

# KNOWLEDGE MANAGEMENT AWARENESS AND USAGE IN BANKING SECTOR OF PAKISTAN

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## ABSTRACT

This research paper aims to measure the knowledge management awareness and knowledge management usage in banking sector of Pakistan. For this study public and private banks, NBP (National Bank of Pakistan) and UBL (United Bank Limited), are selected from Pakistani banking sector. Comparative study is done after evaluating knowledge management awareness and usage. Questionnaire is used to gather quantitative data from managers of both banks. 35 managers from 15 branches of each bank are selected for gathering data. The result visibly shows the level of knowledge management awareness and its usage in both NBP (National Bank of Pakistan) and UBL (United Bank Limited). Moreover, result also proved KM awareness in employees of public banks is lesser than employees of private banks and KM usage in employees of private banks is higher than employees of public banks.

## 1. INTRODUCTION

The knowledge management is the concept in which organisations intentionally collect, organise, share and analyse their knowledge within the resources, documents and qualifications of employees [1]. Managing and leveraging knowledge thus has to be at the core of any attempt to improve an organisation's performance [2].

Knowledge management in the business sector started in the early 1990's when organisations realised KM, it is essential to every organisation and can give the organisation a competitive advantage if the knowledge assets are utilised more effectively and wisely [3]. According to Angus & Patel [4], an article published in Information Week, the knowledge management is the name of a concept in which an enterprise consciously and comprehensively gathers, organises, shares, and analyses its knowledge in terms of resources, documents, and people skills. Knowledge management ensures that "knowledge" is used as effectively and efficiently in achieving organisational goals. As a result, the knowledge management becomes essential factor in the creation and management of intangible asset of an organisation.

The modern business world is characterized by dynamic and changing markets and continuous technological advance [5]. To deal with these trends, organizations must become more flexible and one certain way for them to do so is to strengthen their potential to learn as organizations. Thus, "knowledge" becomes an essential organizational driver and a key factor in value creation.

In today's banking sector where knowledge management is the essential part of growth is been neglected. We need to be able to understand knowledge management better, and to find ways to measure it and identify best practices in this area so that banks can operate better and can develop policies to help them to do so.

The purposes of this study are:

1. Promoting innovation
2. Enhancing the skill level of employee with the help of knowledge management awareness,
3. Endorsing the importance of knowledge management practices for leveraging performance,
4. Recognising the impact of organisational culture on knowledge management.

The study has two research questions:

1. Does Pakistani banking sector, including public and private banks, have knowledge management awareness?
2. Does Pakistani banking sector use knowledge management strategies?

The objectives of this study are:

1. Measuring the level of knowledge management awareness in Pakistani banks in public and private banks.
2. Evaluating the level of knowledge management usage in Pakistani banks in public and private banks

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Hypotheses of this study are:

1. KM awareness in employees of public banks will be lesser than employees of private banks.  
Statistically H1 can be represented as:  $KM\ Awareness_{NBP} < KM\ Awareness_{UBL}$
2. KM usage in employees of private banks will be higher than employees of public banks.  
Statistically H2 can be represented as:  $KM\ Usage_{UBL} > KM\ Usage_{NBP}$

## 2. LITERATURE REVIEW

Davenport and Prusak [6] give an extensive definition of knowledge: "Knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knower".

There is no single agreed definition of knowledge presently and there remain many competing theories. Knowledge involves complex cognitive processes: perception, learning, communication, association and reasoning. The term knowledge is also used to mean the understanding of a subject with the ability to use it. Davenport and Prusak [7] explain that knowledge exists within people. Knowledge derives from information as information derives from data. The authors conceive that if information is to become knowledge, humans must do virtually all the work.

The term knowledge is defined in the Oxford Dictionary and Thesaurus [8] as: "awareness or familiarity gained by experience (of a person, fact, or thing)", "specific information; facts or intelligence about something", or "a theoretical or practical understanding of a subject".

We often divide knowledge into two types, tacit and explicit knowledge [9]. By tacit knowledge we mean knowledge that a human is unable to express, but is guiding the behavior of the human. Explicit knowledge is knowledge that we can represent, or "codify", for example in reports, books, talks, or other communication.

