MANAGING STUDENTS & EMPLOYEES THROUGH COLLEGE INFORMATION MANAGEMENT SYSTEM (CIMS) – A CASE STUDY: SHINAS COLLEGE OF TECHNOLOGY (SHCT), OMAN

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Abstract

Purpose: The objectives of the study were to critically analyze the effectiveness of CIMS in completing the registration / academic advising process at Shinas College of Technology and to critically analyze the effective functions of the CIMS to fulfill the role played by the CIMS.

Design/methodology/approach: For this research study, Simple random sampling method in selecting the samples of the survey. 180 samples were collected which include the faculty, students and users of the College Information Management System (CIMS) from Shinas College of Technology (ICT). The collected data underwent analysis using the SPSS and the findings were interpreted.

Findings: The study reveals that CIMS is characterized by its multiple functions; is user-friendly and flexible. CIMS has met the expectations of most of the users, despite the presence of a few technical problems requiring improvement.Educational Technology Center (ETC) ensures smooth, secure, safe and fast access. CIMS is subject to continuous assessment through periodic follow up by the Educational College Center from any external attacks etc. which is a welcoming feature.

Research limitations/Implications: The study suggests that CIMS users should be given training on the updates and necessary training to the CIMS maintenance crew.

Social implications: The study suggests thatthere is only a small group of individuals who handles and manages the entire program - installation of CIMS and periodic follow-up etc. and technical expertise is needed at the college level.

Originality/Value: No study have ever examined the Information Management System of HEIs in Oman.

Keywords: Shinas College of Technology, Effectiveness, College Information Management Information System, Functional Performance, Professional Evaluation, Human Resources Training, Accessibility, Risk Protection, Waste of Time.

INTRODUCTION

The twenty-first century has witnessed many developments in the field of science of technology, and many writers agree that this era is dominated by technology, which is characterized by numbers, symbols,and data. Technology has led to the preparation of programs and devices for the process of managing transactions. The human element is an important factor in technology management and institutions have invested their human resources, to control technology which is a source and a key factor for improvement and development (Al Matroshi, 2015).The focusonmanagement information systems (MIS), has brought a conclusion that a reciprocal relationship exists between information systems and human resources management in any organization and has a strategic advantage over the principlesof management. Technological information plays a key role in the management of education serving the students (Schuh & Gansemer-Topf, 2010).There is no doubt that the progress witnessed by the Higher Educational Institutions (HEI) has a strong relationship with the latest technology but also leads to, improved performances and to achieve the aspiring goals of these institutions. By relying on modern technology, HEIs can put themselves in the right place.

The employees of the colleges are also very much keen to learn and introduce modern technologies in serving the students community and in improving their performances. As Al-Belushi and Khan (2017) pointed out that the employees of these HEIs are not always looking for financial benefits but they also strive to improve their performances which needs motivational support by their administrators and the employees of the technical colleges are no exception to it. They aspire to compete with the use of technology and activate the role of information systems in the colleges to serve the best in the public interest. In order to ensure the same, Ministry of Manpower in Oman had provided its technical colleges with efficient and accurate systems in order to complete their transactions with utmost accuracy. The ministry has provided Shinas College of Technology with such a facility called College Information Management System (CIMS), a set of programs to administer and manage the students, staff and the employees. CIMS is used by the staff members of the college to perform various tasks like students advising, obtaining the grades of the advisee/s, registering and printing the time table of the advisee/s , entering department time table, preparation of the projections for the forth-coming semesters, preparing graduates list and Deans Honor's list,

attendance maintenance, generating warning letters, to generate student transcripts, degree audit – Diploma, Advanced Diploma, and Bachelor etc., viewing student data – mobile number, address, regular or hostel student, IELTS score etc. (ITD Student Handbook, 2012)

Nowadays, web-based academic advising system is gaining popularity among universities towards student-centric advising to engage students actively in their education process (Hsu et al., 2002) and Administration and Registration Department (ARD) at Shinas College of Technology is training the academic supervisors and students for doing the same using the prevailing CIMS (ITD Student Handbook, 2012).

