STAFF ATTITUDES AS AN INDICATOR OF CHANGE READINESS: A CASE OF A HIGHER EDUCATION INSTITUTION ADOPTING ICT IN STUDENTS' RECORD MANAGEMENT

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ABSTRACT: *This paper is a product of research that sought to evaluate the attitudes portrayed by staff in higher education administration in an effort to adopt ICT for students' record keeping. With an endeavour to bring an understanding of change management in the context of an institution of higher learning, knowledge of the level of staff readiness for the change is important. Staff attitudes were evaluated in this paper because they are considered an important indicator of change readiness. The change under focus is adoption of a Student Information System (SIS) at an Institution of higher learning, Africa International University (AIU) and the results could relate to other institutions. The study involved university staff members who were in either management of course registration, grades information or both for the academic year 2011/2012. Mixed methods were used involving qualitative data, collected through pre-study interviews and quantitative data in the actual study. Data were collected in three phases, first was by face-to-face semi-structured interviews in a preliminary study with 2 members of the University's Management Committee, and second was pre-study with 6 representatives of local best practices in records management (USIU and Strathmore University). Descriptive data for the actual study with AIU staff members were collected using a questionnaire which mainly collected quantitative data but also had room for open-ended questions. Evaluative Research design was adopted for the study, where descriptive data from AIU staff were placed in comparison with the pre-set criteria from the best practice institutions. Judgment was then made to determine the level of change readiness among the staff members at AIU based on prevailing attitudes to adopt a SIS in management of students' academic records. The threshold for readiness was set at 67%. The entire study evaluated 5 indicators of change readiness, and only one, (staff attitudes) which is the focus of this paper met the set threshold to indicate change readiness towards the use of a SIS in records management.*

KEYWORDS: Records Management, Information Systems, Attitudes, Change Management, Information and Communication Technology (ICT).

INTRODUCTION

Information and Communication Technology (ICT) has noticeably influenced the education sector in teaching and learning as well as in administration. The integration of ICT in education is, however, not always a smooth endeavor with instant results. There are many failed technological efforts that cost institutions huge amounts of money, yet end up being underutilized. In other situations, the new technology is used to do things the same way the users did without it (Pedro et. al. 2004, 21). An assessment of institutional readiness before adoption of any major change is very important in highlighting bottlenecks that may lead to a failed technology if implementation was to be done. Institutional readiness for technology

adoption means not just technological and financial readiness, but also involves very key aspects in change management often taken for granted such as the people and the culture. Change implementers in an institution can determine the success or failure of the technology. Change that is not engraved in culture is superficial and does not last. In consideration for adoption of ICT in higher education, it is very important that institutional readiness is assessed without overlooking the people and culture.

It is apparent that ICT is receiving serious attention in the Kenyan education sector. Kenya Education Sector Support Programme (KESSP), a project of the Ministry of Education Science and Technology, identified ICT as a key area of investment between years 2005 and 2010 for public universities for quality assurance (Kenya Education Sector Support Programme, 2005). Primary schools have also not been left out with the government planning to introduce ICT in all primary schools through a laptop project. The country has also a flagship project called Kenya's Vision 2030 that is primarily driven by technology. Institutions of higher learning in Kenya have also increased tremendously in the last ten years, responding to the increase in demand for higher education that has seen many adults going back to further their education. General technological advancement, increased student enrollments, demands for curriculum management and penetration of distance and e-learning are among other reasons why higher education institutions are welcoming ICT adoption in teaching, learning and administration.

Data management software costs academic institutions millions of shillings to purchase and even more to maintain their operations. However, such management systems are helping students in institutions of higher learning to receive improved services, such as being able to directly transfer fees, register on-line, access wireless and unlimited internet, access schedules and grades online, receive automated library services and more. This is in sharp contrast to the long queues on registration days and bulky paper work for university administration staff and teachers that have prevailed in the universities for many years. The use of ICT is enhanced by increased use of smart phones, numerous opportunities available through banks and other sponsors for university students to own computers and there are IT labs in the universities available for students who may not own personal computers. However, not all universities in Kenya have automated the management of students' records; there are some that are still manually managing these records. However the question is, among the institutions that have embraced this office automation; how have the staff received the introduction and how do they perceive the use of this technology?

