CONSIDERATION BASED ON BOHN'S EIGHT-SCALE STAGE: TWO CASE STUDIES FROM BANKING SECTOR OF PAKISTAN

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ABSTRACT

This research paper aims to assess the current stage on knowledge growth of public and private banks from Pakistani banking sector. Two banks, one from public banks and another one from private banks, NBP (National Bank of Pakistan, a public bank) and UBL (United Bank Limited, a private bank) have been selected from Pakistani banking sector for measurement. Questionnaire has been filled from 35 managers of 15 branches of each bank. For assessing the current stage of knowledge growth, 40 questions have been designed for 8 stages carrying measures. The qualitative result is taken out from the quantitative data. The result clearly shows the current stage of knowledge management in both NBP and UBL. NBP is on 5th stage whereas UBL is on 6th Stage on Bohn's Eight Scale Stage.

Index Terms: Knowledge Management, Knowledge Management in Banks, Knowledge Management Process, and Performance Indicators for Knowledge Management.

INTRODUCTION

Manfred Bornemann (2003) has stated that the modern business world is characterized by dynamic and changing markets and continuous technological advance to deal with these trends, organizations must become more flexible and one way for them to do this 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 being 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 objective of this study

is to find out current stages on knowledge management (KM) by using Bohn's eight-scale stage of National bank of Pakistan (NBP) and United Bank Limited (UBL), two case studies from Pakistani banking sector.

LITERATURE REVIEW

Knowledge management is a concept in which an enterprise consciously and comprehensively gathers, organizes, shares, and analyzes its knowledge in terms of resources, documents, and people skills.

Manfred (2003) mentioned in 'an illustrated guide to knowledge management that there are three main aspects of knowledge management: individual knowledge, action and data. The first, individual knowledge (i.e. the sum of an individual's capabilities and experience), determines the possible actions open to an individual and, consequently, the contributions he is able to make to a particular project or task. The second aspect, action, includes both physical and mental actions (e.g. problem solving). The actions required to complete an individual task often result in generation of large amounts of data. The third aspect of knowledge management includes analysis of internal data (e.g. from other projects) and external data sources such as libraries or online databases.

These aspects form the operational layers of the knowledge management model illustrated in Figure 1:
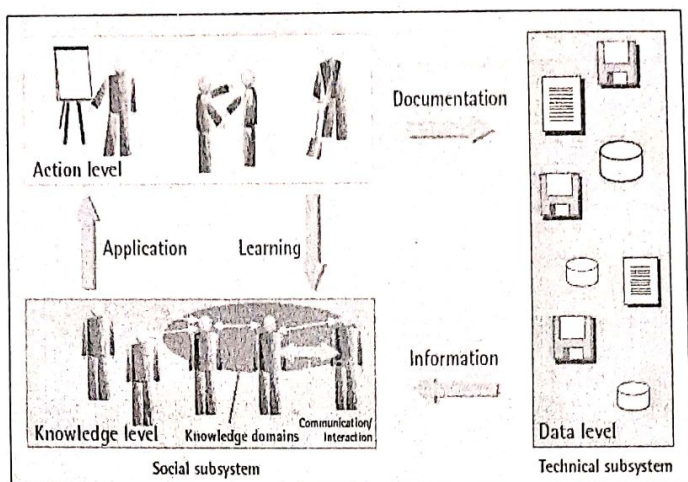
Fig. 1 Basic Model of Knowledge Management
Source: Manfred Bornemann (2003)

The knowledge level is made up of the knowledge of the individual members of the organization and their interaction of individual knowledge. The data level consists of all available documented knowledge. The knowledge and data levels provide inputs for the action level. This is where business processes are enacted that presents an organization's value creating processes.