The usage of the system depends on how smooth and how flexible is the system and the system is not free of defects. Technical issues emerge during usage causing difficulty to the students, faculty, and administrators. Theirissues appear to be pretty like certain fields could not be entered into the system or certain fields needed to be added to complete registration / academic advising process. On another instance, student-related financial statement (briefing the budgetary allocation) could not be generated due to a technical issue. So new record needs to be entered and generated. Subsequently, the generated entry could not also be tracked. Other colleges have also reported similar issues.

In suchinstances, the person needs to report and communicate the issue to the registrar of the college in writing and the registrar,in turn, need to collect similar issues from all the departments and escalates the issue to the IT professional in the Ministry. But, until then, the initiated process gets hanged and the concerned persons have to wait and the transaction cannot proceed further. Many an occasion, the issue gets diverted and the problem is kept in abeyance due to which the purpose gets defeated and the concerned person suffers. All the seven colleges under the ministry are using CIMS for their internal use. Almost all the colleges have come across similar situations.Indeed, these limit the effectiveness of the system and the issues could not be resolved and rectified or taken up at the college level. This leads to the slowing down of the process – time lag anddelayed completion of the transactions. These were the reasons triggering the need for the research study.

RESEARCH QUESTIONS

The research questions can be summed up as follows:

1. How effective is the CIMS in completing the registration / academic advising process at Shinas College of Technology? and

2. What are the effective functions of the CIMS to fulfill the role played by the CIMS?

REVIEW OF LITERATURE

Information System(IS) is useful in three ways viz. information management of employee procedures, payroll structure, monitoring and control over all the organizational activities (Aral, Brynjolfsson & Wu, 2012). IS can be described as a network, which includes multiple destinations and paths, mainly for communication and interaction (BECTA, 2005). Itcovers all the infrastructure required to support the operations, decision-making processand the support to accomplish tasks quickly and accurately, and database systems facilitate to access shared data (Workman, Phelps & Gathegi, 2013) andenable accessible quality information – accurateand complete in relation to management strategies (Munirat, 2014).College Information Management System (CIMS) can coordinate the teacher, the student,and the classroom – all the three relations and enable the resources to achieve optimal use (Dong & Cheng, 2010).A good System should provide accurate statistical data withperceived ease of use and usefulness (Adams, Nelson& Todd, 1992).

Accurate information system helps decision-making in an efficient manner and helps people to make proper decisions whether short term or long term (Meliha, 2001). CIMS focuses on technological, administrative and social aspects which gives rise to the interaction of individuals with their institutions through the usage of IS application towards the process of development (Baskerville & Myers, 2002). A proper CIMS necessitates good structure and the server technology so as to coordinate applicability, security, compatibility, stability, maintainability and other non-functional demands (Anjiang, 2015; Daft & Lengel, 1986).The development of CIMS results in the good process based communication, and technology is one such tool available to managers to achieve efficiency and effectiveness through such processes (Laudon & Laudon, 2013).

CIMS plays a leading role in altering the structure to fit the networks and the proper day-to-day functioning of the departments so as to obtain the required information (Munirat, 2014) and also plays an important role in an organization providing the required information towards sound decision making (Sakthivel, 2014&Baldridge, 1979). It provides analyzed information in short duration and keepsproviding upgraded information to the users to manage the internal affairs (Vogel-Heuser, Fay, Schaefer, & Tichy, 2015).It is a critical function to professionally evaluate the asset exposure and the impact of the funds provided in the event of loss or damage to the system as the managers havea limited budget to spend on priorities (Workman, Phelps & Gathegi, 2013).Liu and Young (2007) showed that the CRM support program and decision-making process using the key information models. Professional statistical information - quality information is a must to implement the entire objectives

desired by the Higher Educational Institutions (HEIs) to attain the efficiency, and technology plays a vital role in streamlining administrative processes and integrating the efficient performances of both humans and organizations (Liang, 2009).CIMS like systems will be useful in managing the academic process in HEIs (Vysochin & Pitelinskii, 2009) as the vital factor viz. total quality management is taken care by the system which is important to achieve efficiency in HEIs towards better services and improvements (Al-Qayoudhi, Hussaini & Khan, 2017). In every HEI, employees are encouraged to experiment and keep abreast of the growing knowledge for effective management (Al Jahwari & Khan, 2016).