THEORETICAL UNDERPINING

ICT Environment at Institutions of Higher Learning

Literature reveals that educational institutions are slow in embracing change and are 'characterized by conservatism in practice, goals and culture' (Lane, 2007, p. 86). However, these institutions are not exempted from responding to the needs for change. This paper intends to bring an understanding of change management in this context by assessing the perceptions of staff towards the adoption of ICT for data management. The information on how staff perceive the use of ICT is hoped to empower the institutional leadership to identify the potential among the staff to embrace change, and the existing problems and gaps in the change process. If such information is owned by the institutional leadership, it will inform

and guide decision making on appropriate strategies to be adopted to overcome the problems, deal with the gaps identified and support the existing potential among the staff members (Barlow& Barlow 2011, pp. 98-99). Through appropriate information dissemination by the leadership, the staff will be facilitated to become effective users of the Student Information System (SIS).

This paper is a focus on Africa International University (AIU), which received a government charter as a private university in Kenya in March 2011. The institution was established in 1983 as Nairobi Evangelical Graduate School of Theology (NEGST), starting off with only one Masters programme and four students but it grew to more than twenty programmes, including Diploma and Bachelor degrees and over 600 students by the year 2012 when this study was done. Information and Communications Technology (ICT) has steadily been applied in teaching, learning and administration and there is noticeable focus in its promotion in the university including the change effort in focus in this paper, introduction of a SIS to manage student academic records.

Staff Attitudes and Change Readiness

Observers have noted that misjudging the organizational and employees change preparedness by the leaders, results to a false start of the change effort, resistance that may stall the change or lead to a total failure of the change effort (Weiner et al. 2008, p.381). Therefore, institutional leaders cannot afford to blindly make decisions without considering the situation surrounding the proposed changes, the people involved and the organizational culture. Adoption of Situational Leadership model in the context of change readiness proposes that employees who are at low readiness level need a "telling" style. This is leader-directed, guiding the follower in "what to do, where to do it and how to do it" in a "high task-low relationship" style (Hersey, Blanchard and Johnson 1996, p. 201, 207). Low to moderate level of readiness is said to need a "selling" leadership style which mainly is a "high task, high relationship style" answering 'why' questions. The Moderate to high readiness level needs "participating" leadership style that involves "high amounts of two-way communication and supportive behavior but low amounts of guidance" referred to as "high relationship-low task" (p. 204, 207). For staff with high readiness, the appropriate leadership style proposed is "delegating," which involves monitoring the staff (followers) with a leeway for them to perform these duties alone. This style involves "low relationship-low task" (p. 204, 207). Determining what level of readiness employees may be at is therefore very helpful to inform the leadership how to intervene and maximize on change promotion by meeting their needs for preparedness. This research adapted the Situational Leadership model's readiness levels but collapsed the 'low to moderate' and the 'moderate to high' levels to one level called, medium level of readiness. The other two levels remain as in the Situational Leadership model: low and high levels of readiness.

Barlow and Barlow identified five behaviors that people who are ready to change engage in: wanting change, owning problems, seeing a future, seeking support and persisting with change (Barlow & Barlow, 2011, pp.94-104). Since change is initiated by the leadership, institutional leaders should use these key indicators of readiness to check their own change readiness and their potential for supporting change among their people. Lack of, or ignorance of key aspects of change readiness among the institutional leadership may be detrimental to any change initiative. For instance, implementation of a Student Information System would need to be backed by a real need for change in record management and a process that has

identified this option as the best way forward. The leadership as well as the change recipients, through what they say and do, should show that they really want change.

Students are at the center of any academic enterprise and management of their records is very important. Some student records, such as their grade reports are permanent institutional records and need to be handled with care and precision to retain the authenticity they ought to carry. Paper records and manual management of records has been the norm in many organizations including academic institutions. When an organization decides to incorporate electronic data management methods, there is a balance that needs to be sought between the manual and the automated processes. McCorry emphasizes the need for this balance and remarks that "automation is a good investment only if it lowers costs, reduces time, and improves efficiency and effectiveness of business operations" (McCorry, 2009, p. 2).

