THE IMPACT OF KNOWLEDGE MANAGEMENT ON ORGANISATIONAL PERFORMANCE

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Abstract - Knowledge management focuses on making available corporate knowledge wherever and whenever it is needed. Due to the important of challenging work environment, the organization often faces on more needs for knowledge to be shared among people throughvarious channels.This research investigates the impact ofknowledge management on organizational performance in a local international college of one university. For analysis, data are collected from the international college in the past three years. This study analyses the data by using knowledge management solutions which included knowledge discovery, knowledge capture, knowledge sharing and knowledge application.The studyfound that concluded the impact of knowledge management is positively related to organisational performance in several ways by effectively integrating and sharing knowledge from a variety of diverse perspectives people.

Index Terms - Knowledge Management, Organizational Performance.

I. INTRODUCTION

The strengths, weaknesses, opportunities and threats (SWOT analysis) of the international college were identified by members of administrative committee during a brainstorming session (See Table 1). Administrators, faculty and staff reviewed the analysis and provided input as part of the college's strategic planning process. The SWOT analysis was used to develop the importantstrategic directionsof the college in the next three years. The SWOT analysis is a tool to identify issues during the early stages of a strategic planning process. Strengths are the strong parts of the organization that can be directly controlled such as international presence in the region. On the other hand, weakness are those elements of the organization that are not positive but can be improvedfor instance insufficient numbers of faculty members. Opportunities and threats operate outside the organization and while they are usually little control but can influence their impact. Several studies literatelysuggest that the organizational performance of the international college is a major issue for the university. This challenge presents an organisational response that should set priorities for improving organizational performance and ensuring cost-effective supports due to financial pressures in recent years.

Table 1 A sample SWOT analysis of the international college.

Strengths	Weaknesses
-International presence -Diversity in faculty members and students -International curriculum designed to meet both local needs and international standards	-Too few faculty/staff -Weak in human resource development -Lack of quality and quantity of facilities -Poor internal and external communication -Inadequate tenure and reward systems - Slow business processes - Complicated workflow management
Opportunities	Threats
-New trends to diversify academic international programs - Available faculty development opportunities - Networking with other international institutions - Increased interest in international education	-Local, regional and international competition - Declining enrolment - Quality of incoming students - Increase in reporting expected by government

This sectionpresents the current international college status of lacking knowledge resources followed by the SWOT analysis. While above list is not exhaustive, it provides a useful context for the development of the strategic planning in the local international college.As pointed out by people in the organization, it is not easy to find the information or the people who hold the information. In other words, it might be possible to creases efficiency and productivity if there is a system to speed up accessibility to information and knowledge within an organization. With slow access to information and resources across the organization, people work slowly due to poor internal and external communication. In

this case, people cannot improve the quality and speed of decision making by accessing the corporate knowledge when they need it. It often shows up diminishing the efficiency of an organization's operating units and business processes. It might be possible to improve business processes and the organization's performance if the organization provides faster access to information and resources for knowledge workers to act quickly and productively. The sharing of contextual knowledge by people within the organization is rare due to poor human resource development. Employee training and development is often perceived simply as an offering access to contextual knowledge by the organization rather than offering appropriate knowledge management activities to develop their skills, knowledge and abilities.

It is important noting that knowledge management may help providesolutions to above challenges by connecting people with the purpose of sharing knowledge and making knowledge more easily assessible[10].It means that knowledge management practices positively impact to organizational performance if knowledge processes are in place. To investigate the impact of knowledge management on organisational performance, this research studied thelocal international college as a single unit in the past three years.

II. LITERATURE REVIEW

To clarify ambiguous definitions used in the fields of studies, this section defines terms used in this paper as general as possible: data, information and knowledge. Data are the raw inputs of individual items of information. Information is processed and value-added data. Knowledge is the understanding of what information implies. Knowledge can be classified as tacit and explicit knowledge [14], [10]. Tacit knowledge is knowledge that cannot be easily described such as skills, experience or native talent. Explicit knowledge is skills and facts that can be written down and taught to others such as financial analysis documents.