Employees who undergo proper training obtain the needed skills towards improved performance and increased productivity; further reduces industrial accidents (Kapur, 2018). Appropriate training received by IT staff earns good value for the organization and such extensive IS require increased investment in technology (Campbell et al., 2002) and improper training leads to a fatality. By mistake or willfully, a person can try to penetrate systems as there are possibilities and thereby loss of information and so managers should be aware of how to protect from illegitimate usage (Workman, Phelps & Gathegi,2013).Computer security detects and prevents unauthorized users from infiltration and access (Ahmad & Elhossiny, 2012). Proper risk management to protect threats and risk, is a must to control and avoid such rikssso as to eliminate loss of information or any damage (Elky, 2006).

After thoroughly going through the above review of literature, the following variables – Proper Functions Performance, Accessibility and Reachability, Protection from Threats and Risk, Reduce Waste of Time and Defaults, Professional Statistics Information, Delivery of the Value and Proper Human Resources Training were identified and wereincluded in the questionnaire and used for the research study.

RESEARCH METHODOLOGY

A pilot survey was conducted with 10 % of the population to ascertain the appropriateness of the questionnaire used. After due corrections based on the suggestions, the questionnaire was used. Simple random sampling methodin selecting the samples of the survey. 180 samples were collected which includethe faculty, students and users of the College Information Management System(CIMS)from Shinas College of Technology (ICT). The collected data underwent analysis using the Statistical Package for the Social Sciences and the findings were interpreted.

FINDINGS

Table 1. Demography of Respondents

	Gender	Frequency	Percentage
Gender	Male	119	66.1
	Female	61	33.9
Status	Academic Staff	113	62.8
	Administrative Staff	12	6.7
	Students	55	30.6
Department	ELC	45	25.0
	Business	16	8.9
	IT	32	17.8
	Engineering	20	11.1
	Others	67	37.2

Source: Questionnaire

Table 2. Functional Performance

#	Statement	SD	D	N	A	SA	χ^2	K-S mean
1	CIMS is characterized by its multiple functions and diversity	6 3.3%	5 2.8%	25 13.9%	105 58.3%	39 21.7%		3.92
2	CIMS is flexible in use and procedure is clear	5 2.8%	22 12.2%	39 21.7%	83 46.1%	31 17.2%	.000	3.63
3	CIMS (with multiple features – appearance, reporting etc,) is user-friendly	9 5.0%	11 6.1%	39 21.7%	86 47.8%	35 19.4%		3.71

Null Hypothesis. 1: There is no relationship between the Functional Performance and the choices of the respondents.

From the above table No.2, it can be seen that p-value < 0.05 which confirms that the null hypothesis 1 is rejected. Therefore, it purports that there is a relationship between the Functional Performance and the choices of the respondents. Comparing the mean values obtained from Kolmogorov-Smirnov test, it can be seen that "CIMS is characterized by its multiple functions and diversity" ranks first (3.92), followed by "CIMS (with multiple features – appearance, reporting etc,) is user-friendly" (3.71) and "CIMS is flexible in use and procedure is clear" (3.63).

Table 3. Professional Evaluation

#	Statement	SD	D	N	A	SA	χ^2	K-S mean
1	CIMS is subject to continuous assessment through periodic follow up by the Educational College Center	5 2.8%	21 11.7%	56 31.1%	74 41.1%	24 13.3%		3.51
2	The Registrar can find out the problems faced by the users and report the same to the Ministry to upgrade the program	6 3.3%	16 8.9%	51 28.3%	82 45.6%	25 13.9%		3.58
3	The system is upgraded regularly based on the reports received from the workshop of the other sections	8 4.4%	17 9.4%	63 35.0%	72 40%	20 11.1%	.000	3.44
4	CIMS is subject to continuous evaluation by the Quality Assurance (QA) committee of the college in coordination with the Ministry of Manpower (MOM) and the involvement of the concerned staff in the evaluation process.	8 4.4%	11 6.1%	78 43.3%	65 36.1%	18 10.0%		3.41

Null Hypothesis. 2: There is no relationship between the Professional Evaluation and the choices of the respondents.

From the above table No.3, it can be seen that p-value < 0.05 which confirms that the null hypothesis 2 is rejected. Therefore, it purports that there is a relationship between the Professional Evaluation and the choices of the respondents. Comparing the mean values obtained from Kolmogorov-Smirnov test, it can be seen that "The Registrar can find out the problems faced by the users and report the same to the Ministry to upgrade the program" ranks first (3.58), followed by "CIMS is subject to continuous assessment through periodic follow up by the Educational College Center" (3.51) and "The system is upgraded regularly based on the reports received from the workshop of the other sections" (3.44).