Knowledge of audit can be done in many ways, one of the many ways is provided by Bohn i.e. Bohn's Eight-Stage Scale. The practice and implementation of knowledge strategies leads organization towards the knowledge growth. Frameworks are proposed for mapping and evaluating the levels of knowledge at organizations. One such map was proposed by Bohn (1994) involves an eight-stage model Auditing of knowledge in organizations can be done through many ways. One of them is Bohn's eight-scale stage shown in Figure 2. This model audits knowledge and find outs the current stage of knowledge growth. Each and every stage represents the typical form of knowledge shown in Table 1.
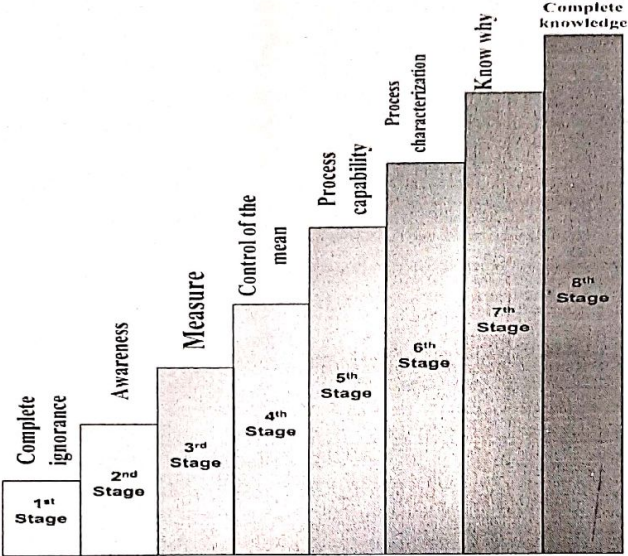
Fig. 2 Bohn's Eight-Scale Stage

Stage	Name	Typical form of knowledge
1	Complete ignorance	Does not exist
2	Awareness	Tacit (primary)
3	Measure	Written (primary)
4	Control of the mean	Written and embodied in hardware
5	Process capability	Hardware and operating manuals
6	Process characterization	Empirical equations (numerical)
7	Know why	Scientific formulas and algorithms
8	Complete knowledge	Ideal stage

Table-1 Bohn's stages of knowledge growth

This framework by Bohn (with parenthetical additions by Tiwana, 2002) can be used to map, analyze and contrast the different stages of knowledge that exist at organizations. This research paper is based on Bohn's eight-scale stages to assess the current stages of knowledge growth in NBP and UBL.

RESEARCH METHODOLOGY

Quantitative data was gathered through questionnaire. For assessing the current stage of knowledge growth, 40 questions were designed for 8 stages carrying measures, mentioned in table 2.

Stages	Questions	Measures
Stage 1 Complete Ignorance	Q.1	KM under different name
	Q.2	Gathered knowledge
	Q.3	Losing critical knowledge
	Q.4	Responsibility of managers
	Q.5	New knowledge creation
Stage 2 Awareness	Q.6	Facilitate integrate knowledge
	Q.7	Knowledge sharing vertically
	Q.8	Number of clients
	Q.9	Improve worker efficiency
	Q.10	Knowledge sharing horizontally
Stage 3 Measure	Q.11	Responsibility of the knowledge officer
	Q.12	Lack of reward
	Q.13	Lack of understanding of KM
	Q.14	Information overload
	Q.15	Lack of information
Stage 4 Control of the mean	Q.16	Knowledge sharing
	Q.17	Improve the capture of knowledge
	Q.18	Meet planned objectives
	Q.19	Transferring knowledge with customers
	Q.20	Improve the competitive advantage
Stage 5 Process capability	Q.21	Lessons learned
	Q.22	Facilitating joint work
	Q.23	KM software
	Q.24	Knowledge sharing everyday
	Q.25	Appropriate knowledge
Stage 6 Process	Q.26	Attain business goals
	Q.27	Promote transferring knowledge

Characterization	Q.28	Capturing knowledge from public research institutions
	Q.29	Updating databases
	Q.30	Encourage skilled employees
Stage 7 Know why	Q.31	Written KM policy
	Q.32	Transfer of knowledge as a function
	Q.33	Grant resources for external knowledge
	Q.34	Participation of employees
	Q.35	Informal training to KM
Stage 8 Complete knowledge	Q.36	Formal training to KM
	Q.37	Value system
	Q.38	Capturing knowledge from competitors
	Q.39	Responsibility of KM unit
	Q.40	Improve knowledge worker retention

Table-3 Measures Related to Knowledge Growth Stages

ANALYSIS OF RESEARCH

The questionnaire consisted of 40 questions to measure the knowledge growth based on Bohn's Eight Scale Stage. Each stage carries 5 questions on a 5-point Likert type scale.

