dependent while using continuous, ordinal or categorical (including dichotomous variables) as independent variables.

The ordinal regression can be classified into the below categories, (1) Simple-Ordinal Regression, with one dependent variable *(ordinal in nature)* and one independent variable *(Continuous or Categorical)* and (2) Multiple-Ordinal Regression, with one dependent variable *(ordinal in nature)* and at least two independent variables. In this research the Logit function is most appropriate. Therefore, impact on dependent variables *(KM adoption enablers)* will be evaluated through SPSS *(Version 13)* default function based on the independent variables *(Gender, Age Group, Educational Qualification, Employment in the Organization and Department)*.

Discussion

Taking all independent variables into account, it was observed that maximum number of statistically significant outcomes were in case of the KM adoption enabler 'Perceived Usefulness' holding likelihood of lower cumulative scores in most cases with lowest scores from '18-28 years' age group and 'Admin' department thereby depicting that for every one-unit increase there are odds of 'Perceived Usefulness' to be on the lower side as compared to other groups. Likewise, the likelihood of higher cumulative score, statistically significant at 5%, is observed in case of 'Employment' with less than 2 years, 2 to 5 years and 5 to 10 years.

The KM adoption enablers 'Subjective Norm' holds second highest number of observations holding likelihood of lower cumulative scores in most cases with respect to 'Department'. Likewise, with respect to the independent enabler 'Employment', the likelihood of higher cumulative score, statistically significant at 5%, is observed in case of 2-5 years followed by graduation and post-graduation with respect to educational qualification.

The next KM adoption enabler with maximum number of statistically significant outcomes is 'Job Relevance'. Here, the likelihood of higher cumulative score, statistically significant at 5%, is observed only in case of the independent variable category 'Educational Qualification' with 'Graduation' holding highest odd ratio of 8.47 followed by 'Post Graduation' with odd ratio of 7.75. The independent variables of the category 'Department' showcased maximum number of observations with likelihood of lower cumulative score, statistically significant at 5%.

Varied reasons like target industry sector, target location, target population of survey, time-slot of survey etc. may have affected the score strength. This suggests that a similar research may not produce identical results if the any of the aforementioned elements are changed. The regression score may be totally different as compared to this study or even if they are similar the strength of scores may differ with change in target location, target population and time-slot of survey etc.

Conclusion

Theoretical implications

The academic implications of this research study includes understanding about the dependent variables such as 'Perceived Usefulness', 'Subjective Norm' and 'Job Relevance' and the level of their reliability on independent variables such as Age, Gender, Employment in Organization, Education and Department. It may also guide organization on success enablers and key performance indicators.

Managerial implications

This research would potentially aid in decision making process by ITES organizations with respect to selection of appropriate knowledge management system, its implementation process and its phases while evaluation of existing knowledge solutions keeping in view the availability of budget and target groups.

Research Limitations

Due to size and enormity of ITES sector at global level, this research focuses only on the ITES organization within Delhi NCR. A larger sample was not available due limited number of ITES organizations in Delhi NCR with employee base of over 1,000. Other research studies also had to face similar constraints. In the research study conducted by W. Money and A. Turner during 2004 witnessed a response rate of less than 20%. However, for this research 657 valid responses received through online survey are found sufficient, with respect to Yamane rule, to contribute

good outcomes with respect to KM adoption and utilization in ITES organization within Delhi NCR. The study may have biased opinion and inputs from respondents which is likely to impact the result of the research. Therefore, the findings may not be applicable across India and even at global level. The findings may not generalize across other sectors and industries. With rapid change in technology tools (Mobile applications, Cloud Computing etc.) the adoption and usage of KM may include other variables in future, which could not be covered in this research study.

References

Anli Suresh; Knowledge Management Adoption, Practice and Innovation in the Indian Organizational Set up: An Empirical Study; Journal of IT and Economic Development 4(2), 31-42, October 2013 31

Davis, F.D., R.P. Bagozzi, and P.R. Warshaw. "User Acceptance of Computer Technology: A Comparison of Two Theoretical Models," Management Science, 35, 1989, 982-1003.

Economic Times Website: http://articles.economictimes.indiatimes.com/2012-06-21/news/32352276_1_ites-exports-ites-sector-sachin-pilot. Retrieved 2012-06-21; Retrieved on 20th Jan 2015

Ein-Dor P., 2006. Taxonomies of Knowledge Management. In Schwartz D. and Te'eni D., 2006. Encyclopedia of Knowledge Management. Idea Group Reference, pp. 848 – 854.

Field, A.P., 2005. Discovering statistics using SPSS, 2nd ed. London: Sage publications.