Table 4. Accessibility and Reachability

#	Statement	SD	D	N	A	SA	χ^2	K-S mean
1	Access to CIMS is easy and is not complex	7 3.9%	15 8.3%	37 20.6%	74 41.1%	47 26.1%		3.77
2	CIMS is developed online, and the users can access from anywhere using internet connection	3 1.7%	12 6.7%	29 16.1%	70 38.9%	66 36.7%		4.02
3	Academics and Administration did not face any issues with CIMS	13 7.2%	33 18.3%	73 40.6%	41 22.8%	20 11.1%	.000	3.12
4	Educational Technology Center (ETC) ensures smooth and secure access through CIMS	3 1.7%	15 8.3%	54 30.0%	70 38.9%	38 21.1%		3.69
5	ETC is unable to take full control/responsibility of the CIMS connection speed	6 3.3%	14 7.8%	81 45.0%	53 29.4%	26 14.4%		3.44

Null Hypothesis. 3: There is no relationship between the Accessibility and Reachability and the choices of the respondents.

From the above table No.4, it can be seen that p-value < 0.05 which confirms that the null hypothesis 3 is rejected. Therefore, it purports that there is a relationship between the Accessibility and Reachability and the choices of the respondents. Comparing the mean values obtained from Kolmogorov-Smirnov test, it can be seen that "CIMS is developed online, and the users can access from anywhere using internet connection" ranks first (4.02), followed by "Access to CIMS is easy and is not complex" (3.77) and "Educational Technology Center (ETC) ensures smooth and secure access through CIMS" (3.69).

Table 5. Protection from Risk and Threat

#	Statement	SD	D	N	A	SA	χ^2	K-S mean
1	Ministry of Manpower (MOM) programming specialists closely monitor CIMS operation and protect CIMS	5 2.8%	8 4.4%	66 36.7%	74 41.1%	27 15%		3.61
2	High-level protection to CIMS by college keeps the system away from an attack	3 1.7%	13 7.2%	66 36.7%	71 39.4%	27 15%	.000	3.59
3	The role of ETC is to ensure the network is secure, safe and fast	3 1.7%	12 6.7%	57 31.7%	83 46.1%	25 13.9%		3.64
4	ETC has effective software to detect and stop unauthorized entry into CIMS	5 2.8%	7 3.9%	78 43.3%	70 38.9%	20 11.1%		3.52

Null Hypothesis. 4: There is no relationship between the Protection from Risk and Threat and the choices of the respondents.

From the above table No.5, it can be seen that p-value < 0.05 which confirms that the null hypothesis 4 is rejected. Therefore, it purports that there is a relationship between the Protection from Risk and Threat and the choices of the respondents. Comparing the mean values obtained from Kolmogorov-Smirnov test, it can be seen that "The role of ETC is to ensure the network is secure, safe and fast" ranks first (3.64), followed by "Ministry of Manpower (MOM) programming specialists closely monitor CIMS operation and protect CIMS" (3.61) and "High-level protection to CIMS by college keeps the system away from an attack" (3.59).

Table 6. Reduce waste of time and Default

#	Statement	SD	D	N	A	SA	χ^2	K-S mean
1	CIMS users encounter many problems causing time waste and failure to meet deadlines	16 8.9%	24 13.3%	51 28.3%	60 33.3%	29 16.1%		3.34
2	CIMs provides data in less time and effort	9 5.0%	15 8.3%	39 21.7%	81 45.0%	36 20.0%	.000	3.67
3	CIMS is helpful to students and employees to carry out registration and follow-up	8 4.4%	10 5.6%	37 20.6%	86 47.8%	39 21.7%		3.77

Null Hypothesis. 5: There is no relationship between the Reduce waste of time and Default and the choices of the respondents.

From the above table No.6, it can be seen that p-value < 0.05 which confirms that the null hypothesis 5 is rejected. Therefore, it purports that there is a relationship between the Reduce waste of time and Default and the choices of the respondents. Comparing the mean values obtained from Kolmogorov-Smirnov test, it can be seen that "CIMS is helpful to students and employees to carry out registration and follow-up" ranks first (3.77), followed by "CIMs provides data in less time and effort" (3.67) and "CIMS users encounter many problems causing time waste and failure to meet deadlines" (3.34).