Table 4 presents the summary of responses of stage 1 from NBP. The measurement item of question 1 is "KM under different name", mean value 3.06 tells us that in NBP KM is there but with different name. The measurement item of question 2 is "Gathered knowledge", mean value 1.23 shows employees of NBP are not satisfied with the gathered knowledge. The measurement item of question 3 is "Losing critical knowledge", mean value 1.23 illustrates that NBP loses its critical knowledge if knowledge worker leaves the organization. The measurement item of question 4 is "Responsibility of managers", mean value 3.00 represents all employees agreed that managers of NBP are supposed to implement KM strategies. The measurement item of question 5 is "New knowledge creation", mean value 2.94 shows new knowledge is created whenever is required in NBP. In the end overall percentage is calculated for the stage, which is 57.2.

Stage 1	0 Strongly Disagree	1 Disagree	2 Disagree nor Agree	3 Agree	4 Strongly Agree	% of Stage	Mean	Variance	S.D.
Q1	0	0	0	33	2	35	3.06	1.03	1.02
Q2	0	27	8	0	0	35	1.23	0.15	0.39
Q3	0	29	4	2	0	35	1.23	0.15	0.39
Q4	0	0	0	35	0	35	3.00	1.03	1.01
Q5	0	0	2	33	0	35	2.94	0.97	0.99
	0	56	28	309	8	57.2			

Table-4 Summary of responses of stage 1 from NBP

Table 5 presents the summary of responses of stage 2 from NBP. The measurement item of question 6 is "Facilitate integrate knowledge", mean value 0.89 tells us that NBP does not facilitate integrate knowledge. The measurement item of question 7 is "Knowledge sharing vertically", mean value 2.91 shows employees of NBP share knowledge vertically. The measurement item of question 8 is "Number of clients", mean value 3.14 illustrates that NBP believes that KM can increase number of clients. The measurement item of question 9 is "Improve worker efficiency", mean value 3.03 represents all employees agreed that KM can improve workers' efficiency. The measurement item of question 10 is "Knowledge sharing horizontally", mean value 3.00 shows that in NBP knowledge is shared horizontally. In the end overall percentage is calculated for the stage, which is 65.5.

Stage 2	0 Strongly Disagree	1 Disagree	2 Disagree nor Agree	3 Agree	4 Strongly Agree	% of Stage	Mean	Variance	S.D
Q6	5	29	1	0	0	35	0.89	0.09	0.29
Q7	0	0	3	32	0	35	2.91	0.94	0.97
Q8	0	0	0	30	5	35	3.14	1.04	1.02
Q9	0	0	0	34	1	35	3.03	1.03	1.01
Q10	0	0	0	35	0	35	3.00	1.03	1.01
	5	29	8	393	24	65.5			

Table-5 Summary of responses of stage 2 from NBP

Table 6 presents the summary of responses of stage 3 from NBP. The measurement item of question 11 is "Responsibility of the knowledge officer", mean value 2.06 tells us that employees of NBP are neutral about the responsibility of knowledge officers. The measurement item of question 12 is "Lack of reward", mean value 0.97 shows majority of employees of NBP disagree that lack of reward is the hurdle in implementing KM in NBP. The measurement item of question 13 is "Lack of understanding of KM", mean value 3.20 illustrates that NBP believes that there is a lack of understanding KM. The measurement item of question 14 is "Information overload", mean value 3.37 shows that information overloaded can be the hurdle of implementing KM in NBP. The measurement item of question 15 is "Lack of information", mean value 3.26 shows that in NBP lack of information can also be the hurdle of KM. In the end overall percentage is calculated for the stage, which is 64.4.