Electronic management of records has been attributed by users to promotion of efficiency in academic institutions despite the challenges that also come with it (Krishnaveni & Meenakumari, 2010, p.285). In a change initiative that would reduce the use of paper and manual processes, the employees need to be involved in the creation of the new way of doing business for more acceptance of the change. McCorry suggests that "not only do you need to provide IT systems, tools, and policies, but also it is important to create the paperless culture within your firm" (McCorry, 2009, p. 2). There are many reasons why people may prefer to use paper rather than adapt to new technologies and issues of concern such as data loss, security and historical purposes that prefer paper for record back-up need to be addressed. McCorry makes reference to a business research that revealed that:

> …31% of PC users have lost all of their files due to events beyond their control. Gartner Research found that over 77% of organizations don't have disaster recovery or business continuity plans, and the ones that do are often outdated or never communicated to employees. In a different study it was found that 34% of companies fail to test their backups, and of those that do, 77% have found backup failures (McCorry, 2009, p. 2).

Records in a university context involve sensitive student data that track the student academic and non-academic life and inform the generation of student academic and non-academic permanent records such as degree certificates and academic transcripts. Loss of data in a university setting can be disastrous. Users' confidence in the Student Information System needs to be assured to promote their readiness but measures also taken to prevent dreadful incidences that could arise from massive data loss or the generation of inaccurate data.

METHODOLOGY

An evaluative design in the descriptive mode was adopted, which has three parts, descriptive data, criteria of readiness and evaluative judgment of collected data based on determined criteria (Cole, 2001, p.308).

A pre-study done with the AIU leadership revealed that the present change initiative was preceded by failed attempts to automate the management of student academic records and the leadership was keen on making the proposed change to work. Some of the issues identified to

have caused previous failure were the lack of technical support especially since the previously proposed Student Information System was a gift, of custom design and not open source. Selection of the software was also not preceded with a needs assessment or a system study. The Integrated Management Information Systems (IMIS) committee was planning in the present change effort to do a needs assessment and information gathering, to prioritize and set criteria for what the system would need to do to be successful that would guide system selection. A system pilot study was also to be conducted for the whole system outcome, which would inform the way forward on the SIS implementation.

Data was also gathered from teaching and non-teaching staff whose work involved management of course registration through a questionnaire. The questionnaire sought information on the prevailing staff attitudes towards the Student Information System. This descriptive data from the staff is what was judged on the set criteria from the best practices to determine the level of readiness for the electronic management of student records. Two Kenyan universities were selected as best practices for this study after a review of their overall best rating in a research done by the Kenya Education Network (Kashorda and Waema 2009, 35). Consultation was also done with IT and educational experts at Africa International University who considered them as the key leaders in this area, based on their contribution in research and consultancy as well as their rating on the investment of money and people in relation to the adoption of technology in academic administration. Both institutions are chartered private universities in Kenya. The teaching staff involved in the study were all fulltime and part-time staff that had taught at least one course in 2011/2012 academic year. The non-teaching staff included members in the Deputy Vice Chancellor Academic Affairs (DVCAA's) office, Registrar's office, Extension Studies, Finance, and Information Technologies department who were involved in the management of registration and/or examination information.

RESULTS AND DISCUSSION

The paper was guided by the hypothesis (tested in the null form) that:

H_0: There is no significant difference between teaching and non-teaching staff attitudes towards the electronic management of student academic data.

Prevailing attitude towards SIS among staff

The pre-study done among two best practice institutions in Kenya found out that staff are more likely to support change if they have the right attitude towards electronic management of records. A total of 21 statements on record management that is ICT enhanced were presented to the respondents expecting answers between agree, not sure or disagree. Fifteen of them were stated positively and agreeing to them was regarded as an indication of positive attitude towards adoption of a SIS, while six of them were stated in the negative and agreeing to them indicated negative attitude. During data analysis the responses of the negatively stated items were switched between 'agree' and 'disagree' so as to reflect the correct attitude. *Agree* scores by 0% to 33% of staff were an indication of a negative attitude towards use of a SIS, 34% to 66% indicated those not sure how to rate a SIS in records management and 67% to 100% are regarded as positive attitude towards adoption of a SIS.