Table 7. Professional Statistics Information

#	Statement	SD	D	N	A	SA	χ^2	K-S mean
1	Statistical data for previous academic years and other colleges (to compare) can be obtained from CIMS	9 5.0%	11 6.1%	69 38.3%	57 31.7%	34 18.9%		3.53
2	CIMS provides basic statistics in relates to staff and students	5 2.8%	12 6.7%	52 28.9%	80 44.4%	31 17.2%	.000	3.67
3	Statistics is provided with high accuracy and in time	6 3.3%	18 10.0%	59 32.8%	67 37.2%	30 16.7%		3.54

Null Hypothesis. 6: There is no relationship between the Functional Performance and the choices of the respondents.

From the above table No.7, it can be seen that p-value < 0.05 which confirms that the null hypothesis 6 is rejected. Therefore, it purports that there is a relationship between the Professional Evaluation and the choices of the respondents. Comparing the mean values obtained from Kolmogorov-Smirnov test, it can be seen that "CIMS provides basic statistics in relates to staff and

students" ranks first (3.67), followed by "Statistics is provided with high accuracy and in time" (3.54) and "Statistical data for previous academic years and other colleges (to compare) can be obtained from CIMS" (3.53).

Table 8. Delivery of the Value

#	Statement	SD	D	N	A	SA	χ^2	K-S mean
1	CIMS provides effective information to the user	7 3.9%	15 8.3%	37 20.6%	85 47.2%	36 20.0%		3.71
2	CIMS collects & stores data in an easy/efficient way	6 3.3%	13 7.2%	41 22.8%	84 46.7%	36 20.0%	.000	3.73
3	CIMS require a long time to respond to the queries made causing a delay	16 8.9%	25 13.9%	48 26.7%	64 35.6%	27 15.0%		3.34

Null Hypothesis. 7: There is no relationship between the Delivery of the value and the choices of the respondents.

From the above table No.8, it can be seen that p-value < 0.05 which confirms that the null hypothesis 7 is rejected. Therefore, it purports that there is a relationship between the Delivery of the value and the choices of the respondents. Comparing the mean values obtained from Kolmogorov-Smirnov test, it can be seen that "CIMS collects & stores data in an easy/efficient way" ranks first (3.73), followed by "CIMS provides effective information to the user" (3.71) and "CIMS require a long time to respond to the queries made causing delay" (3.34).

Table 9. Human Resources Training

#	Statement	SD	D	N	A	SA	χ^2	K-S mean
1	CIMS does not require professionalism as it is easy to handle	6 3.3%	15 8.3%	48 26.7%	81 45.0%	30 16.7%		3.63
2	Though CIMS users gain skills and improve their performances	7 3.9%	11 6.1%	41 22.8%	100 55.6%	21 11.7%	.000	3.65
3	CIMS users are given intensive training to use the system successfully	13 7.2%	26 14.4%	59 32.8%	63 35.0%	19 10.6%		3.27

Null Hypothesis. 8: There is no relationship between the Human Resources Training and the choices of the respondents.

From the above table No.9, it can be seen that p-value < 0.05 which confirms that the null hypothesis 8 is rejected. Therefore, it purports that there is a relationship between the Human Resources Training and the choices of the respondents. Comparing the mean values obtained from Kolmogorov-Smirnov test, it can be seen that "Though CIMS users gain skills and improves their performances" ranks first (3.65), followed by "CIMS does not require professionalism as it is easy to handle" (3.63) and "CIMS users are given intensive training to use the system successfully" (3.27).