Stage 3	0 Strongly Disagree	1 Disagree	2 Neither Disagree nor Agree	3 Agree	4 Strongly Agree	% of Stage	Mean	Variance	S.D
Q11	0	16	1	18	0	35	2.06	0.44	0.66
Q12	1	34	0	0	0	35	0.97	0.11	0.33
Q13	0	0	1	26	8	35	3.20	1.04	1.02
Q14	0	0	1	20	14	35	3.37	1.13	1.06
Q15	0	0	0	26	9	35	3.26	1.08	1.04
	1	50	6	270	124	64.4			

Table-6 Summary of responses of stage 3 from NBP

Table 7 presents the summary of responses of stage 4 from NBP. The measurement item of question 16 is "Knowledge sharing", mean value 2.94 tells us that employees of NBP agree that knowledge is shared. The measurement item of question 17 is "Improve the capture of knowledge", mean value 2.77 shows majority of employees of NBP agree that KM is in use to improve the efficiency of captured knowledge. The measurement item of question 18 is "Meet planned objectives", mean value 2.89

illustrates that NBP uses KM to meet the planned objectives. The measurement item of question 19 is "Transferring knowledge with customers", mean value 1.74 shows that employees of NBP are neutral about transferring knowledge to customers. The measurement item of question 20 is "Improve the competitive advantage", mean value 3.00 shows that in NBP KM is in use to improve the competitive advantage. In the end overall percentage is calculated for the stage, which is 67.

Stage 4	0	1	2	3	4	% of Stage			
	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree		Mean	Variance	S.D
Q16	0	0	2	33	0	35	2.94	0.97	0.99
Q17	0	3	2	30	0	35	2.77	0.85	0.92
Q18	0	2	0	33	0	35	2.89	0.94	0.97
Q19	2	19	0	14	0	35	1.74	0.31	0.56
Q20	0	0	0	35	0	35	3.00	1.03	1.01
	2	24	8	435	0	67			

Table-7 Summary of responses of stage 4 from NBP

Table 8 presents the summary of responses of stage 5 from NBP. The measurement item of question 21 is "Lessons learned", mean value 3.09 tells us that employees of NBP agree that lessons are learned by sharing documents. The measurement item of question 22 is "Facilitating joint work", mean value 2.94 shows majority of employees of NBP share knowledge by facilitating joint work. The measurement item of question 23 is "KM software", mean value 1.20 shows that no KM software is used in NBP. The measurement item of question 24 is "Knowledge sharing everyday", mean value 3.20 shows that sharing knowledge is the part of everyday routine in NBP. The measurement item of question 25 is "Appropriate knowledge", mean value 3.17 shows that in NBP it takes few hours to get appropriate knowledge. In the end overall percentage is calculated for the stage, which is 68.

Stage 5	0 Strongly Disagree	1 Disagree	2 Neither Disagree nor Agree	3 Agree	4 Strongly Agree	% of Stage	Mean	Variance	S.D
Q21	0	0	0	32	3	35	3.09	1.03	1.02
Q22	0	1	0	34	0	35	2.94	0.99	0.99
Q23	0	28	7	0	0	35	1.20	0.15	0.38
Q24	0	0	0	28	7	35	3.20	1.06	1.03
Q25	0	0	0	29	6	35	3.17	1.05	1.03
	0	29	14	369	64	68			

Table-8 Summary of responses of stage 5 from NBP

Table 9 presents the summary of responses of stage 6 from NBP. The measurement item of question 26 is "Attain business goals", mean value 1.26 tells us that in NBP no KM strategies are used to attain business goals. The measurement item of question 27 is "Promote transferring knowledge", mean value 2.20 shows majority of employees of NBP are neutral that KM is essential to promote transferring knowledge. The measurement item of question 28 is "Capturing knowledge from public research institutions", mean value 1.80 shows that employees of NBP are neutral about capturing knowledge from public research institutions. The measurement item of question 29 is "Updating databases", mean value 2.80 shows that NBP updates its database frequently. The measurement item of question 30 is "Encourage skilled employees", mean value 3.11 shows that in NBP skilled employees are encouraged. In the end overall percentage is calculated for the stage, which is 54.7.