Hansen, M.T., and Oetinger, B. Introducing T-shaped managers: knowledge management's next generation. Harvard Business Review (March 2001), 107-116.

Hester A.J., 2010. A Comparison of the Influence of Social Factors and Technological Factors on Adoption and Usage of Knowledge Management Systems. Proceedings of the 43rd Hawaii International Conference on System Sciences, IEEE, pp. 1-10.

J. R. Perez and P. O. Pablos, "KM and organizational competitiveness: A framework for human capital analy-sis," Journal of Knowledge Management, Vol. 7, No. 3, pp. 82–91, 2003.

Junnarkar, B. (1997). Leveraging collective intellect by building organizational capabilities. Expert Systems with Applications, 13(1), 29–40.

Keskin, H. (2005). The relationships between explicit and tacit oriented KM strategy and Firm Performance. Journal of American Academy of Business, Cambridge Hollywood 7 (1), pp 169-176

Khoshalhan F. Designing X Control Chart Using DEA Approach, International Multi Conference of Engineers and Computer Scientists, II(2008), pp. 19-21

Li-Su Huang, Mohammed Quaddus, Anna L Rowe and Cheng-Po Lai; An investigation into the enablers affecting knowledge management adoption and

practice in the life insurance business; Knowledge Management Research & Practice (2011) 9, 58-72. doi:10.1057/kmrp.2011.2

Lucier, C. E. & J. D. Torsilieri (2001), Can knowledge management deliver bottom-line results? In I. Nonaka and D. Teece (eds.) Managing industrial Knowledge, pp.231-243, London: SAGE Publications.

Luis Ernesto Prado Tamez. The adoption of Knowledge Management Systems in Mexico (2014), pp. 19-30

Metaxiotis, K., K. Ergazakis, & J. Psarras (2005), "Exploring the world of knowledge management: agreements and disagreements in the academic/practitioner community", Journal of Knowledge Management, 9 (2), pp. 6-18.

Michael Brandt Jones, Bahaudin G. Mujtaba, Albert Williams and Regina A. Greenwood; Organizational Culture Types and Knowledge Management in U.S. Manufacturing Firms; Journal of Knowledge ManagementPractice,Vol.12, No. 4, December 2011

Ministry of Corporate Affairs Website: www.mca.gov.in; Retrieved on 15th June 2015.

Money, W., Turner, A. (2004) Application of the Technology Acceptance Model to a Knowledge Management System, Proceedings of the 37th Hawaii International Conference on System Sciences (HICSS037), January 5-8, 2004, Hilton Waikoloa Village, Hawaii, USA, IEEE, 1-9.

Moore, G.C. and I. Benbasat, "Development of an Instrument to Measure the Perceptions of Adopting an Information Technology Innovation," Information Systems Research, 2, 3 (September 1991), 192-222.

NASSCOM Website: "Indian IT-BPO Industry". Retrieved on 15th December 2012.

Prieto, I.M. and Revilla, E. (2006), "Learning capability and business performance: a non-financial and financial assessment", The Learning Organization, Vol. 12 No. 2, pp. 166-85.

Rogers, E.M. (1995), Diffusion of Innovations, The Free Press, New York, NY.

Satyendra C. Pandey, Andrew Dutta, (2013) "Role of knowledge infrastructure capabilities in knowledge management", Journal of Knowledge Management, Vol. 17 Iss: 3, pp.435 – 453

Teubner, Alexander and Nietsch, Michael, "Managing Knowledge in Medium Sized Software Companies" (2000). ECIS 2000 Proceedings. Paper 123.

Venkatesh, V., and Davis, F. D. "A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies," Management Science (45:2), 2000, pp. 186-204.

Website: http://www.itinfo.am/eng/it-enabled-services/; Retrieved on 20th December 2013.

Yinglei Wang, Darren B. Meister, Peter H. Gray; "Social influence and knowledge management systems use: evidence from panel data"; MIS Quarterly Volume 37 Issue 1, March 2013; Pages 299-313

Appendix

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.802
Bartlett's Test of Sphericity	Approx. Chi-Square	3224.549
	df	45
	Sig.	.000

Table 1: Kaiser-Meyer-Olkin (KMO) Bartlett's Test of Spherecity.