Knowledge Management comprises a range of practices used by organizations to identify, create, represent, and distribute knowledge [10]. Knowledge Management programs are typically tied to organizational objectives such as improved performance, competitive advantage, innovation, developmental processes, lessons learnt

transfer (for example between projects) and the general development of collaborative practices. Knowledge Management is frequently linked and related to what has become known as the learning organization, lifelong learning and continuous improvement

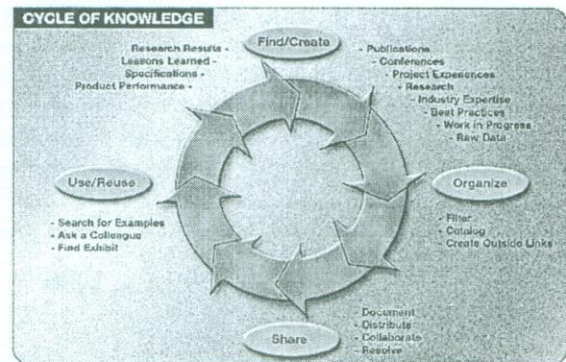


Figure 1: Knowledge Management Cycle [11]

In traditional organizations, knowledge leans to flow along organizational lines, from the top to bottom. But that prototype rarely gives outcomes in making knowledge available and where it's needed the most. In contemporary organizations, information can flow transversely organizational lines, reaching knowledge holders who can use it in ways that best endorse the organizational goals and that improves responsiveness to the customer at the same time. By investigating the four basic elements of the knowledge management cycle, we can understand it better [Figure 1] (Mike Burk) [11]: find/create, organize, share, and use/reuse. Under "find/create," especially as it functions in a transportation organization, knowledge can be gathered through a many ways, including seminars, publications, conferences, workshops, meetings, project experiences, research, and organizational skills. After that in the cycle, "organize," the knowledge is scanned and is linked with the outside sources. Then the information is shared for broad accessibility, making utilize of databases, internet and other techniques.

To help carry out the "organize" and "share" works in knowledge domains of knowledge holders having a familiar interest, many experts recommend a knowledge manager. This person has the task of soliciting good practices, indexing and cataloguing new information as it comes in, and serving as an information broker by assisting people to obtain the information they need. The



knowledge manager can also serve as a supporter for knowledge transfer and sharing practices within and further than his knowledge domain of work.

The final stage of the knowledge management cycle, "use/reuse," occupies both informal contacts and access to reports, good practices, success stories, and other forms of communication, including exhibits, demonstrations, and training sessions. To a great extent of this knowledge can be made accessible to an extensive audience through the Internet. This is the step in which knowledge is functional to solve real-world issues, working more efficiently, and improving safety. Of course, these results are then saved as part of the lessons learnt for use as the knowledge cycle starts again.

**3. RESEARCH METHODOLOGY**

For measuring the level of knowledge management awareness 10 questions are asked from employees, questions carry measures which focus on knowledge management awareness (Table 1)

**Table 1:** Measures related to KM awareness

Questions	Measures
Q.1	KM under different name
Q.2	Responsibility of manager
Q.3	Information overloaded
Q.4	Understanding of KM
Q.5	Number of clients
Q.6	Improve worker efficiency
Q.7	Knowledge sharing vertically
Q.8	Responsibility of the knowledge officer
Q.9	Knowledge sharing horizontally
Q.10	New knowledge creation

For measuring the level of knowledge management usage 10 questions are asked, questions carry measures which focus on knowledge management usage (Table 2)

**Table 2:** Measures related to KM usage

Questions	Measures
Q.1	Value System
Q.2	Capturing knowledge from other sources
Q.3	Formal training related to KM
Q.4	Responsibility of KM unit
Q.5	knowledge worker retention
Q.6	Grant resources to obtain external knowledge
Q.7	Informal training related to KM
Q.8	Transfer of knowledge
Q.9	Knowledge management strategy
Q.10	Database of lessons learned

SPSS (Statistical Package for the Social Sciences) 16.0 is used for descriptive and inferential statistics. Statistics are a method of summarizing and analyzing data for the purpose of drawing conclusions about the data. Descriptive statistics simply offer us a way to describe a summary of data. Whereas inferential statistics allow us to make a conclusion related to hypothesis.

The sample size has a direct impact on the power of statistical analysis and the generalizability of results (Hair et al., 1998). The study is aims to measure the level knowledge management awareness and usage which is done through the survey of two banks that is National Bank of Pakistan (NBP) and United Bank Limited (UBL). Nine branches of each bank are selected on random basis by questioning of 35 managers from each bank; selection of managers is also done through random basis.

