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PROJECT TITLE: STRESS REDUCTION AND PERFORMANCE IMPROVEMENT OF ACADEMIC STAFF THROUGH RESOURCE MANAGEMENT

ABSTRACT

In today's world that emphasizes on efficiency and speed in work, workplace stress is on everyone's mind, including educators in the academic industry. Knowledge management is believed to promise better decision making, academic services enhancement and to transform information and intellectual assets into enduring value. The creation and dissemination of knowledge has long been the social role of colleges and universities, increase use of information technology is hopefully to provide more opportunities to improve the knowledge production and sustainability in the institutions. This research examines how knowledge management (KM) can be designed and implemented in a higher education institution to improve performance in terms of knowledge sharing and learning among the academic staff. It is also aim to point out how successful communication and knowledge sharing can be able to reduce stress caused by fragmented information technology infrastructure, inaccessible and unreliable data, redundant data gathering and information hoarding.

PROBLEM

In today's world that emphasizes on efficiency and speed in work, workplace stress is on everyone's mind, including educators in the academic industry. In a study conducted by a group of researchers, it confirms that human service professions generally prone to a significant risk of stress related disorders as compared with all other occupations, where the relative risks are particularly high for teachers and social care workers providing personal care for the elderly and the mentally and physically disabled (Wieclaw, Agerbo, Mortensen and Bonde, 2006). In other studies by Tye and O'Brien (2002), they indicate that this crisis is a nationwide phenomenon. A fact that stated by Malaysia State Health Committee chairman Datuk Dr K Rajapathy in a newspaper New Straits Times reported by Lee (Oct 18, 2003), that teachers form the largest group of people with higher risk of suffering mental health problems. Unfortunately, in this information age, most of the time the ICT technologies introduced in education institutions are used in teaching, learning and assessment, for example e-learning portals, on-line curricula, online-tuition, electronic classroom management systems, Electronic Whiteboards and other ICT learning support software, which are often used in managing and ensure students' learning but not being used to manage resources and intellectual assets of the academics. Indeed it is a great lose to these education institutions

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when any experienced and knowledgeable academic staff is retiring or leaving the institution. The knowledge is not retained and hence the institution is deemed losing its "hidden" intellectual asset. Knowledge management is believed to "promise better decision making, academic services enhancement and cost reduction", and to "transform information and intellectual assets into enduring value" (Kidwell, Vander Linde, & Johnson, 2001, p.3). The creation and dissemination of knowledge has long been the social role of colleges and universities, increase use of information technology is hopefully to provide more opportunities to improve the knowledge production and sustainability in the institutions.

SOLUTION

This research is set out to examine how knowledge management (KM) can be designed and implemented in a higher education institution to improve performance in terms of knowledge sharing and learning among the academic staff. It also aims to point out how successful communication and knowledge sharing can be able to reduce stress, which caused by fragmented information technology infrastructure, inaccessible and unreliable data, redundant data gathering and information hoarding. Resource management system can be used to manage staff's academic and admin-related resources, and this aims to indirectly reduce the paperwork needs to be done by different levels of staffs, and save the hours they normally use to prepare the paperwork. This research also hopes to allow knowledge management practitioners and researchers to consider dimensions of power and influence of KM within the educational workplace. Lastly, the research also aims to produce a set of challenges to the KM practitioners, and let them to review the current situation in this area.

There are two KM strategies to be done: a system needs to be implemented that acts like a traditional library, which manage large cache of documents, these documents need to be organized by using ontology[1] approach. This system must also include search engines that allow staff to find and use the documents they need. In the second strategy, it is most important to include a system that allows staff to communicate with others (Hansen, Nohria and Tierney, 1999). Milam, J. (2006) presented a system

[1] Ontology is a formal, explicit specification of a shared conceptualisation (Gruber, 1993). Ontology is shown to be central to KM strategies in higher education for capturing and utilizing knowledge assets (Milam, J., 2006).

