An Analysis of Knowledge Management in Educational Institution

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Abstract

Information generated through high knowledge procedure centrally from educational institutions is distributed to the people to nurture further. Research is progressing effectively in exercises of knowledge management by several Global Universities. Presently there is need in educational field to increase the intellectual power available in institution for sharing experiences. Knowledge management has excellent potential in educational sector and should have greater significance. On the other side they are taking responsibility of commitment, storing, design, exchanging, spreading, training and reuse. In this proposal the plan is to analyse the use of knowledge management. Analysis was made among five pointers that give knowledge management in educational institutes. The approach included is mutually quantitative and subjective analysis to calculate knowledge management. In addition, there was an important difference among academic and non-academic staff groups and the results indicate that the educational institutions following a development towards knowledge-orientation.

1. Introduction

A new emerging field in the educational environment is Knowledge management (KM). Various anticipated gatherings and classes at international and national level are on Knowledge Management. Several Universities internationally are successfully participating in KM related activities and doing research. It is in a matter of seconds getting the opportunity to be standard in Education field on account of need to divulge the insightful force available in association for sharing experiences [1]. Knowledge Management has formed into a key element of today's business competitive environments with literature. Scholastic and business groups trust that the methodology of utilizing information can offer an association with proceeding of competitive prizes [2]. Any enlightening establishment as a point of convergence of data needs to complete KM so it can develop the conceivable outcomes and obligation of skilled delegates through recognizing methods for making, seeing, executing, using and scattering various levelled learning. This would mean a KM emphasis on the creation, use and change of their total knowledge [3].

In this study it is at initially settled on seeing evaluation measures of KM and their qualities and weaknesses. The relationship between KM in the field of organization and system of foundations, its variables including the general administration, HR, key vision and interior procedure. In the meantime, the study anticipated that would enlighten whether it is subject to offer frameworks for making KM more viable.

1.1. Literature review

KM estimation has nine points of view [4]. Knowledge measurement in procedures and items, and authoritative estimation in view of procedures of KM [5]. In addition, Chang and Wang [6] had arranged the estimation strategies into seven methodologies and they are methodology variables, representative qualities, administrator attributes, authoritative society, review and appraisal, data innovation and working systems.

Educational institutes are the essential places for utilizing and delivering information. Utilizing KM, enlightening associations will have the ability to play out more sufficiently by spreading data among social orders, and augmenting the route toward learning and teaching to abroad Educational Institutes [7]. In this way, we need to set up what KM is and form it into orders so we can get a hypothetical perception, and set up the fitting association for the creation of programming thoughts. In view of the nearness of new learning creators in the preparation section, progressively informative foundations are researching the probability of applying business KM systems [8].

2. Knowledge Management Importance in Educational Institutions

KM is basically indispensable for affiliations, included experts where accomplishment depends on time, use and uniqueness of learning base. It would seem, by all accounts, to be reasonable to consider higher enlightening foundations as affiliations included masters who add to learning base. Internationalization of cutting edge training, dependable learning, and standpoint change from teaching to adjusting, new advances and globalization are the key parts in making data organization. KM directs immense data proficiently and thusly it will be a fit mechanical assembly to enhance productivity and decline cost in the gathering of a colossal volume of data. If KM practice is being worked in an association as a perpetual activity then simply the made learning could be gotten and recorded additionally put something aside for future use. Data is the key for essential administration and technique creation. Learning should move into an action yet unfortunately it doesn't happen constantly. To bolster in centered world each enlightening foundation should execute fruitful gadgets for data organization [9].

2.1 Assess KM

Decided on the challenges and the prerequisites for the colleges internationalization furthermore their commitments of conveying data and KM. Data share and involvement in social capital progression inside IT units in colleges, and their results showed that there was a significant refinement between the learning offer technique and social capital experience [10]. In this study, the files to evaluate the achievement of a KM system have been given by a review. For this circumstance, a mix of records was introduced in the overview [11].

3. Research Questions

To get both subjective and quantitative information, research inquiries were utilized. Particular inquiries that utilized as a part of this examination are:

What are the needs of knowledge for the institute group?

What do staff, administration and managers comprehend about KM?

What late innovations are being used at the foundation that improves the earth for KM hone?

What are the proposals with respect to the usage of KM practices?

What knowledge practices, retention policies, and gaps are in existence at institution?

The examination system for this contextual analysis was refined using a perception, survey, institutional archives and meetings. A model drawn from a foundation group of worker was used for the quantitative stage. The individuals who participated in the reviews were given to scholastic and non-scholarly staff in various obligation of position to gauge the level of KM.