**4. ANALYSIS OF RESEARCH**

(a) Knowledge management awareness in National Bank of Pakistan (NBP)

Table 3 presents measures related to questions along with their mean values related to KM awareness. Average mean measures the level of KM awareness.

**Table 3:** Measures related to KM awareness along with mean values of NBP

Questions	Measures	Mean
Q.1	KM under different name	3.06
Q.2	Responsibility of manager	3.00
Q.3	Information overloaded	3.37
Q.4	Understanding KM	3.20
Q.5	Number of clients	3.14
Q.6	Improve worker efficiency	3.03
Q.7	Knowledge sharing vertically	2.91
Q.8	Responsibility of the knowledge officer	2.06
Q.9	Knowledge sharing horizontally	3.00
Q.10	New knowledge creation	2.94
Grand Mean		2.97

The scale of measurement is from 0 – 4, 0 represents strongly disagree and 4 represents strongly agree to the question. The mean value of question 1 from the employees of NBP is 3.06 which means most of employees agreed that in their organization KM is practicing but with different name. For question 2 most of employees agreed KM is the responsibility of managers which we came to know from the mean value



3.00. The mean value 3.37 of question 3 says that information is basically overloaded in their bank. Most of employees of NBP agreed that they do have much understanding about KM which is calculated from the mean value 3.20 of question 4. NBP's employee do believe that implementing KM in their bank will increase number of clients and can improve workers' efficiency as well, which we come to know from the mean values 3.14 and 3.03 of questions 5 and 6. Employees of NBP also believe that implementing KM can increase knowledge sharing horizontally which says by the mean value 3.00 of question 9. For question 7, 8 and 10 mean values are in between 2-3, it means employees are not sure whether implementing KM in banks increase knowledge sharing vertically or not, also they are not aware of knowledge officer's responsibility and they don't know if top management takes keen interest in creation of new knowledge or not.

With the help of mean values (Figure 2), average mean is taken out which is 2.94. Average mean gives us the percentage value which is 74.25. If we rank KM awareness in NBP out of 100, 74.25 is the result we get.

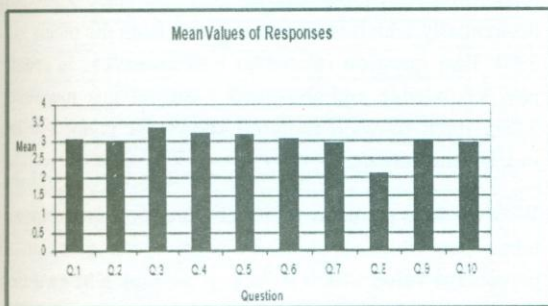


Figure 2: Mean Values of Responses Related to KM Awareness in NBP

Result shows KM awareness 74 percent in NBP and rest 26 percent is unawareness about KM in NBP (Figure 3).

The rest 26 percent shows where lacking is, where NBP needs to know about KM.

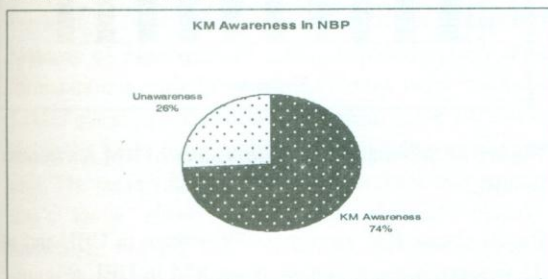


Figure 3: KM Awareness in NBP

(b) Knowledge management Usage in National Bank of Pakistan (NBP)

Table 4 presents measures related to questions along with their mean values related to KM usage. Average mean measures the level of KM usage.

Table 4: Measures related to KM usage along with mean values of NBP

Questions	Measures	Mean
Q.1	Value System	1.23
Q.2	Capturing knowledge from other sources	3.00
Q.3	Formal training related to KM	3.00
Q.4	Responsibility of KM unit	1.03
Q.5	knowledge worker retention	1.03
Q.6	Grant resources to obtain external knowledge	2.97
Q.7	Informal training related to KM	1.14
Q.8	Transfer of knowledge	1.03
Q.9	Knowledge management strategy	1.06
Q.10	Database of lessons learned	2.80
Grand Mean		1.82