Comparing Means

Table. 10 T-Test comparing means between males and females

Dependent Variable	Gender	Mean	t	df	Sig. (2 tailed)	Mean Diff.
Functional Performance	Male	11.4202	1.277	178	.203	0.48574
	Female	10.9344				
Professional Evaluation	Male	14.0756	0.909	178	.364	0.41989
	Female	13.6557				
Accessibility and Reachability	Male	18.1849	0.714	178	.476	0.39799
	Female	17.7869				
Protection from Threats and Risk	Male	14.3866	0.210	178	.834	0.09147
	Female	14.2951				
Reduce Waste of Time and Defaults	Male	10.7899	0.103	178	.918	0.03582
	Female	10.7541				
Professional Statistics Information	Male	10.8319	0.708	178	.480	0.27456
	Female	10.5574				
Delivery of the Value	Male	10.8571	0.665	178	.507	0.23419
	Female	10.6230				

Human Resources Training	Male	10.6555	0.824	178	.411	0.29481
	Female	10.3607				

From table No. 10 above, it can be observed that the mean value of the males for all the dimension is greater than the mean of the female. It can also be seen that the p-value obtained from the t-test is > 0.05. i.e. there is no significant difference between male and female workers for any of the dimensions covered in the study.

Table. 11 ANOVA for comparing means between various study groups

Dimension		Sum of Squares	df	Mean Square	F	Sig.
Functional Performance	Between groups	109.872	2	54.936	10.362	.000
	Within Groups	938.373	177	5.302		
	Total	1048.244	179			
Professional Evaluation	Between groups	192.430	2	96.215	12.664	.000
	Within Groups	1344.770	177	7.598		
	Total	1537.200	179			
Accessibility and reachability	Between groups	140.387	2	70.194	5.921	.003
	Within Groups	2098.163	177	11.854		
	Total	2238.550	179			
Protection from Threats and Risk	Between groups	93.417	2	46.709	6.521	.002
	Within Groups	1267.827	177	7.163		
	Total	1361.244	179			
Reduce Waste of Time and Defaults	Between groups	77.402	2	38.701	8.674	.000
	Within Groups	789.709	177	4.462		
	Total	867.111	179			
Professional Statistics Information	Between groups	103.027	2	51.514	9.307	.000
	Within Groups	979.700	177	5.535		
	Total	1082.728	179			
Delivery of the Value	Between groups	51.531	2	25.766	5.419	.004
	Within Groups	841.580	177	4.755		
	Total	893.111	179			
Human Resources Training	Between groups	122.986	2	61.493	13.615	.000
	Within Groups	799.458	177	4.517		
	Total	922.444	179			

The above table No.11 shows the Analysis of Variance test performed to compare the mean values for all the dimensions of the study groups viz. Administrative staff, Academic staff, and Students. It can be seen that the F statistics is significant for all the dimensions which prove that the respondents from various groups differ in their opinion about the dimensions covered in the study.

Table. 12 Post Hoc analysis for comparing means between various study groups

Dependent	Groups		Mean diff.	Std. Error	Sig.
Functional Performance	Admin Staff	Academic staff	-3.176	0.6991	.000
		Students	-2.765	0.7336	.000
	Academic staff	Admin Staff	3.176	0.6991	.000
		Students	0.410	0.3786	.279
	Students	Admin Staff	2.765	0.7336	.000
		Academic staff	-0.410	0.3786	.279
Professional Evaluation	Admin Staff	Academic staff	-4.175	0.8369	.000
		Students	-3.477	0.8782	.000
	Academic staff	Admin Staff	4.175	0.8369	.000
		Students	0.700	0.4532	.126
	Students	Admin Staff	3.477	0.8782	.000
		Academic staff	-0.700	0.4532	.126
Accessibility and reachability	Admin Staff	Academic staff	-3.569	1.0453	.001
		Students	-3.468	1.0970	.002
	Academic staff	Admin Staff	3.569	1.0453	.001