	Ger	nder		Fie	eld Stud	ły		Jo Gro	ob oups		Job I	Levels	
Demographics	Male	Female	Computer Science	GFP	Business	Interior Design	Administrative	Non-Academic Staff	Academic Staff	Manager	Expert	Lecturer/Asst.	Prof./ Prof.
			Comp		Ι	Inte	Adn	Non-A	Acae	N		Master	Ph.D.
No.	40	24	7	11	15	3	28	28	36	8	20	21	15
%	62.50	37.50	10.94	17.19	23.44	4.69	43.75	43.75	56.25	12.50	31.25	32.81	23.44

Seventy delegates were picked through subjective investigating and analysed through a standardized instrument laid out by the investigators for organization of data, where 64 representatives submitted back the poll with their reactions (The subtle elements are given in Table 1). SPSS was utilized to dissect the reaction of the staff. The Kruskal-Wallis test, Mann-Whitney test were additionally performed.

4. Testing Design

Five courses of action of key locales were considered and used to gage each of the five grows, particularly, general organization, power style, imperative vision, inward methodology and HR. These measures were made by planning test [11], and were subjected to a formal pre-test by a couple of chairmen and masters. By finding out Cronbach's Alpha, an inward consistency examination was performed autonomously for each variable in the evaluated model. The results in Table 2 exhibit that the Cronbach's Alpha for each one of the variables in the model were over the basic worth 0.7 [12] Thus, reasoned that every one of the things had been properly relegated to every variable. The instrument grew additionally had content legitimacy [12]. Five-point rating scale is utilized as a part of this study, i.e. 1 - strongly disagree, 2 - disagree, 3 - neither disagree not agree, 4 - agree and 5 - strongly agree. The unwavering quality alphas (an) of various variables and test things for every variable are talked about as takes after.

5. Results

Cogency and correlation of the instrument's declarations were realised through the Cronbach method, the correlation for all the sub scales of KM were high and significant at 0.01, but note the correlation for the indicators of general management (r= 0.84) is last rank, and Strategic Vision in the first rank (0.80) as shown in Table 2. The extreme Cronbach's Alpha

belongs to general management (0.83). The reliability alphas of Total KM (0.95) were very strong, and the alpha value of 95% indicates that the research instrument has a high validity.

Parameters	No. of Items	Cronbach's Alpha	Mean	Correlation s	Significan t
Internal Process	6	0.75	13.18	0.81	0.01
Strategic Vision	5	0.72	11.39	0.80	0.02
Leadership Style	13	0.81	25.75	0.83	0.00
Human Resources	10	0.72	15.62	0.80	0.01
General Management	15	0.83	29.81	0.84	0.00
KM Total	49	0.95	28.83	-	-

Table 2. Statistics of data

5.1 Data Description

Table 3 shows Mean, SD, Skewness and Kurtosis of 5 parameters: strategic vision, general management, internal process, leadership style, human resources and total of KM.

Five Parameters	Mean	Standard Deviation	Skewness	Kurtosis
General Management	2.7094	0.4459	0.2224	-1.2941
Leadership Style	2.7909	0.4338	0.1404	-1.2926
Strategic Vision	3.0969	0.5044	-0.0270	-0.6566
Internal Process	2.6510	0.4732	-0.2294	-0.9320
Human Resources	2.8109	0.2795	0.0964	-1.0449

Table 3. Statistical description

5.2 Parameters Score

As can be seen in Table 4, the means of the parameters of non-academic staff, academic staff, and total members, are different. They are discussed below:

- Academic Staff The aggregate mean of the 5 parameters that were characteristic of KM was 2.9598 and the most astounding mean had a place with strategic vision (3.2599) and the least mean was 2.7906 for internal process.
- Non-Academic Staff The total mean of the 5 parameters that were indicative of KM was 2.6638 and the highest mean belonged to *strategic vision (2.9339)* and the lowest mean was 2.5115 for *internal process*.

In general, the respondents level of leadership style and strategic vision is more than average, in other words, they are satisfied with the system aspect of leadership style and strategic vision. However responses to the other parameters.

	Parameter	General Management	Leadership Style	Strategic Vision	Internal Process	Human Resources
	Academic Staff	2.8520	2.9378	3.2599	2.7906	2.9589
Mean	Non-Academic Staff	2.5668	2.6440	2.9339	2.5115	2.6630
1	Total Mean	2.7094	2.7909	3.0969	2.6510	2.8109

Table 4. Analysis of key areas with respect to category of staff

5.3 Data Analysis

The fundamental target of this study is to recognize and research the example for setting up a KM at the college. The minor destinations of the study included contemplating the demographic elements of the gathering gender orientation and of the staff classification (scholastic and non-scholarly staff). As indicated by the outcomes appeared in Table 5, there are critical contrasts between the methodology of scholastic staff and non-scholarly staff to KM parameters. The extents of SD in measures show contrasts between the two gatherings. It shows up the technique of scholarly staff were concentrated. Along these lines, it was reviewed that scholastic staff had a more positive methodologies since they have more information and more significant/more broad vision