The scale of measurement is from 0 – 4, 0 represents strongly disagree and 4 represents strongly agree to the question. Mean value 1.23 of question 1 shows mostly employees of NBP disagreed about the value system related to KM in their organization. As per the mean value of question 2, which is 3.00, says NBP captures knowledge from other sources such as competitors. Majority of employees of NBP agreed that they do get formal trainings which we come to know from mean value 3.00 of question 3. Question 4, 5 and 8 got same mean value which is 1.03; it shows mostly in NBP there isn't any knowledge management unit, employees don't know about the policies planned related to knowledge workers and there isn't any separate function of knowledge transfer. Mean value 2.96 of question 6 shows that NBP grants resources to obtain external knowledge. As per the mean value of question 7 which is 1.14 shows that there isn't any informal training provided to NBP employees. Mean value of question 9 is 1.06 which clearly shows that NBP doesn't have any written knowledge management policy. For updating database of lessons learned, employees' responses gave mean value 2.8 which reflects that employees do update database.

With the help of mean values (Figure 4), average mean is taken out which is 1.82. Average mean gives us the percentage value which is 45.7. If we level KM usage in NBP out of 100, 45.7 is the result we get.



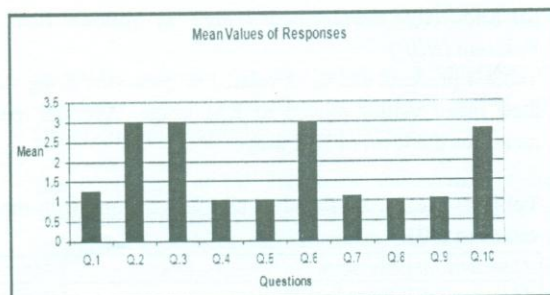


Figure 4: Mean Values of Responses Related to KM Usage in NBP

Result shows KM usage 46 percent in NBP and rest 54 percent is gap which makes KM unsuccessful in NBP (Figure 5). The rest 54 percent shows where lacking is, where NBP needs to use more KM strategies.

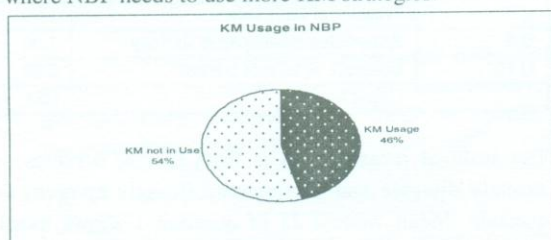


Figure 5: KM Usage in NBP

(c) Knowledge management awareness in United Bank Limited (UBL)

Table 5 presents measures related to questions along with their mean values related to KM awareness. Average mean measures the level of KM awareness.

Table 5: Measures related to KM awareness along with mean values of UBL

Questions	Measures	Mean
Q.1	KM under different name	3.17
Q.2	Responsibility of manager	3.26
Q.3	Information overloaded	3.40
Q.4	Understanding KM	3.14
Q.5	Number of clients	3.11
Q.6	Improve worker efficiency	3.29
Q.7	Knowledge sharing vertically	3.00
Q.8	Responsibility of the knowledge officer	2.91
Q.9	Knowledge sharing horizontally	3.06
Q.10	New knowledge creation	3.20
Grand Mean		3.15

The scale of measurement is from 0 – 4, 0 represents strongly disagree and 4 represents strongly agree to the question. The mean value of question 1 from the employees of UBL is 3.17 which means most of employees agreed that in their organization KM is practicing but with different name. For question 2, the mean value is 3.26, most of employees agreed KM is the responsibility of managers. The mean value of question 3 which is 3.4 says that information is basically overloaded in their bank. Most of employees also agreed that they do not have much understanding about KM because mean value of question 4 is 3.15. They do believe that implementing KM in their bank will increase number of clients which we come to know from mean value of 3.00 of question 5 and can improve workers' efficiency as well which we come to know from mean value 3.00 of question 6. With the mean value of 3.00 of question 7 we come to know employees of UBL also believe that implementing KM can increase knowledge sharing horizontally. Mean value of question 8 is 2.91, which shows employees are not aware of knowledge officer's responsibility. Employees of UBL do share knowledge horizontally which we come to know from the mean value 3.06. Last question related to KM awareness is creating new knowledge and the mean value of this measure is 3.20, which shows if required knowledge is not available in UBL they create it.

With the help of mean values (Figure 6), average mean is taken out which is 3.15. Average mean gives us the percentage value which is 78.8. If we rank KM awareness in UBL out of 100, 78.8 is the result we get.