Table 1 shows a summary on the test of staff attitude towards SIS in records management with the last column showing the attitudes on each item as guided by the Likert scale. In this study, right attitudes that are required of staff as an indication of change readiness for a SIS are defined by positive attitudes. These are determined by having at least 67% of staff agreeing to each of the statements as shown in table 1.

Table 1: Staff Attitude towards the Use of ICT in Student Records Management

No.	A good student information system:	Agree Count	%	Not Sure Count	%	Disagree Count	%	Staff Attitudes
1.	Promotes flexibility in records management	54	89%	5	8%	2	3%	**Positive Attitude by more than 67% of staff** (indicating high readiness for adoption of a SIS)
2.	Is cost effective	48	79%	12	20%	1	2%	
3.	Promotes efficiency in records management	60	100%	0	0%	0	0%	
4.	Promotes control in records management	56	92%	5	8%	0	0%	
5.	Saves time spent in management of examination information	55	90%	6	10%	0	0%	
6.	Promotes safety in records management	48	79%	13	21%	0	0%	
7.	Enhances accuracy in records	56	92%	4	7%	1	2%	
8.	Empowers students to manage their academic progress	51	84%	10	16%	0	0%	
9.	Saves time spent by staff and students in course registration	58	97%	2	3%	0	0%	
10.	Promotes conservation of the environment due to reduced paper usage	56	92%	3	5%	2	3%	
11.	Facilitates a change of institutional culture	46	75%	12	20%	3	5%	
12.	Promotes AIU's vision & mission	45	74%	12	20%	4	7%	
13.	Demands a change in thinking and behavior	48	79%	7	11%	6	10%	
14.	Promotes privacy and dignity of staff and students	35	57%	25	41%	1	2%	**Positive Attitude by 34% to 66% of staff** (indicating medium readiness for adoption of a
15.	Enhances fee payment	36	59%	22	36%	3	5%	
16.	Translates to more work for me *	27	44%	22	36%	12	20%	
17.	Robs people of jobs	29	49%	22	37%	8	14%	

							SIS)
	and status *						
18.	Destabilizes normal operations in student academic management *	36	59%	21	34%	4	7%
19.	Requires technical support that is not available in AIU*	23	38%	30	49%	8	13%
20.	Introduces technical jargons that are often discouraging to learners*	31	51%	22	36%	8	13%
21.	Requires a lot of time to learn the system *	26	43%	22	37%	12	20%

* - feedback for agree and disagree swapped to take care of the negative statements

From the analysis of staff attitudes towards adoption of SIS, all the staff met the required threshold of positive attitudes in 13 items (numbers 1 to 13) of the 21 outlined items. It is noteworthy that the perception of AIU staff indicated confidence in a SIS to efficiently manage student academic records and thus, high level of readiness for the anticipated change. According to the staff, a SIS would be time saving and would enhance flexibility, control, accuracy and safety of records among its users. They even perceive that adoption of a SIS would not just bring a change in thinking and behavior among the system users but also enhance the institutional vision and mission. However, there was hesitation among the staff members in the items numbered 14 to 21, since only 34% to 66% of the staff had positive attitudes towards them. They seemed unsure whether a SIS would promote privacy and dignity of its users, enhance fee payment, rob some people of their jobs and destabilize academic management. They also seemed not sure whether the required technical support for the system is available in the university. In the course of system implementation and training, it is important for the change leadership team to ascertain the role of a SIS, especially as it relates to these 8 items that staff are unsure of.

Further analysis of the staff attitude was done to ascertain any difference between teaching and non-teaching staff on their attitude towards the use of a SIS in records management. This analysis generally portrayed an overall positive attitude among all staff towards the use of a SIS in records management. The non-teaching staff were slightly more positive compared to their teaching staff counterparts, looking at the level of their agreement to the items surveyed. In addition, the teaching staff seemed more uncertain and probably skeptical of some roles of the SIS, looking at the responses indicating "not sure". While the non-teaching staff met the required threshold for right attitudes towards a SIS in 15 out of the 21 items, the teaching staff met the threshold in 13 items. That is to mean that in addition to the 13 items in table 1 that all staff rated with positive attitude, there were 2 more items where the non-teaching staff rated to meet the set threshold for positive attitude but the teaching staff did not. These were the propositions that a SIS *enhances fees payment* and that it also *promotes privacy and dignity of staff and students* as portrayed in table numbers 2 and 3 below.

