

Effect of Demographic Variables and Type of Banks on Knowledge Management Practices

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Abstract

Knowledge management (KM) has become an important asset of all the organizations. KM affects many aspects of organizations and is itself affected by many factors. The present piece of research focuses on studying the effect of demographic variables and type of banks KM practices. To reach this goal sample was collected using mail survey. Of the total respondents, 390 participants responded properly whose data could have been included in the research and was put to statistical analysis. ANOVA was applied on the data and results obtained indicate that Bank name ($F=12.104$, $p<0.01$), interaction of bank name, age in years and educational level ($F = 2.087$, $p<.05$), and interaction of gender, educational level and number of working years ($F=3.871$, $p<0.01$) significantly affect Knowledge Management Practices. Further, post hoc tests indicate that knowledge management practices of SBI are poorer than knowledge management practices of PNB, AXIS, HDFC, Canara, and ICICI.

Key Words: Knowledge Management, Public/Private Sector banks, Name/Type of Bank, Effect

Introduction

In today's economy, knowledge has become a critical thing. Knowledge is seen by organizations as a key resource for strategic edge (Grant, 2015). Organizations today handle their knowledge assets as a result of the value of knowledge. Wing (1990) introduced the term "knowledge management" (KM) for the first time in a keynote speech for the United Nations at the International Labour Organization. Applying the combined knowledge of the entire workforce to achieve certain organizational objectives is the essence of knowledge management. Making sure that individuals receive the information they require, when and when they require it - the appropriate information, at the appropriate moment - is the goal (Amsler, January 2021; & Saravanan & Velayutham, 2019). By providing data in a location that is easily accessible to all employees, knowledge management helps firms eliminate information silos. It gives people a place to store knowledge they've accumulated over time, avoiding a firm from losing that expertise when workers leave the company (Amsler, January 2021).

The KM topic has been present for about 20 years, according to Grant (2015), and both practitioners and academics continue to be interested in it. Like any other discipline, the KM field is expanding, and scholars and clinicians have created theories, models, and paradigms to describe KM occurrences. Wiig (1993), Nonaka and Takeuchi (1995), Grant (1996), Earl (2001), and Hansen, Nohria, and Tierney (1999), to name a few, are some of the most significant founders of the field to have created such concepts, systems, and paradigms. Their speculations, models, and paradigms have given organizations guidelines on how to better integrate knowledge into their systems and procedures, have clarified the importance of knowledge in organizations, have looked into how organizations can manage knowledge more effectively, and have given organizations tools and plans for KM problems that face both business organizations and society at large.

The procedure through which an organization collects/generates, manages, evaluates, and disseminates its knowledge in a way that is readily available to personnel is known as knowledge management. This information covers people skills, commonly quizzed, instructional materials, and technological solutions (Amsler, January 2021). We are aware of the burdensome nature of data in the age of big data, but it also holds the promise of unheard-of commercial potential for those who master knowledge management. Knowing something has advantages beyond simply doing or generating something, and is widely seen as a product or cognitive commodity (Raza, April 7, 2020).

There are commonly three categories of knowledge:

- a) **Explicit:** Data derived from written materials like books, newspapers, or articles.
- b) **Implicit:** Knowledge that does not start out in a concrete form but can be transformed into one, like a speech or an experience that is dictated.

- c) **Tacit:** Knowledge that is hard to ascertain, such as how you feel or perceive an incident following a significant occurrence (Raza, April 7, 2020).

In the present study following statements (Table 1.) have been used to assess knowledge management (KM). The statements asked about designated manager for administering knowledge management processes, encourages the exchange of ideas and knowledge between individuals and groups, standard processes for the exchange of ideas and knowledge, has methods to critically analyse information for future use, has a register or database of skills, expertise and knowledge sources and has regular symposiums, lectures, conferences, or training sessions to share knowledge and ideas.