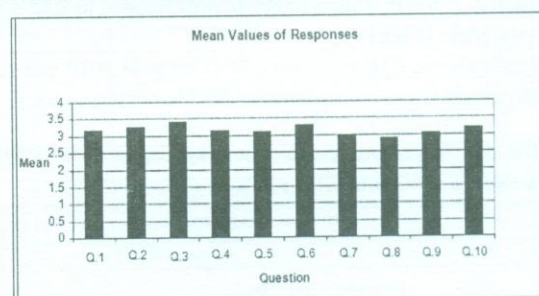


Figure 6: Summary of Mean Values of KM Awareness in UBL.

Result shows KM awareness 79 percent in UBL and rest 21 percent is unawareness about KM in UBL (Figure 7). The rest 21 percent shows where lacking is, where UBL needs to know more about KM.

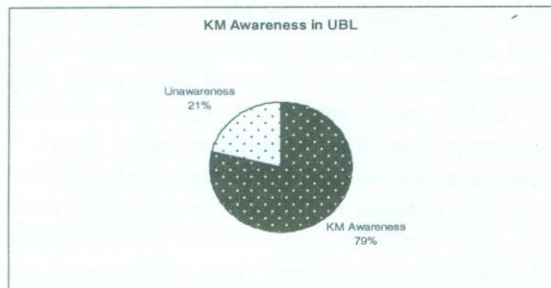


Figure 7: KM awareness in UBL

(d) Knowledge management awareness in United Bank Limited (UBL):

Table 6 presents measures related to questions along with their mean values related to KM usage. Average mean measures the level of KM usage.

Table 6: Measures related to KM usage along with mean values of UBL

Questions	Measures	Mean
Q.1	Value System	1.31
Q.2	Capturing knowledge from other sources	3.00
Q.3	Formal training related to KM	3.00
Q.4	Responsibility of KM unit	1.03
Q.5	knowledge worker retention	2.63
Q.6	Grant resources to obtain external knowledge	3.03
Q.7	Informal training related to KM	1.11
Q.8	Transfer of knowledge	1.09
Q.9	Knowledge management strategy	1.91
Q.10	Database of lessons learned	3.31
Grand Mean		2.14

The scale of measurement is from 0 – 4, 0 represents strongly disagree and 4 represents strongly agree to the question. Mean value 1.31 of question 1 shows mostly employees of UBL disagreed about the value system related to KM in their organization. As per the mean value of question 2, which is 3.00, says UBL captures knowledge from other sources such as competitors. Majority of employees of UBL agreed that they do get formal trainings which we come to know from mean value 3.00 of question 3. Question 4 got mean value 1.03 which shows in UBL there isn't any knowledge management unit. The mean value 2.63 of question 5 shows employees don't know about the policies planned related to knowledge workers. Mean value 3.03 of question 6 shows that UBL grants resources to obtain external knowledge. As per the mean value of question 7 which is 1.11 shows

that there isn't any informal training provided to UBL employees. Mean value of question 9 is 1.91 which clearly shows that UBL doesn't have written knowledge management policy. For updating database of lessons learned, employees' responses gave mean value 3.31 which reflects that employees do update database. With the help of mean values (Figure 8), average mean is taken out which is 2.14. Average mean gives us the percentage value which is 53.3. If we level KM usage in NBP out of 100, 53.3 is the result we get.

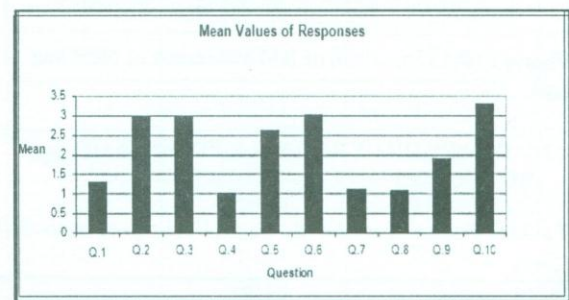


Figure 8: Mean Values of KM usage in UBL

Result shows KM usage 53 percent in UBL and rest 47 percent is gap which makes KM unsuccessful in UBL (Figure 9). The rest 47 percent shows where lacking is, where UBL needs to use more KM strategies.