Table 2: A Student Information System (SIS) promotes privacy and dignity of staff and students

A SIS Promotes privacy and dignity of staff and students		Teaching	Non-teaching	
	Agree	51.2%	72.2%	57.4%
	Not sure	46.5%	27.8%	41.0%
	Disagree	2.3%		1.6%
Total		100.0%	100.0%	100.0%

N=61   df =2   p-value 0.406>0.05   Null hypothesis was not rejected

While 72.2% of the non-teaching staff agreed to the proposition that a SIS *promotes privacy and dignity of staff* and 27.8% were not sure, only 51.2% of the teaching staff agreed; 46.5% were not sure and 2.3% disagreed as shown on table 2 above. That a Student Information System *enhances fees payment*, 77.8% of the non-teaching staff agreed, while only 51.2% of the teaching staff agreed to it, 41.9% of the teaching staff were not sure and 7% of the teachers disagreed as shown on table 3 below. The teaching staff may probably think that crediting the system with increased *privacy and dignity of staff* may be overrating it, while more human intervention (in terms of students and staff) may be required for enhanced *fees payment*. Besides this difference in attitudes based on these two items, both the teaching and the non-teaching staff showed similar confidence on the use of a SIS based on the other 13 items that met the readiness threshold.

Table 3: SIS Enhances fee payment

A SIS enhances fee payment		Teaching	Non-teaching	
	Agree	51.2%	77.8%	59.0%
	Not sure	41.9%	22.2%	36.1%
	Disagree	7.0%		4.9%
Total		100.0%	100.0%	100.0%

N=61   df=2   p-value 0.150>0.05   Null hypothesis 1 was not rejected

All the staff, both teaching and non-teaching were 100% positive that a SIS *promotes efficiency in records management* and therefore no statistics were computed on this item because it was a constant. As already observed, some items never met the 67% threshold of positive attitudes, but a chi square test was done on all the items except the constant one stated above. This was to determine if the differences observed between the teaching and non-teaching staff were statistically significant at 2df, allowing a 5% margin error. To test the null hypothesis, Fisher's exact test was used.

The chi square tests showed non-rejection of the hypothesis in all but 2 items numbered 6 and 8 in table 1 both of which had met the required threshold for right attitudes. This is to say that although the two items that a SIS *promotes safety in records management* and *empowers students to manage their academic progress* were rated with a positive attitude by both teaching and non-teaching staff, the non-teaching staff rated the items way much higher than the teaching staff and this difference was statistically significant. The claim that a SIS *promotes safety in records management* was supported by 100% of non-teaching staff, compared to 69.8% of the teaching staff, but 30.2% of teaching staff were not sure how to rate it. Though both categories of staff met the required threshold for this item, the level of