Sr. No.	Table 1. Statements Related to Knowledge Management
1.	My bank has a designated manager for administering knowledge management processes
2.	My bank encourages the exchange of ideas and knowledge between individuals and groups
3.	My bank has standard processes for the exchange of ideas and knowledge between individuals and groups
4.	My bank has methods to critically analyse information for future use
5.	My bank has a register or database of skills, expertise and knowledge sources
6.	My bank has regular symposiums, lectures, conferences, or training sessions to share knowledge and ideas

Demographic factors and information sharing behavior did not correlate, according to Ismail and Yusof (2009) and Mogotsi et al. (2011). Demographic characteristics do not appear to be the main predictors of knowledge sharing behavior, according to Ismail and Yusof's 2009 research. Knowledge management studies frequently concentrate on the commercial sector, according to Gaffoor and Cloete (2010), while paying little attention to the public service sector. Additionally, the few studies that do take into account the public service sector tends to concentrate on Western contexts with little attention paid to emerging nations.

The impact of appraisal results and the perceived advantages of information sharing on the intention to share knowledge was examined by Boardia, Irmer, and Abusah in 2006. These investigators looked at two scenarios in their research: direct interpersonal sharing and sharing through contributions to an electronic information management system. In both situations, such as when knowledge sharing took place interpersonally or through a knowledge management system, females demonstrated stronger perceptions of the advantages of sharing knowledge than did males. These results suggest that females are more likely than males to share their information.

Several studies' outcomes have also shown that gender may have an impact on how people share knowledge. The potential impact of cognitive or gender differences on teamwork and knowledge sharing in KMS situations has only been hinted at in a tiny amount of knowledge management research (Gold et al., 2001). Taylor (2004) discovered that gender had a major impact on how knowledge management systems were used, with males continuously reporting higher levels of utilization than females of the knowledge management system investigated emails, data mining, knowledge repository, and yellow pages.

Research Methodology

Objectives of the Study

- I. To study the effect of demographic variables on Knowledge Management Practices
- II. To study the effect of type of bank on Knowledge Management Practices

Hypotheses

- I. Demographic variables will have significant effect on Knowledge Management Practices.
- II. Type of bank will have significant effect on Knowledge Management Practices.

Sample

A sample of 390 subjects was selected from different banks of Punjab, both Nationalized and state banks, and private and public sector banks. The sample includes male as well as female subjects.

Tools Used to Assess Knowledge Management Practices

A survey questionnaire (as presented in Table 1.) was framed keeping in mind the concept of Knowledge Management Practices. The same questionnaire was administered to 390 subjects.

Tools Used For Statistical Analysis

The aim of the research was to study the effect of demographic variables and type of bank on Knowledge Management Practices. To reach the goal ANOVA and Post Hoc tests were applied on the data collected from various banks in Punjab.

Results and Discussion

The aim of the present piece of work was to study the effect of demographic variables and type of banks on knowledge management (KM). Demographic variables include gender, age, level of education and years since a person is working the bank, and banks include HDFC, AXIS, Canara, ICICI, PNB and SBI. Table 2. gives a glimpse of the variables and number of participants in each variable.

Variable	Value Label	N
Bank Name	HDFC	55
	AXIS	38
	Canara	37
	ICICI	51
	PNB	44
	SBI	165
Gender	Male	220
	Female	170
Age in Years	21 - 30	154
	31- 40	157
	41 - 50	49
	More than 50	30
Educational level	Graduate	173
	Post-graduate	212
	Doctorate	5
Working Years	1 - 3	118
	3 - 5	103
	5 - 10	98
	More than 10	71

Results of ANOVA have been Table 3. which presents output with *Knowledge Management Practices* as dependent variable and *bank name and demographic variables* as independent variables. *R Squared* came out to be .538 which indicates 53.8% of variance in knowledge management practices has been accounted for by the independent variables under study i.e. *bank name and demographic variables*.

Bank name ($F=12.104$, $p<0.01$), interaction of bank name, age in years and educational level ($F = 2.087$, $p<.05$), and interaction of gender, educational level and number of working years ($F=3.871$, $p<0.01$) significantly affect Knowledge Management Practices.