The purpose of Knowledge Management (KM) can be seen as sharing corporate knowledge in the organization to provide support for knowledge sharing within communities-of-practice so that it improves organizational performance in many areas[13]. In general, successful KM gives leverage for sharing the knowledge within an organization. However, it is difficult to keep distributed knowledge informed, and to share the knowledge in the changing work environment. Organisational culture and human factors in the workplace of organizations also means that not everyone is willing to share information with others. There is also a need for knowledge to be shared in different locations though various channels. Knowledge sharing within an organization is frequently focused on skills and facts that can be written down and taught to others. This type of knowledge is classified as explicit knowledge. On the other hand, tacit knowledge is knowledge and skill that is hard to describe and difficult to capture but useful such as experience or native talent in people.

Knowledge management development generally refers to four processes: knowledge discovery, knowledge capture, knowledge sharing and knowledge application. Knowledge discovery and capture are generally considered to be one of the most important beginning steps in KM development. Knowledge discovery is the activity to develop new knowledge from data and information or prior knowledge within people or organizational entities. Knowledge capture process is designed to construct explicit knowledge from implicit or tacit knowledge. This is often done by using manual methods such as interviewing, tracking the reasoning process, and observing documented and undocumented knowledge. The aim of this knowledge process is to find what information or knowledge is being used and how it is being used. Knowledge sharing process may involve communications that takes place across individuals, groups, departments or organizations. Knowledge application process refers to facilitating individuals to utilize knowledge possessed by other individuals without acquiring or learning that knowledge.

Some difficulties that have been identified for successfully driving knowledge management are organizational culture that poorly promotes knowledge managementin practices [1]. Many organizations use the leading-edge information technologies to support KM practices, but it does not enable dramatic improvement in KM.

Knowledgeplayed an important role in organizational strategies since mid-1970s. By the 1980s, the importance of organizational knowledge is increasingly recognized. Organizations have focused on processes to manage knowledge [6]. Thus, information system is developed to provide a technological base for managing knowledge systematically. The term knowledge management is seen as management of knowledge related activities at that time. These activities include broad, multi-dimensional and covers most aspect of the enterprise's activities [13].

Knowledge management is applied in many ways in the organizations. The first approach is that of the repository model. It focuses on managing information and using knowledge in tangible formats. Knowledge management is also seen to be an organization's intellectual assets [3]. This approach is viewed as a legal approach that involves intellectual properties. Knowledge management can also be regarded as business intelligence that produces valuable information for strategic decision-making [5]. Because of business intelligence, organizations achieve competitive advantages in a rapidly changing business environment by utilizing intelligence to the relevant knowledge gained. Other approaches include

the cognitive and continuous learning approach[7]. It focuses on learning within groups as well as individual's learning level. Many organizations have begun to recognise knowledge as the valuable assets in their organisations. These valuable assets include personal skills and experience as well as any stored information in the organisations. Knowledge Management Systems (KMS) is a system that can provide competitive advantage by giving decision makers the necessary insight into patterns and trends affect their domain[12]. It means that KMS enables decision makers to analyse and understand the patterns quickly and identify the most significant trends. From this perspective, our KMS approach focus on how to provide essential knowledge promptly, and to serve related information to decision makers in making most efficient decisions. Relevant literature in recent years on the topic of knowledge management indicates that KM is positively correlated to organizational performance[1], [4], [7], 9]. As performance can be measured in many different indicators including financial and non-financial performance[10], and operational performance [15].This study examines impact of knowledge management practices negatively effects on organisational performance in case of the international college.

III. METHODOLOGY

This research investigates the impact of knowledge management on organizational performance in a local international college. For analysis, data are collected from the international college in the past three years. This study analyses the data regarding useof knowledge management processesto discover knowledge, capture knowledge, share knowledge and apply knowledge into daily business[10]. This approachdemonstrates the variety ways to integrate information technologies and mechanisms for supporting KM mechanisms to improve organization performance measurements.