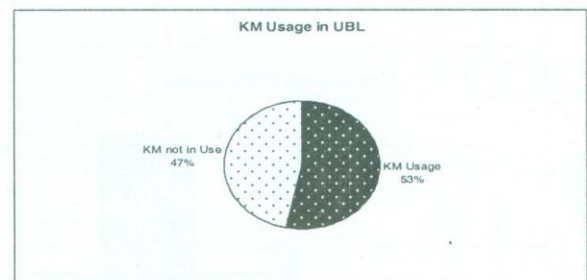


Figure 9: KM usage in UBL

4.1 COMPARISON OF KM AWARENESS FINDINGS OF BOTH CASES

Table 7: Percentages of KM Awareness Findings of Both Cases

NBP	UBL
74.2%	7.8%

Figure 10 presents the comparison of KM awareness in NBP and UBL through the percentage values they carry. NBP is on 74% whereas UBL is on 78%. It clearly shows



that UBL is ahead than NBP in KM awareness.

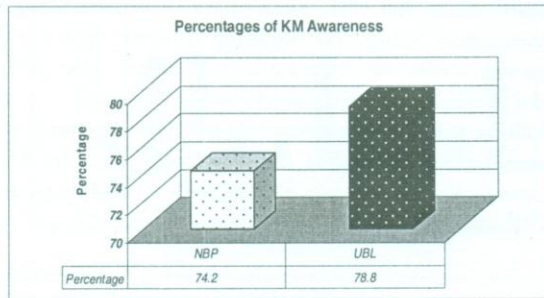


Figure . 10: Comparison of KM awareness of NBP and UBL

4.2 COMPARISON OF KM USAGE FINDINGS OF BOTH CASES

Table 8: Percentages of KM Usages Findings of Both Cases

NBP	UBL
45.7%	53.3%

Figure 11 presents the comparison of KM usage in NBP and UBL through the percentage values they carry. NBP is on 45% whereas UBL is on 53%. It clearly shows that UBL is ahead than NBP in KM usage.

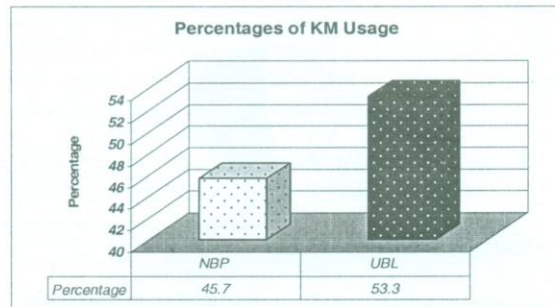


Figure. 11: Comparison of KM usage of NBP and UBL

4.3 HYPOTHESES TESTING

Hypothesis 1 (H1) is, KM awareness in employees of public bank will be lesser than employees of private bank. Statistically can be represented as:  $KM\ Awareness_{NBP} < KM\ Awareness_{UBL}$

Table 9 presents the descriptive statistics of hypothesis 1. For hypothesis 1 the variable KM awareness of both

banks is selected which has 10 different measures related to KM awareness. The descriptive statistics presents the summary of whole data. 7 out of 10 measurement items have higher mean values in UBL than NBP, 2 measurement items have same mean values whereas 1 measurement item has less mean value in UBL than NBP. On the basis of higher mean values in more measurement items, we can state that KM awareness is less in public bank (NBP) than private bank (UBL) which proves our hypothesis 1 valid.

Table 10 shows the T test (Statistical formula of T-test is  $t = [ (x1 - x2) - d ] / SE$ ) of hypothesis 1, which is used to test whether there is a significant differences between the means of two groups. Since we are using a 95% confidence,  $\alpha = 0.05$ , therefore if  $p < 0.05$  we accept our hypothesis and reject null hypothesis. Under the “t-test for Equality of Variances” the “Sig.” for “Equal variances assumed”, 6 out of 10 measurement items have less than 0.05 values, therefore we can say there is a significant difference between the variance of two groups.

Table 9: Descriptive statistics of hypothesis 1

Group Statistics					
	ID	N	Mean	Std. Deviation	Std. Error Mean
KM under different name	NBP	35	4.0571	0.23550	0.03981
	UBL	35	4.1714	0.38239	0.06463
Responsibility of managers	NBP	35	4.0000	0.0000	0.00000
	UBL	35	4.2571	0.44344	0.07495
Information overload	NBP	35	4.3143	0.75815	0.12815
	UBL	35	4.4000	0.49705	0.08402
Lack of understanding of KM	NBP	35	4.1429	0.69209	0.11698
	UBL	35	4.1429	0.60112	0.10161
Number of clients	NBP	35	4.1429	0.35504	0.06001
	UBL	35	4.1143	0.32280	0.05456
Improve worker efficiency	NBP	35	4.0286	0.16903	0.02857
	UBL	35	4.2857	.45835	0.07748
Knowledge sharing vertically	NBP	35	3.9143	0.28403	0.04801
	UBL	35	3.9143	0.28403	0.04801
Responsibility of the knowledge officer	NBP	35	3.0571	0.99832	0.16875
	UBL	35	3.9143	0.37349	0.06313
Knowledge sharing horizontally	NBP	35	4.0000	0.000000	0.00000
	UBL	35	4.0571	0.23550	0.03981
New knowledge creation	NBP	35	3.9429	0.23550	0.03981
	UBL	35	4.2000	0.40584	0.06860