Dependent Variable: Knowledge Management Practices				
Source	Sum Squares	df	Mean Square	F
Corrected Model	4090.498 ^a	150	27.270	1.856
Intercept	49184.791	1	49184.791	3347.958

Bank Name	889.081	5	177.816	12.104**
Gender	1.103	1	1.103	.075
Age in Years	26.980	3	8.993	.612
Educational Level	8.581	2	4.291	.292
Working Years	41.009	3	13.670	.930
Bank Name * Gender	13.840	5	2.768	.188
Bank Name * Age in Years	187.383	14	13.384	.911
Bank Name * Educational Level	23.670	5	4.734	.322
Bank Name * Working Years	121.640	15	8.109	.552
Gender * Age in Years	72.798	3	24.266	1.652
Gender * Educational Level	7.922	1	7.922	.539
Gender * Working Years	49.026	3	16.342	1.112
Age in Years * Educational Level	8.271	3	2.757	.188
Age in Years * Working Years	30.080	5	6.016	.410
Educational Level * Working Years	5.396	3	1.799	.122
Bank Name * Gender * Age in Years	49.995	6	8.332	.567
Bank Name * Gender * Educational Level	40.669	4	10.167	.692
Bank Name * Gender * Working Years	93.940	8	11.742	.799
Bank Name * Age in Years * Educational Level	183.933	6	30.656	2.087*
Bank Name * Age in Years * Working Years	108.059	4	27.015	1.839
Bank Name * Educational Level * Working Years	146.811	8	18.351	1.249
Gender * Age in Years * Educational Level	94.991	3	31.664	2.155
Gender * Age in Years * Working Years	68.984	3	22.995	1.565
Gender * Educational Level * Working Years	170.625	3	56.875	3.871**
Age in Years * Educational Level * Working Years	46.395	1	46.395	3.158
Bank Name * Gender * Age in Years * Educational Level	.000	0	.	.
Bank Name * Gender * Age in Years * Working Years	.000	0	.	.
Bank Name * Gender * Educational Level * Working Years	1.627	2	.814	.055
Bank Name * Age in Years * Educational Level * Working Years	.000	0	.	.
Gender * Age in Years * Educational Level * Working Years	2.255	1	2.255	.154
Bank Name * Gender * Age in Years * Educational Level * Working Years	.000	0	.	.
Error	3511.145	239	14.691	
Total	252503.000	390		

Corrected Total	7601.644	389		
R Squared = .538 (Adjusted R Squared = .248)				
% of variance explained by the model = 53.8				
*. Significant at 0.05 level of significance				
**. Significant at 0.01 level of significance				

Post Hoc Tests

Tukey’s HSD test (Tukey’s honestly significant difference) has been used for multiple comparisons. The names of the banks are presented in descending order. Which pairs of means are significantly different are denoted by asterisks in the bank names matrix.

Following are all the pairwise differences for four means (Table 4).

The differences with HSD values have also been presented in Table 4. The asterisks in the first column show that SBI mean differs significantly ($p < .05$) from all other groups. Compared to knowledge management practices of PNB, AXIS, HDFC, Canara, and ICICI to knowledge management practices of SBI are poor.

Groups that are included in the similar homogenous subgroup do not vary from one another very much. The SBI belongs to one of its own subsets. It differs greatly from all the other methods. There is no distinction between the bank names PNB, AXIS, HDFC, Canara, and ICICI. They are in the same subset as one another.

Table 5. Homogeneous Subsets for Knowledge Management Practices				
	<i>Bank Name</i>	<i>N</i>	<i>Subset</i>	
			<i>1</i>	<i>2</i>
			Tukey HSD ^{a,b,c}	SBI
	PNB	44		26.0000
	AXIS	38		26.7895
	HDFC	55		26.8182
	Canara	37		27.2162
	ICICI	51		27.3529
	Sig.		1.000	.490
Means for groups in homogeneous subsets are displayed. Based on observed means. The error term is Mean Square (Error) = 14.691.				
a. Uses Harmonic Mean Sample Size = 50.033.				
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.				
c. Alpha = 0.05.				