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approach of academic knowledge in “Ontologies in Higher Education”, which provided us with an overall insight of the higher education industry from a structural perspective. Various classification schemas and taxonomies used to differentiate the academic institutions and their components had been discussed and useful guidelines for constructing academic ontologies were provided. According to Lamont (2003), there are two activities involved in creating ontologies. First is to code new documents in a beginning taxonomy, and second is to modify the taxonomy to handle new types of information. These can usually be done through a combination of automation and human intervention. Techniques involved in documents classification include using keywords, statistical analyses that recognize the patterns of words and using semantic network or ontology that analyzes the context of the words (Lamont, 2003, p.2). Milam (2006) advocated the developers must incorporate the principles of dynamic classification in order for taxonomies to be fluid and changing to meet different sets of needs. For such reason, developers may then need to incorporate concept maps, pattern recognition, Boolean logic, and subject matter experts to achieve such goal. To ensure content management is able to help institutions to handle information overload that burden the existing systems and personnel, work on ontologies must be given enough resources and attention. The loss of critical knowledge assets with employee turnover and retirement must be stemmed and recorded through the right way of capturing and leveraging knowledge (Milam, J., 2006).

TARGET MARKET

This solution benefits two parties: the higher education institution and its academic staff. The KM system can be implemented in a higher education institution to improve performance in terms of knowledge sharing and learning among the academic staff, and to help the institution to sustain the expert knowledge. The creation and dissemination of knowledge has long been the social role of colleges and universities, increase use of information technology is hopefully to provide more opportunities to improve the knowledge production and sustainability in the institutions.

COMPETITION/CONTRIBUTION

Most of the organizations are always overwhelmed by the need to rapidly organize unstructured information (knowledge). This is due to reasons such as staff retirements and turnover, budget cutbacks, an unqualified labor pool, lack of skills and/or training, and changing mission by the institutions. Besides, staffing problems and the continuity of knowledge remain embittered as explicit information is not always

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readily available. Therefore the automated knowledge management system would certainly fulfill these needs. In addition, most of the time the ICT technologies introduced in education institutions are used in teaching, learning and assessment, for example e-learning portals, on-line curricula, online-tuition, electronic classroom management systems, Electronic Whiteboards and other ICT learning support software are often used in managing and ensure students' learning. However, ICT is seldom being used to manage resources and intellectual assets of the academics.

MILESTONES

The proposed project milestone is as follows:

Milestone	Milestone Goal	Deadline
Concept approval	Feasibility studies and basic system concepts is approved	22/5/2015
Requirements review	Requirements specifications are complete, correct, approved and suitable for input to design.	3/7/2015
Preliminary design review	The architectural design satisfies all product requirements, is approved and is suitable for input into the detailed design process.	10/7/2015
Critical design review	Detailed designs fully implement the system architecture, are approved and are suitable for input into the development of code.	24/7/2015
Test plan review	Test plans are adequate for the testing of all product features, are approved and are suitable for input to the development of test cases and test procedures.	15/2/2016
Test readiness review	Developed and unit tested software has been passed by the test team and is suitable for input into integration testing.	26/2/2016
System test review	The software product has passed system testing and is suitable for input into acceptance testing.	11/3/2016
Operational readiness review	The software product has passed acceptance testing and is suitable for deployment in its target production environment.	18/3/2016

(note to students: This is a sample milestone, please plan your own milestone accordingly.

REFERENCES

Hansen, M. T., Nohria, N. and Tierney, T. (1999). What's Your Strategy for Managing Knowledge? *Harvard Business Review,* 77 (2), 106-116.

Kidwell, J.J., Vander Linde, K.M., and Johnson, S.L. (2001). "Applying Corporate Knowledge Management Practices

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in Higher Education." In Bernbom, Gerald, editor, *Information Alchemy: The Art and Science of Knowledge Management*. EDUCAUSE Leadership Series #3. San Francisco: Jossey-Bass. 1-24.

Lamont, J. (2003). Dynamic Taxonomies: Keeping Up with Changing Content. *KM World*, 12(5).

Lee K. F. 2003. 'Teachers Face Highest Risk of Mental Illness'. New Straits Times. 18 Oct 2003.

Milam, John. (2006). "Ontologies in Higher Education". In Metcalfe A. S. (ed.). *Knowledge Management and Higher Education: A Critical Perspective*. Hershey, PA: Information Science Publishing.

Tye, B. B., and L. O'Brien. 2002. Why are experienced teachers leaving the profession? *Phi Delta Kappan*, 84 (1): 24-32.

Wieclaw, J., Agerbo, E., Mortensen, P. B., and Bonde, J. P. (2006). Risk of affective and stress related disorders among employees in human service professions. Occup Environ Med, 63(5), p.p. 314 – 319.