Table 10: T-Test of hypothesis 1

		Independent Samples Test								
		Leven's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower		Upper
KM under different name	Equal variances assumed	10.203	0.002	-1.506	68	.137	-.11429	.07591	-.26576	.3719
	Equal variances not assumed			-1.506	56.549	.138	-.11429	.07591	-.26632	.03775
Responsibility of managers	Equal variances assumed	110.118	.000	-3.431	68	.001	-.25714	.07495	-.40671	-.10757
	Equal variances not assumed			-3.431	34.000	.002	-.25714	.07495	-.40947	-.10482
Information overload	Equal variances assumed	.599	.442	-.599	68	.578	-0.8571	.15324	-.39149	.22006
	Equal variances not assumed			-.599	58.670	.578	-0.8571	.15324	-.39238	.22095
Lack of understanding of KM	Equal variances assumed	.174	.678	.000	68	1.000	.0000	.15495	-.30920	.30920
	Equal variances not assumed			.000	66.963	1.000	.0000	.15495	-.30931	.30931
Number of clients	Equal variances assumed	.499	.482	.352	68	.726	.02857	.08111	-.13328	.19042
	Equal variances not assumed			.352	67.393	.726	.02857	.08111	-.13330	.19045
Improve worker efficiency	Equal variances assumed	68.026	.000	-3.114	68	.003	-.25714	.08258	-.42192	-.09237
	Equal variances not assumed			-3.114	43.080	.003	-.25714	.08258	-.42366	-.09062
Knowledge sharing vertically	Equal variances assumed	.000	1.000	.000	68	1.000	.00000	0.06790	-.13548	.13548
	Equal variances not assumed			.000	68.000	1.000	.00000	.06790	-.13548	.13548
Responsibility of the knowledge officer	Equal variances assumed	162.038	.000	-4.757	68	.000	-.85714	.18017	-1.21667	-.4762
	Equal variances not assumed			-4.575	43.335	.000	-.85714	.18017	-1.22041	-.49388
Knowledge sharing horizontally	Equal variances assumed	9.340	.003	-1.435	68	.156	-.05714	.03981	-.13658	.02229
	Equal variances not assumed			-1.435	34.000	.160	-.05714	.03981	-.13804	.02376
New knowledge creation	Equal variances assumed	15.337	.000	-3.242	68	.002	-.25714	.07931	-.41541	-.09888
	Equal variances not assumed			-3.242	54.566	.002	-.25714	.07931	-.41612	-.09817

Hypothesis 2 (H2) is, KM usage in employees of private banks will be higher than employees of public bank. Statistically can be represented as:  $KM Usage_{UBL} > KM Usage_{NBP}$

Table 11 presents the descriptive statistics of hypothesis 2. For hypothesis 2 the variable KM usage of both banks is selected which has 10 different measures related to KM usage. The descriptive statistics presents the summary of whole data. 6 out of 10 measurement items have higher mean values in UBL than NBP, 3 measurement items have same mean values whereas 1 measurement item has less mean value in UBL than NBP. On the basis of higher mean values in more measurement items, we can state that KM usage is higher in private bank (UBL) than public bank (NBP) which proves our hypothesis 2 valid.

Table 12 shows the T test (Statistical formula of T-test is  $t = [ (x1 - x2) - d ] / SE$ ) of hypothesis 2, which is used to test whether there is a significant differences between the means of two groups. Since we are using a 95% confidence,  $\alpha = 0.05$ , therefore if  $p < 0.05$  we reject our hypothesis and accept null hypothesis. Under the “t-test for Equality of Variances” the “Sig.” for “Equal variances assumed”, 3 out of 10 measurement items have less than 0.05 values, therefore we can say there is a significant difference between the variance of two groups.