ANOVA results and Post hoc comparison indicates that Knowledge Management Practices are significantly affected by name of bank, interaction of bank name, age in years and educational level, and interaction of gender, educational level and number of working years. Knowledge management practices of SBI are poorer than knowledge management practices of PNB, AXIS, HDFC, Canara, and ICICI. Except for Punjab National Bank (PNB) rest of the banks (AXIS, HDFC, Canara, and ICICI) are private banks. State Bank of India (SBI) is the largest and one of the oldest nationalized public banks. So, name of bank, here, clearly indicates of type of bank i.e., public sector bank and private banks. Although, it would be too early/immature to conclude that all public sector banks have poor knowledge management practices because only one such bank have come up with such results but being this bank one of the largest bank it stimulates to think on these lines.

Further, interaction of bank name, age in years and educational level, and interaction of gender, educational level and number of working years also significantly affect the knowledge management practices. So, it can be inferred

that when name of bank, age and level of education have been considered together they also affect knowledge management practices. Gender, educational level and number of working years, means experience, have been considered together they also affect knowledge management practices. With increasing age we get more experience so it can make better or worst knowledge management practices. Additionally, with higher level of education and increased number of working years (experience) knowledge management practices can become better. Taylor (2004) also found similar results. The potential impact of cognitive or gender differences on teamwork and knowledge sharing in KMS situations has only been hinted at in a tiny amount of knowledge management research (Gold et al., 2001).

Conclusion

On the basis of results it can be concluded for the present research that type/name of bank significantly affects knowledge management practices in Punjab. Demographic variables, although not independently, but they affect when taken together i.e. they have interactive effect - interaction of bank name, age in years and educational level, and interaction of gender, educational level and number of working years significantly affect Knowledge Management Practices.

References

- Amsler, S. (January 2021). *Knowledge management (KM)*. Retrieved on 6/28/2022 from: <https://www.techtarget.com/searchcontentmanagement/definition/knowledge-management-KM#:~:text=Knowledge%20management%20is%20the%20process,training%20documents%20and%20people%20kills>.
- Bordia, P., Irmer, B. E., & Abusah, D. (2006). Differences in sharing knowledge interpersonally and via databases: The role of evaluation apprehension and perceived benefits. *European Journal of Work and Organizational Psychology, 15*(3), 262-280.
- Earl, M. (2001). Knowledge management strategies: Toward a taxonomy. *Journal of Management Information Systems, 18*(1), 215-233.
- Gaffoor, S., & Cloete, F. (2010). Knowledge management in local government: The case of Stellenbosch Municipality. *South African Journal of Information Management, 12*(1), 1-7.
- Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: an organizational capabilities perspective. *Journal of Management Information Systems, 18*(1), 185-214.
- Grant, K. (2015). Knowledge management: An enduring but confusing fashion. *Leading Issues in Knowledge Management, 2*, 1-26.
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal, 17*(S2), 109-122.
- Hansen, M. T., Nohria, N., & Tierney, T. (1999). What's your strategy for managing knowledge? Response. *Harvard Business Review, 77*(3), 196-196.
- Ismail, M. B., & Yusof, Z. M. (2009). Demographic factors and knowledge sharing quality among Malaysian government officers. *Communications of the IBIMA, 9*(1), 1-8.
- Mogotsi, I. C., Boon, J. A., & Fletcher, L. (2011). Knowledge sharing behaviour and demographic variables amongst secondary school teachers in and around Gaborone, Botswana. *South African Journal of Information Management, 13*(1), 1-6.
- Raza, M. (April 7, 2020). *Knowledge management: Guidelines and best practices*. Retrieved on 6/28/2022 from: <https://www.bmc.com/blogs/knowledge-management-best-practices/#:~:text=Knowledge%20Management%20is%20the%20process,practice%20Knowledge%20Management%20to%20perfection>.
- Saravanan, S., & Velayutham, S. (2019). Knowledge management in Lanson Toyota with reference to Chennai. *Adalya Journal, 8*(9), 300 – 308.
- Taylor, W. A. (2004). Computer-mediated knowledge sharing and individual user differences: an exploratory study. *European Journal of Information Systems, 13*(1), 52-64.
- Wiig, K. M. (1994). *Knowledge management foundations: thinking about thinking-how people and organizations represent, create, and use knowledge*. Schema Press, Limited.