Stage 6	0 Strongly Disagree	1 Disagree	2 Neither Disagree nor Agree	3 Agree	4 Strongly Agree	% of Stage	Mean	Variance	S.D
Q26	0	34	1	0	0	35	1.03	0.12	0.34
Q27	0	14	0	21	0	35	2.20	0.51	0.72
Q28	0	7	28	0	0	35	1.80	0.35	0.59
Q29	0	2	3	30	0	35	2.80	0.86	0.93
Q30	0	0	1	29	5	35	3.11	1.02	1.01
	0	57	66	240	20	54.7			

Table-9 Summary of responses of stage 6 from NBP

Table 10 presents the summary of responses of stage 7 from NBP. The measurement item of question 31 is "Written KM policy", mean value 1.06 tells us that in NBP no written KM policies are there. The measurement item of question 32 is "Transfer of knowledge as a function", mean value 1.03 shows that no function named Transfer of Knowledge is in NBP. The measurement item of question 33 is "Grant resources for external knowledge", mean value 2.97 shows that NBP grant resources for external knowledge. The measurement item of question 34 is "Participation of employees", mean value 3.00 shows employees of NBP participate in implementing KM. The measurement item of question 35 is "Informal training to KM", mean value 1.14 shows that in NBP no informal training is given to employees related to KM. In the end overall percentage is calculated for the stage, which is 46.

Stage 7	0 Strongly Disagree	1 Disagree	2 Neither Disagree nor Agree	3 Agree	4 Strongly Agree	% of Stage	Mean	Variance	S.D
Q31	0	33	2	0	0	35	1.06	0.12	0.35
Q32	0	34	1	0	0	35	1.03	0.12	0.34
Q33	0	0	1	34	0	35	2.97	1.00	1.00
Q34	0	0	0	35	0	35	3.00	1.03	1.01
Q35	0	30	5	0	0	35	1.14	0.14	0.37
	0	97	18	207	0	46			

Table-10 Summary of responses of stage 7 from NBP

Table 11 presents the summary of responses of stage 8 from NBP. The measurement item of question 36 is "Formal training to KM", mean value 3.00 tells us that in NBP formal trainings are given to employees related to KM. The measurement item of question 37 is "Value system", mean value 1.23 shows that no value system to promote KM is available in NBP. The measurement item of question 38 is "Capturing knowledge from competitors", mean value 3.00 shows that NBP captures

knowledge from competitors. The measurement item of question 39 is "Responsibility of KM unit", mean value 1.03 shows that no KM unit is available in NBP. The measurement item of question 40 is "Improve knowledge worker retention", mean value 1.03 shows NBP does not improve knowledge worker retention. In the end overall percentage is calculated for the stage, which is 46.7

Stage 8	0 Strongly Disagree	1 Disagree	2 Neither Disagree nor Agree	3 Agree	4 Strongly Agree	% of Stage	Mean	Variance	S.D
Q36	0	0	0	35	0	35	3.00	1.03	1.01
Q37	0	27	8	0	0	35	1.23	0.15	0.39
Q38	0	0	0	35	0	35	3.00	1.03	1.01
Q39	0	34	1	0	0	35	1.03	0.12	0.34
Q40	2	30	3	0	0	35	1.03	0.11	0.34
	2	91	24	210	0	46.7			

Table-11 Summary of responses of stage 8 from NBP

Figure 3 shows the percentages of all stages of NBP. The highest percentage is on stage 5, which is 68. The highest percentage shows NBP is on stage 5 on Bohn's Eight Scale Stages.

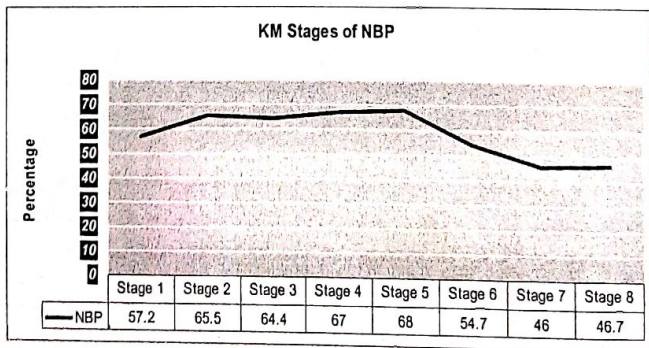|	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7	Stage 8
NBP	57.2	65.5	64.4	67	68	54.7	46	46.7