		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval		Odd Ratio
							Lower Bound	Upper Bound	
Threshold	[Subjective_Norm = Strongly Disagree]	-1.52	0.847	3.218	1	0.07	-3.18	0.141	
	[Subjective_Norm = Disagree]	-0.976	0.847	1.327	1	0.25	-2.64	0.684	
	[Subjective_Norm = Neutral]	-0.12	0.848	0.02	1	0.89	-1.78	1.541	
	[Subjective Norm = Agree]	2.128	0.847	6.305	1	0.01	0.467	3.788	
Location	[Gender= Female]	-0.275	0.164	2.797	1	0.094	-0.6	0.047	0.76
	[Gender= Male]	0(a)	.	.	0	.	.	.	
	[Age= 18-28]	-0.3	0.362	0.683	1	0.409	-1.01	0.411	0.74
	[Age= 29-39]	-0.437	0.323	1.839	1	0.175	-1.07	0.195	0.65
	[Age= 40-50]	0(a)	.	.	0	.	.	.	
	[Employment= 2 to 5]	1.245	0.415	8.995	1	0.003	0.431	2.058	3.47
	[Employment= 5 to 10]	0.141	0.381	0.137	1	0.711	-0.61	0.887	1.15
	[Employment= Less Th]	0.192	0.417	0.212	1	0.645	-0.63	1.01	1.21
	[Employment= Over 10]	0(a)	.	.	0	.	.	.	
	[Education= Grad]	2.252	0.791	8.102	1	0.004	0.701	3.802	9.51
	[Education= PG]	2.235	0.789	8.014	1	0.005	0.687	3.782	9.35
	[Education= PhD]	0(a)	.	.	0	.	.	.	
	[Department= Admin]	-1.41	0.354	15.919	1	0.000	-2.1	-0.72	0.24
	[Department= Finance]	-3.523	0.349	102.13	1	0.000	-4.21	-2.84	0.03
	[Department= HR]	-2.072	0.296	48.983	1	0.000	-2.65	-1.49	0.13
	[Department= Legal]	-0.811	0.548	2.189	1	0.139	-1.89	0.263	0.44
	[Department= Mktng]	-1.58	0.357	19.633	1	0.000	-2.28	-0.88	0.21
	[Department= Ops]	-2.091	0.231	81.786	1	0.000	-2.54	-1.64	0.12
	[Department= Support]	0(a)	.	.	0	.	.	.	

Link function: Logit.

a This parameter is set to zero because it is redundant.

Table 2: Parameter Estimates: Subjective Norm

		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval		Odd Ratio
							Lower Bound	Upper Bound	
Threshold	[Job_Relevance = Disagree]	-9.765	1.596	37.42	1	0	-12.89	-6.636	
	[Job_Relevance = Neutral]	-7.948	1.465	29.44	1	0	-10.82	-5.077	
	[Job_Relevance = Agree]	-3.933	1.456	7.298	1	0.01	-6.786	-1.079	
Location	[Gender= Female]	-0.099	0.198	0.252	1	0.615	-0.488	0.289	0.91
	[Gender= Male]	0(a)	.	.	0	.	.	.	
	[Age= 18-28]	-0.041	0.479	0.007	1	0.932	-0.979	0.897	0.96
	[Age= 29-39]	-0.09	0.44	0.042	1	0.838	-0.952	0.772	0.91
	[Age= 40-50]	0(a)	.	.	0	.	.	.	
	[Employment= 2 to 5]	-0.893	0.613	2.119	1	0.145	-2.095	0.309	0.41
	[Employment= 5 to 10]	-1.526	0.593	6.616	1	0.010	-2.689	-0.363	0.22
	[Employment= Less Than 2]	-1.136	0.615	3.408	1	0.065	-2.341	0.07	0.32
	[Employment= Over 10]	0(a)	.	.	0	.	.	.	
	[Education= Graduation]	2.136	0.967	4.884	1	0.027	0.242	4.031	8.47
	[Education= PG]	2.024	0.966	4.394	1	0.036	0.131	3.916	7.57
	[Education= PhD]	0(a)	.	.	0	.	.	.	
	[Department= Admin]	-5.111	1.057	23.38	1	0.000	-7.183	-3.04	0.01
	[Department= Finance]	-5.452	1.052	26.87	1	0.000	-7.513	-3.391	0.00
	[Department= HR]	-5.234	1.036	25.52	1	0.000	-7.266	-3.203	0.01
	[Department= Legal]	16.646	0	.	1	.	16.646	16.65	16,953,756.68
	[Department= Marketing]	-3.584	1.075	11.12	1	0.001	-5.691	-1.477	0.03
	[Department= Operations]	-4.904	1.015	23.34	1	0.000	-6.893	-2.914	0.01
	[Department= Support]	0(a)	.	.	0	.	.	.	#VALUE!

Link function: Logit.

a This parameter is set to zero because it is redundant.

Table 3: Parameter Estimates: Job Relevance

■■■