		Students	0.100	0.5661	.859
	Students	Admin Staff	3.468	1.0970	.002
		Academic staff	-0.100	0.5661	.859
Protection from Threats and Risk	Admin Staff	Academic staff	-2.917	0.8126	.000
		Students	-2.806	0.8527	.001
	Academic staff	Admin Staff	2.917	0.8126	.000
		Students	0.110	0.4400	.801
	Students	Admin Staff	2.806	0.8527	.001
		Academic staff	-0.110	0.4400	.801
Reduce waste of time and Defaults	Admin Staff	Academic staff	-2.578	0.6413	.000
		Students	-2.703	0.6730	.000
	Academic staff	Admin Staff	2.578	0.6413	.000
		Students	-0.120	0.3473	.720
	Students	Admin Staff	2.703	0.6730	.000
		Academic staff	0.120	0.3473	.720
Professional Statistics Information	Admin Staff	Academic staff	-2.796	0.7143	.000
		Students	-3.218	0.7496	.000
	Academic staff	Admin Staff	2.796	0.7143	.000
		Students	-0.420	0.3868	.277
	Students	Admin Staff	3.218	0.7496	.000
		Academic staff	0.420	0.3868	.277
Delivery of the Value	Admin Staff	Academic staff	-2.136	0.6620	.001
		Students	-1.702	0.6948	.015
	Academic staff	Admin Staff	2.136	0.6620	.001
		Students	0.430	0.3585	.227
	Students	Admin Staff	1.702	0.6948	.015
		Academic staff	-0.430	0.3585	.227
Human Resource Training	Admin Staff	Academic staff	-3.181	0.6453	.000
		Students	-3.464	0.6771	.000
	Academic staff	Admin Staff	3.181	0.6453	.000
		Students	-0.280	0.3494	.420
	Students	Admin Staff	3.464	0.6771	.000
		Academic staff	0.280	0.3494	.420

Post hoc analysis was carried out for pairwise comparison by with Fisher's Least Significant Difference (LSD) method vide Table No.12. The results showthat for the first dimension viz. functional performance there is a significant difference between administrative staff and academic staff and also between administrative staff and students,However, it is observed that there is no significant difference between academic staff and students for their responses.

For the second dimension – Professional Evaluation, it is observed that is a significant difference between administrative staff and academic staff and also between administrative staff and students. But there is no significant difference between academic staff and students.

For the third dimension – Accessibility and Reachability, it is observed that there is a significant difference between administrative staff and academic staff andalso between administrative staff and students.But there is no significant difference between academic staff and students.

For the fourth dimension – Protection from Threats and Risk, it is observed that there is a significant difference between administrative staff and academic staff and also between administrative staff and students. But there is no significant difference between academic staff and students.

For the fifth dimension – Reduce waste of time and Defaults, there is a significant difference between administrative staff and academic staff and also between administrative staff and students. But there is no significant difference between academic staff and students.

For the sixth dimension – Professional Statistics Information, there is a significant difference between administrative staff and academic staff and also between administrative staff and students. But, there is no significant difference between academic staff and students.

For the seventh dimension – Delivery of the Value, there is a significant difference between administrative staff and academic staff and also between administrative staff and students. But there is no significant difference between academic staff and students.

For the eighth dimension – Human Resources Training, there is a significant difference between administrative staff and academic staff and between administrative staff and students. But there is no significant difference between academic staff and students.

From the above, it can be seen that for all the eight dimensions, there is no significant difference between the academic staff and students. i.e. the means of the academic staff and students are same. i.e. Considering CIMS through all the eight dimensions it can be noticed that the academic staff and students accept it in the same sense.

CONCLUSION

From the above findings, it can be observed that most of the respondents agreedthat CIMS is characterized by its multiple functions. They also agreed that CIMS is user-friendly and flexible. Most of them confirmed that the Educational Technology Center (ETC) ensures smooth, secure, safe and fast access. It was reported that in CIMS, the problems faced by the users are reported to the Ministry and upgraded regularly, and CIMS is subject to continuous assessment through periodic follow up by the Educational College Center from any external attacks etc.which is a welcoming feature. Most of them agree that CIMS users gain skills and improve their performances as it is easy to handle and the users are given required training.

Though CIMS is speeding up and improving the operational process which makes an effective impact it was also reported that there is a small group of individual who handles and manages the entire program - installation and periodic follow-up etc.

RECOMMENDATIONS

Based on the above findings, the followingsuggestions were recommended:

1. To conduct periodic workshops on the functional aspects of CIMS and its latest developments.
2. To conduct a continuoussystem evaluation to periodically elicit feedback from the users which might help to improve the system.
3. To seek the technical expertise to support the administrative staff in case of any difficulties arise during CIMS usage.
4. To avoid directly contacting the registrar or the ministry personnel to solve any issues arising thereby.
5. To empower ETC with more technical expertise.
6. To foster effective communication between the Colleges and the Information Technology Department at the Ministry.
7. To continue to send out pop-up alerts to employees on the updates of the system.
8. Last but not least, to increase the number of expertise in managing CIMS with a simple mechanism.

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