confidence in the proposed system was statistically significantly higher among the non-teaching staff than among the teaching staff. More teaching staff seemed more skeptical of the role of a SIS, probably due more to the key role of the staff responsible for the safety of records. This could communicate that more assurance may be needed for the teaching staff on how student records should be kept safe in a SIS and the non-teachers alerted of their responsibility in this regard. On the proposition that a SIS *empowers students to manage their academic progress*, 100% of non-teaching staff were in support, compared to 76.7% of the teaching staff, while 23.3% of the teaching staff were not sure. This difference could be due to difference in understanding of the term "*manage their academic progress*" among the 2 groups of staff. While the non-teachers may understand it to mean "follow your results online", the teaching staff may take it to mean "improve academic performance". Involvement of staff through communication and training in the implementation process should therefore give room for them to clarify any uncertainties on the roles of a SIS as well as the responsibilities of the different users, in order to have maximum benefit from the system.
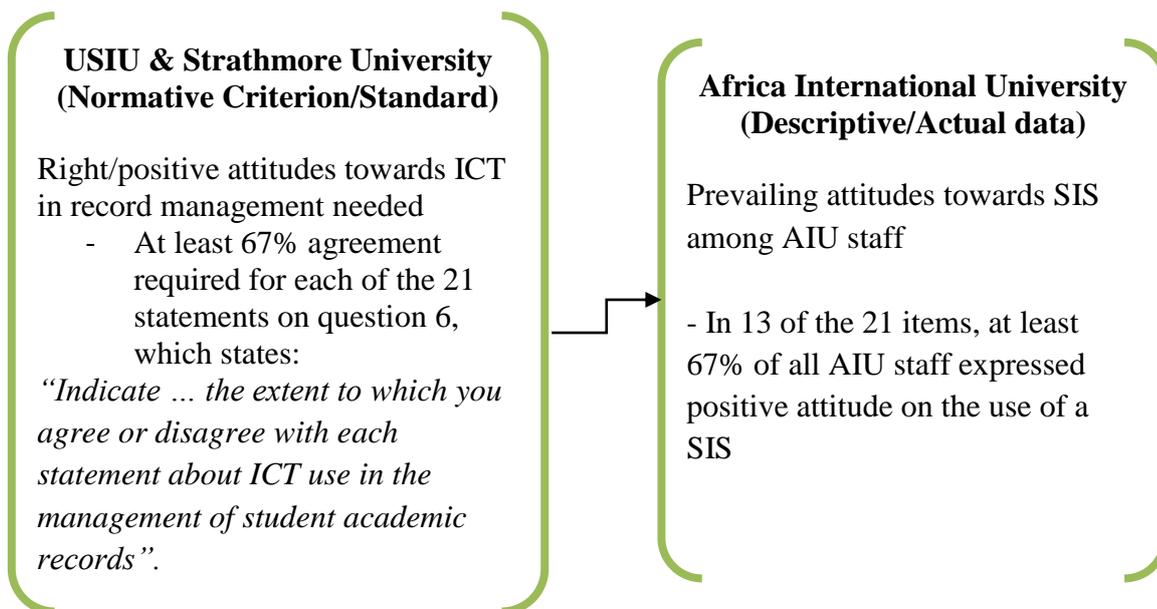
For the rest of the items, the difference in the attitudes of staff was confirmed not to be influenced by whether the staff were teaching or non-teaching. Even for the 2 items (*promotes privacy and dignity of staff* and *enhances fees payment*), which the non-teaching staff had rated to meet the required threshold and the teaching staff had not, the difference between them was not statistically significant. This is to show that the job category of staff in AIU did not significantly influence their attitude towards adoption of a student information system although non-teaching staff indicated more positive perception towards the use of a SIS in records management. The data on table 1 however shows that 8 items did not meet the required threshold for positive attitudes among all staff. The change leadership team would therefore need to fill the existing gaps and make the most of the goodwill among the staff members who were generally positive on the role of a SIS in student records management through training and adequate communication.

On other practical terms, the change leadership team would need to fill the gaps and ensure that through communication and training, all the staff have the right attitudes on the role of a SIS. The staff need to clearly understand how to integrate the role of the system and their own roles, considering that it is humans who are responsible to manage the academic process assisted by the system. For instance, it was revealed from best practices that although a SIS can keep records safe, safety in technology is the responsibility of the users as much as it is of the technical support team. The staff members would therefore need to be informed how to participate in keeping student records safe. In addition, the students who would be empowered by the system to manage their academic progress would need adequate training and resources to support the technology. This could only be feasible if for instance the number of computers in the student labs is adequate and the Internet connection is steady and reliable. The students who study off-campus would need to be carefully considered, by establishing computer labs in their study centers, or empowering them to own personal computers with internet connectivity or smart phones that they can use to manage their academic progress.

Provision was also given to the staff members through an open-ended question, in case they had any other remarks to make about a SIS. Feedback received through the open-ended question revealed additional staff expressions towards a SIS such as the 13 statements listed below.