Fig. 3 Summary of all KM stages of NBP

Table 12 presents the summary of responses of stage 1 from UBL. The measurement item of question 1 is "KM under different name", mean value 3.17 tells us that in UBL KM is there but with different name. The measurement item of question 2 is "Gathered knowledge", mean value 1.14 shows employees of UBL are not satisfied with the gathered knowledge. The measurement item of question 3 is "Losing critical knowledge", mean value 1.54 illustrates that NBP loses its critical knowledge if knowledge worker leaves the organization. The measurement item of question 4 is "Responsibility of managers", mean value 3.26 represents all employees agreed that managers of NBP are supposed to implement KM strategies. The measurement item of question 5 is "New knowledge creation", mean value 3.20 shows new knowledge is created whenever is required in NBP. In the end overall percentage is calculated for the stage, which is 61.5.

Stage 1	0	1	2	3	4	% of Stage			
	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree		Mean	Variance	S.D
Q1	0	0	0	29	6	35	3.17	1.05	1.03
Q2	0	30	5	0	0	35	1.14	0.14	0.37
Q3	0	16	19	0	0	35	1.54	0.24	0.49
Q4	0	0	0	26	9	35	3.26	1.08	1.04
Q5	0	0	0	28	7	35	3.20	1.06	1.03
	0	46	48	249	88	61.5			

Table-12 Summary of responses of stage 1 from UBL

Table 13 presents the summary of responses of stage 2 from UBL. The measurement item of question 6 is "Facilitate integrate knowledge", mean value 1.14 tells us that UBL does not facilitate integrate knowledge. The measurement item of question 7 is "Knowledge sharing vertically", mean value 3.00 shows employees of UBL share knowledge vertically. The measurement item of question 8 is "Number of clients", mean value 3.11 illustrates that UBL believes that KM can increase number of clients. The measurement item of question 9 is "Improve worker

efficiency", mean value 3.29 represents all employees agreed that KM can improve workers' efficiency. The measurement item of question 10 is "Knowledge sharing horizontally", mean value 3.06 shows that in UBL knowledge is shared horizontally. In the end overall percentage is calculated for the stage, which is 68.

Stage 2	0	1	2	3	4	% of Stage	Mean	Variance	S.D
	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree				
Q6	0	32	1	2	0	35	1.14	0.14	0.37
Q7	0	0	3	33	0	36	3.00	1.00	1.00
Q8	0	0	0	31	4	35	3.11	1.04	1.02
Q9	0	0	0	25	10	35	3.29	1.09	1.05
Q10	0	0	0	33	2	35	3.06	1.03	1.02
	0	32	8	372	64	68			

Table-13 Summary of responses of stage 2 from UBL

Table 14 presents the summary of responses of stage 3 from UBL. The measurement item of question 11 is "Responsibility of the knowledge officer", mean value 2.91 tells us that employees of UBL know about the responsibilities of knowledge officers. The measurement item of question 12 is "Lack of reward", mean value 1.00 shows majority of employees of UBL disagree that lack of reward is the hurdle in implementing KM in UBL. The measurement item of question 13 is "Lack of understanding of KM", mean value 3.14 illustrates that UBL believes that there is a lack of understanding KM. The measurement item of question 14 is "Information overload", mean value 3.40 shows that information overloaded can be the hurdle of implementing KM in UBL. The measurement item of question 15 is "Lack of information", mean value 3.09 shows that in UBL lack of information can also be the hurdle of KM. In the end overall percentage is calculated for the stage, which is 68.1.

Stage 3	0	1	2	3	4	% of Stage	Mean	Variance	S.D
	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree				
Q11	0	1	1	33	0	35	2.91	0.96	0.98
Q12	3	32	0	1	0	36	1.00	0.11	0.33
Q13	0	0	4	22	9	35	3.14	0.98	0.99
Q14	0	0	0	21	14	35	3.40	1.16	1.08
Q15	0	0	0	32	3	35	3.09	1.03	1.02
	3	33	10	327	104	68.1			