Parameters		Mean	Standard Deviation
Conoral Management	Academic Staff	30.12	0.4032
General Management	Non-Academic Staff	29.51	0.4770
Landarah ter Stada	Academic Staff	26.01	0.4230
Leadership Style	Non-Academic Staff	25.49	0.4470
Stratagia Vision	Academic Staff	11.50	0.5999
Strategic Vision	Non-Academic Staff	11.27	0.4987
Laternal Decement	Academic Staff	13.31	0.5233
Internal Process	Non-Academic Staff	13.05	0.4328
	Academic Staff	15.78	0.3569
Human Resources	Non-Academic Staff	15.46	0.2142
		N =	64

Table 5. Mann-Whitney test for finding relationship with respect to parameters

By the results of the Kruskal-Wallis Test, in which the significance value is less than 0.04, the NULL hypothesis that there is no relationship between these 5 parameters. Thus KM is rejected. And all 5 parameters are proved to have a direct positive relationship with KM (*Table 6*).

Table 6. Kruskal-Wallis test for finding relationship with respect to category of gender

	General Management	Leadership Style	Strategic Vision	Internal Process	Human Resources
Chi. Square Test	87.981	20.200	9.857	8.939	18.250
Df	3	3	3	3	3
Asymp. Sig.	0	0	0.021	0.212	0.0019

5.4 Hypothesis Test

Hypothesis – 1, there is a relationship between gender and KM

Non-parametric Mann-Whitney Test is conducted for the independent male and female groups: Table 7 shows the test results, and allows to compare the means for male and female

groups in the all 5 management parameters. Since the significance is < 0.04, the NULL hypothesis have been rejected. There is a significant different noticed among male and female individuals. As can be seen, just for general management and strategic vision parameters were there no significant different among male and female groups. In any case, there is a significant relationship among gender and different parameters of KM.

	General Management	Leadership Style	Strategic Vision	Internal Process	Human Resources
Mann- Whitney U	770.4546	800.8465	928.4418	725.3964	661.2959
Wilcoxon W	3026.0293	2822.7309	3234.4131	3066.2692	3049.4133
Ζ	-1.6554	-2.1041	-1.5693	-2.7984	-3.4947
Asymp. Sig. (z-tailed)	0.0010	0.0089	0.0012	0.0000	0.0000

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Hypothesis -2, There is a significant relationship between groups of the study (academic and non-academic staff)

For this hypothesis test, a non-parametric mean for two independent groups (the academic and non-academic staff) is applied. In this study, a non-parametric Mann-Whitney Test was used (Table 8). This test is intended to identify whether KM is identical for the groups of academic staff and the non-academic staff.

	General Management	Leadership Style	Strategic Vision	Internal Process	Human Resources
Mann- Whitney U	691.4	601.4	947.4	631.4	486
Wilcoxon W	1799.4	1548.4	2041.4	1759.4	1641
Ζ	-3.0978	-3.989	-2.354	-4.289	-5.389
Asymp. Sig. (z-tailed)	0.001	0	0.011	0	0

Table 8. Mann-Whitney test

Table 8 tests and compares the means for 5 parameters of KM in the two groups: academic staff and non-academic staff. Because of the less significance (< 0.04), the NULL hypothesis is rejected. Hence, this shows that there is a significant difference between the two different groups of employees in all 5 parameters of KM.

6. Discussion

KM is a basic system for association aggressiveness and upgrading execution [13]. Then again, how to evaluate KM associations has formed into a standout amongst the most principal issues in KM [14]. The writing exhibits that most by far of the hypotheses, exploration, and examinations of KM are for choosing pointers/parameters/estimations and techniques for estimation, however hardly any effort has been associated with gage KM over an extent of criteria.

As showed in Table 4, one of the principle issues of the school is lack of technique and reasonable authoritative structure to bolster inward procedures. Demonstrated that "people, strategies, IT and supporting hierarchical structure" are four key achievements of KM. Likewise, in a positioning [15], the need of criteria was distinguished: staff, data, intelligence, information and learning. In our work, the minimum score was given to HR (group working, learning exchange, and execution evaluation) and inside procedure (accessible measure of information crevice, learning, and sharing of learning). Additionally, the most minimal scores of different parameters are: Strategic vision: learning and execution in the Leadership style; corporate scorecard; distinguish and take care of shared issues as a group, consideration on creating worker information; General administration: rivalry between partners, system of knowledge representatives.

7. Conclusion

The results from the examination, in entire it can be communicated that there are recognizable real lists and verifications of KM in the fields of instructive, exploration, official, computerized offices, experimental, at the college and they are growing progressively. Furthermore, from the viewpoint of perspective of the scholarly and non-scholastic staff of the college under study, there have been changes in the parameters of KM especially in initiative style and vital vision at the normal and more normal level. Records of interior procedure, general administration and HR of KM have not been precisely effective in the exploration air and have been assessed to be powerless. There was no important relationship found in KM. In any case, there was a significant relationship amongst KM and gatherings (scholarly and non-scholastic staff) of the study. Besides, there was an extensive relationship among KM and occupation levels.

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