1. "A noble project that is long overdue"
2. "is the way to the future"
3. "this is a welcome move and look forward to the installation of the system"
4. "a timely and worthy project for any serious academic institution"
5. "it is greatly needed in a much growing institution like AIU; with increase in student enrolment the system will be a necessity and not a choice; it will greatly increase efficiency and make work easier"
6. "it is likely to increase student enrolment"
7. "I don't have enough info about such systems"
8. "if well understood it is time saving and accurate if data entry is accurate"
9. "accessibility of training on the system will be a challenge since most students are overloaded with academic work; they have no time for even recreation"
10. "it would be more effective to avoid the up and down running especially during registration, where often times, HOD's are not in office"
11. "reduces paper work"
12. "'it enhances efficiency and discipline among the staff and students but needs to be supported with effective technical team and infrastructure"
13. "Confidentiality of information should be given priority"

These open-ended statements do not just reflect the positive attitude that AIU staff members generally held towards adoption of SIS; they also give precautions and issues of concern for the staff, when implementing the project. Such issues touch on the technical support required, training considerations for staff and students, accuracy in data entry and confidentiality for information. Though generally positive, staff in Institutions of higher learning are also aware that success in adoption of the system is an integration of a good system and humans working with it to technically support users, transfer, audit and enter data and keep the information safe.

USIU & Strathmore University
(Normative Criterion/Standard)

Right/positive attitudes towards ICT in record management needed
- At least 67% agreement required for each of the 21 statements on question 6, which states:

"Indicate ... the extent to which you agree or disagree with each statement about ICT use in the management of student academic records".

Africa International University
(Descriptive/Actual data)

Prevailing attitudes towards SIS among AIU staff

- In 13 of the 21 items, at least 67% of all AIU staff expressed positive attitude on the use of a SIS

Figure 1: A representation of the process of judging the level of change readiness based on staff attitudes towards the use of a SIS in records management

The staff attitude on the 13 items that attained the 67% threshold required to gauge right attitudes towards a SIS is an indication of high level of readiness for the planned change, at least judging by expressed attitudes of the staff. Based on the other 8 items that didn't meet the set threshold, the staff are not as enthusiastic on the adoption of the SIS. However, since the 8 items were rated 34% to 66%, showing medium level of change readiness, the staff may be open to consider change and would need to be supported and encouraged.

IMPLICATIONS TO RESEARCH AND PRACTICE

In view of the importance of proper change management in Educational Administration, a clear understanding of the dynamics involved is crucial. In the context of implementation of ICT systems in higher education as was the focus of this study, the focus on people should not be lost since technology as good as it can be can fail if the users are not considered. In addition, the prevailing culture in any institution has implications for the behavior and attitudes between the subgroups such as teaching and non-teaching staff in an institution of higher learning. This study reveals that staff in the surveyed institution are in tune with other sectors in society that have embraced the use of ICT enhanced technology to promote work efficiency and this may be a reflection of other institutions of higher learning. Exposure to the benefits that ICT enhanced technology can yield in many facets of human life might be an influence to staff in institutions of higher learning to embrace technology positively even for their work. However, positive attitude as important as it is to successful change management is not enough and practical steps by the leaders in these institutions are needed to complement this goodwill. Communication, motivation and material support are crucial for staff expected to implement a new records management system and consideration is needed to meet the expectations and concerns of the various subgroups such as teachers and non-teachers.

CONCLUSION

Considering the inquiry into the prevailing attitudes towards adoption of SIS among staff in an institution of higher learning, the generally positive attitudes revealed in this paper indicate that the university staff were ready to adopt SIS in managing students' academic records. The observed high positive attitude among non-teaching staff is commendable, since they are the main users of the system on daily basis. However, the caution expressed by the teaching staff on some items that may be manipulated by people should not be ignored.

RECOMMENDATION

Considering that the university staff have the right attitudes towards the use of SIS which is an important indicator of change readiness, a successful change implementation would heavily depend on the leadership's capacity to inform, motivate and empower the staff or adoption of the SIS. This might entail ensuring proper budget allocation to support creation of the right technological climate by investing in required technological infrastructure for the student information system. Proper and adequate communicating to staff and students who are the change implementers can also not be ignored in enhancing their motivation towards

the change and facilitation of training on the role and use of the SIS is important in building the users' capacity.

FUTURE RESEARCH

Since this study was done in anticipation of a proposed student information system, a follow-up study to evaluate the success rate of the system implementation could be done. Establishing the factors contributing to the success or lack of it would be important, including the role of staff attitudes in the process. A study among students might also give an important angle to evaluation of change management with a different group of end-users.

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