Table-14 Summary of responses of stage 3 from UBL

Table 15 presents the summary of responses of stage 4 from UBL. The measurement item of question 16 is "Knowledge sharing", mean value 3.03 tells us that employees of UBL agree that knowledge is shared. The measurement item of question 17 is "Improve the capture of knowledge", mean value 2.86 shows majority of employees of UBL agree that KM is in use to improve the efficiency of captured knowledge. The measurement item of question 18 is "Meet planned objectives", mean value 3.09 illustrates that UBL uses KM to meet the planned objectives. The measurement item of question 19 is "Transferring knowledge with customers", mean value 3.00 shows that employees of UBL agree that they transfer knowledge to customers. The measurement item of question 20 is "Improve the competitive advantage", mean value 3.00 shows that in UBL KM is in use to improve the competitive advantage. In the end overall percentage is calculated for the stage, which is 74.8.

Stage 4	0 Strongly Disagree	1 Disagree	2 Neither Disagree nor Agree	3 Agree	4 Strongly Agree	% of Stage	Mean	Variance	S.D
Q16	0	0	0	34	1	35	3.03	1.03	1.01
Q17	0	1	3	31	0	35	2.86	0.90	0.95
Q18	0	0	0	32	3	35	3.09	1.03	1.02
Q19	0	0	0	35	0	35	3.00	1.03	1.01
Q20	0	0	0	35	0	35	3.00	1.03	1.01
	0	1	6	501	16	74.8			

Table-15 Summary of responses of stage 4 from UBL

Table 16 presents the summary of responses of stage 5 from UBL. The measurement item of question 21 is "Lessons learned", mean value 3.11 tells us that employees of UBL agree that lessons are learned by sharing documents. The measurement item of question 22 is "Facilitating joint work", mean value 3.00 shows majority of employees of UBL share knowledge by facilitating joint work. The measurement item of question 23 is "KM software", mean value 2.83 shows that KM software is used in UBL. The measurement item of question 24 is "Knowledge sharing everyday", mean value 3.09 shows that sharing knowledge is the part of everyday routine in UBL. The measurement item of question 25 is "Appropriate knowledge", mean value 3.14 shows that in UBL it takes few hours to get appropriate knowledge. In the end overall percentage is calculated for the stage, which is 75.8.

Stage 5	0 Strongly Disagree	1 Disagree	2 Neither Disagree nor Agree	3 Agree	4 Strongly Agree	% of Stage	Mean	Variance	S.D
Q21	0	0	0	31	4	35	3.11	1.04	1.02
Q22	0	0	0	35	0	35	3.00	1.03	1.01
Q23	0	2	2	31	0	35	2.83	0.89	0.94
Q24	0	0	0	32	3	35	3.09	1.03	1.02
Q25	0	0	0	30	5	35	3.14	1.04	1.02
	0	2	4	477	48	75.8			

Table-16 Summary of responses of stage 5 from UBL

Table 17 presents the summary of responses of stage 6 from UBL. The measurement item of question 26 is "Attain business goals", mean value 2.97 tells us that in UBL KM strategies are used to attain business goals. The measurement item of question 27 is "Promote transferring knowledge", mean value 3.14 shows majority of employees of NBP agree that KM is essential to promote transferring knowledge. The measurement item of question 28 is "Capturing knowledge from public research institutions", mean value 3.11 shows that employees of UBL agree that they capture knowledge from public research institutions. The measurement item of question 29 is "Updating databases", mean value 3.34 shows that UBL updates its database frequently. The measurement item of question 30 is "Encourage skilled employees", mean value 3.31 shows that in UBL skilled employees are encouraged. In the end overall percentage is calculated for the stage, which is 79.4.

Stage 6	0 Strongly Disagree	1 Disagree	2 Neither Disagree nor Agree	3 Agree	4 Strongly Agree	% of Stage	Mean	Variance	S.D
Q26	0	0	1	34	0	35	2.97	1.00	1.00
Q27	0	0	0	30	5	35	3.14	1.04	1.02
Q28	0	0	1	29	5	35	3.11	1.02	1.01
Q29	0	0	0	23	12	35	3.34	1.12	1.06
Q30	0	0	0	24	11	35	3.31	1.11	1.05
	0	0	4	420	132	79.4			