**Table 11:** Descriptive statistics of hypothesis 2  
**Group Statistics**

	ID	N	Mean	Std. Deviation	Std. Error Mean
Value System	NBP	35	2.2286	.42604	.07201
	UBL	35	2.3143	.47101	.07961
Capturing knowledge from competitors	NBP	35	4.0000	.00000 <sup>a</sup>	.00000
	UBL	35	4.0000	.00000 <sup>a</sup>	.00000
Formal training to KM	NBP	35	4.0000	.00000 <sup>a</sup>	.00000
	UBL	35	4.0000	.00000 <sup>a</sup>	.00000
Responsibility of KM unit	NBP	35	2.0286	.16903	.02857
	UBL	35	2.0286	.16903	.02857
Improve knowledge worker retention	NBP	35	2.0286	.38239	.06463
	UBL	35	3.6286	.49024	.08287
Grant resources for external knowledge	NBP	35	3.9714	.16903	.02857
	UBL	35	4.0286	.16903	.02857
Informal training to KM	NBP	35	2.1429	.35504	.06001
	UBL	35	2.1143	.47101	.07961
Transfer of knowledge as a function	NBP	35	2.0286	.16903	.02857
	UBL	35	2.0857	.28403	.04801
Lessons learned	NBP	35	4.0857	.28403	.04801
	UBL	35	4.1143	.32280	.05456
Written KM policy	NBP	35	2.0571	.23550	.03981
	UBL	35	2.9143	.50709	.08571

a. t cannot be computed because the standard deviations of both groups are 0.



Table 12: T-Test of hypothesis 1

Independent Samples Test

		Leven's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Value System	Equal variances assumed	2.556	.115	-.798	68	.427	-.08571	.10735	-.29993	.12850
	Equal variances not assumed			-.798	67.327	.427	-.08571	.10735	-.29997	.08063
Responsibility of KM unit	Equal variances assumed	.000	1.000	.000	68	1.000	.00000	.04041	-.08063	.08063
	Equal variances not assumed			.000	68.000	1.000	.00000	.04041	-.08063	.08063
Improve knowledge worker retention	Equal variances assumed	23.649	.000	-15.225	68	.000	-1.60000	.10509	-1.80971	-1.39029
	Equal variances not assumed			-15.225	64.194	.000	-1.60000	.10509	-1.80993	-1.39007
Grant resources for external knowledge	Equal variances assumed	.000	1.000	-1.414	68	.162	-.05714	.04041	-.13777	.02349
	Equal variances not assumed			-1.414	68.000	.162	-.05714	.04041	-.13777	.02349
Informal training to KM	Equal variances assumed	.127	.723	.287	68	.775	.02857	.09970	-.17038	.22752
	Equal variances not assumed			.287	63.207	.775	.02857	.09970	-.17065	.22779
Transfer of knowledge as a function	Equal variances assumed	4.439	.039	-1.023	68	.310	-.05714	.05587	-.16863	.05434
	Equal variances not assumed			-1.023	55.399	.311	-.05714	.05587	-.16909	.05480
Lessons learned	Equal variances assumed	623	.433	-.393	68	.695	-.02857	.07268	-.17360	.11646
	Equal variances not assumed			-.393	66.916	.695	-.02857	.07268	-.17364	.11650
Written KM policy	Equal variances assumed	7.424	.008	-9.070	68	.000	-.85714	.09451	-1.04573	-.66856
	Equal variances not assumed			-9.070	48.015	.000	-.85714	.09451	-1.04716	-.66713

## 5. CONCLUSION AND RECOMMENDATION

After measuring the level of KM awareness, the conclusion of first objective says that KM awareness is higher in private bank of Pakistani banking sector than public bank. Second objective was to measure the level of knowledge management usage in public and private banks from Pakistani banking sector. After measuring the level of KM usage, the conclusion of second objective says that KM usage is higher in private bank of Pakistani banking sector than public bank. There are two hypotheses in the study; first hypothesis is "KM awareness in employees of public banks will be lesser than employees of private banks" which is proven valid with the help of descriptive and inferential statistics. Second hypothesis is "KM usage in employees of private banks will be higher than employees of public banks" which is also proven valid with the help of descriptive and inferential statistics.

It is recommended that further research can be done on the barriers which occur in implementing KM strategies and research can also be done on knowledge transfer process and procedures. The knowledge in the minds of employees, information/knowledge system, and organizational culture are the most valuable assets. It is also recommended that organizations now track the level of knowledge growth and analyze the rate of change in KM implementation. In addition, KM awareness and usage studies should be performed on a wider sample of same banks, to better measure the true level.

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