Table-17 Summary of responses of stage 6 from UBL

Table 18 presents the summary of responses of stage 7 from UBL. The measurement item of question 31 is "Written KM policy", mean value 1.91 shows employees are neutral about written KM policies in UBL. The measurement item of question 32 is "Transfer of knowledge as a function", mean value 1.09 shows that no function named Transfer of Knowledge is in UBL. The measurement item of question 33 is "Grant resources for external knowledge", mean value 3.03 shows that UBL grant resources for

external knowledge. The measurement item of question 34 is "Participation of employees", mean value 3.00 shows employees of UBL participate in implementing KM. The measurement item of question 35 is "Informal training to KM", mean value 1.11 shows that in UBL no informal training is given to employees related to KM. In the end overall percentage is calculated for the stage, which is 50.7.

Stage 7	0 Strongly Disagree	1 Disagree	2 Neither Disagree nor Agree	3 Agree	4 Strongly Agree	% of Stage	Mean	Variance	S.D
Q31	0	6	26	3	0	35	1.91	0.38	0.62
Q32	0	32	3	0	0	35	1.09	0.13	0.35
Q33	0	0	0	34	1	35	3.03	1.03	1.01
Q34	0	0	0	35	0	35	3.00	1.03	1.01
Q35	0	33	0	2	0	35	1.11	0.13	0.36
	0	71	58	222	4	50.7			

Table-18 Summary of responses of stage 7 from UBL

Table 19 presents the summary of responses of stage 8 from UBL. The measurement item of question 36 is "Formal training to KM", mean value 3.00 tells us that in UBL formal trainings are given to employees related to KM. The measurement item of question 37 is "Value system", mean value 1.31 shows that no value system to promote KM is available in UBL. The measurement item of question 38 is "Capturing knowledge from competitors", mean value 3.00 shows that UBL captures knowledge from competitors. The measurement item of question 39 is "Responsibility of KM unit", mean value 1.03 shows that no KM unit is available in UBL. The measurement item of question 40 is "Improve knowledge worker retention", mean value 2.63 shows UBL does improve knowledge worker retention. In the end overall percentage is calculated for the stage, which is 54.8.

Stage 8	0	1	2	3	4	% of Stage	Mean	Variance	S.D
	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree				
Q36	0	0	0	35	0	35	3.00	1.03	1.01
Q37	0	24	11	0	0	35	1.31	0.17	0.42
Q38	0	0	0	35	0	35	3.00	1.03	1.01
Q39	0	34	1	0	0	35	1.03	0.12	0.34
Q40	0	0	13	22	0	35	2.63	0.71	0.84
	0	58	50	276	0	54.8			

Table-19 Summary of responses of stage 8 from UBL

Figure 4 shows the percentages of all stages of UBL. The highest percentage is on stage 6, which is 79. The highest percentage shows UBL is on stage 6 on Bohn's Eight Scale Stages.
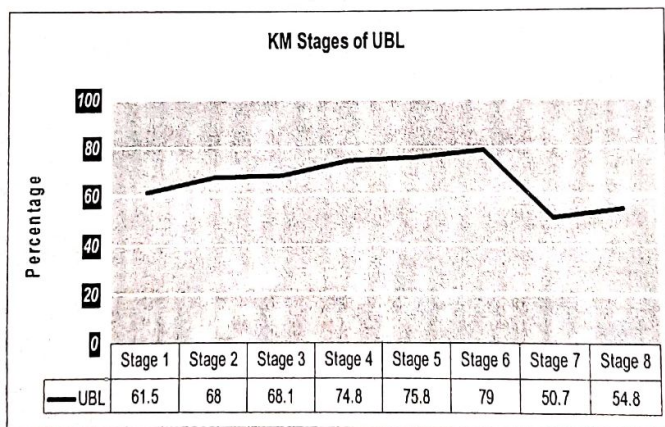

Fig. 4 Summary of all stages of UBL

CONCLUSION AND RECOMMENDATION

After assessing the current stages of both banks, the conclusion says that public bank is on stage 5 and private bank is on stage 6 on knowledge growth of Bohn's Eight Scale Stage. It is recommended for Pakistani banks that they must promote the knowledge management culture in their organizations. They must use more helpful knowledge management strategies, which would lead towards the high knowledge growth. 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.

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