Table 2KM processes, mechanisms and applied information technologies.

KM Processes	KM Sub-processes	KM Mechanisms	Applied IT
Knowledge Discovery	Combination	Meetings, documents	Databases, web-based access to data, repositories of information, lessons learned
	Socialization	Seminars, workshops, brainstorming retreats, initiation	Online communication, email
Knowledge Capture	Externalization	Lessons learned, best practices,	Databases
	Internalization	Learning by doing, job training, face-to-face meetings	Online communication
Knowledge Sharing	Socialization	Seminars, workshops, brainstorming retreats, initiation	Online communication, content management system, online planning and scheduling software, email
	Exchange	Memos, manuals, meeting minutes, translated documents	Content management system,shared online repositories
Knowledge Application	Direction	Traditional hierarchical relationships in organizations, working committee	Content management system, shared online repositories
	Routines	Organizational policies, work practices, and standards	Content management system,shared online repositories

Firstly, the knowledge discovery process aims to develop new tacit or explicit knowledge from data and information or known prior knowledge. This process focused on enabling the discovery of the knowledge embedded in business processes to support faculty members in acquiring job specific knowledge in a systematic and controlled way. Combination sub-process enabled the discover of new explicit knowledge by gathering data from existing documents. Socialization sub-process enabled the discovery of new tacit knowledge that is often available outside of new team members. To encourage interaction between team members, there has been more seminars, workshops, brainstorming

retreats and initiations. For example, many official documents were only available in Thai, but they are now available in digital form in English with written or verbal explanations as a common practice on purpose. Secondly, the knowledge capture process aims to retrieve either tacit or explicit knowledgefrom people or organizational units.

Externalisation sub-process involves tacit knowledge into explicit forms such as written documents, visuals, or figures. Internalization sub-process enable the conversion of explicit knowledge into tacit knowledge. It represents the traditional notion of learning by doing and job training. For example, job trainings were organized in English to new foreign faculty and staff so that non-Thai people to be familiar with the organizational units and their job requirements. Most important data and information as well as sample documents are available in a form of online databases after the knowledge capture process. Thirdly, knowledge sharing process aims to make explicit or tacit knowledge available to people within the organizational units.

In our case, many official forms were not available in one place, but that must be completed by faculty, staff and students on time to complete routine tasks such as support for faculty.To resolve this challenge, the socialisation sub-process enabled effective transfer of explicit or tacit knowledge that can be shared by organising formal settings such as seminars, workshops and brainstorming retreats. Exchange sub-process enabled people to access formal documents and forms. It took place across individuals, groups, departments or organizational units to share knowledge with others through content management and information repository systems. Lastly, knowledge application process aims to support individuals utilize knowledge possessed by other individuals without acquiring or learning that knowledge from them. Direction sub-process involved individuals to process the knowledge underlying the direction directly without transferring from others.

This often refers to people following the university directions according to a traditional hierarchical relationship in organizational units.In our case, most difficult challenge was dealing with culture shock in the workplace as we have diverse international people in the international workplace within the traditional local university environment. To bridge the gap,routine sub-process involved the utilization of knowledge embedded in organizational policies, work practices and standards that guide impending behaviour of people in organizational units. With improved knowledge management processes, mechanisms, the international college can discover, capture and share knowledge effectively and efficiently with applied information technologies.

IV. RESULTS AND DISCUSSION

A study investigated the hypothesis that KM is positively related to the organizational performance. The impact of KM to organizational performance is measured with official internal quality assurance assessmentsin the past three years.

Internal quality assurance is regarded as educational quality assurance standard in Thailand [11]. The process involved collecting, analysing and report information regarding the performance of academic programs in the international college.The internal educational quality assurance of seven programs (A to H) was measured using the following scale.

0.01 – 2.00	Low quality
2.01 – 3.00	Medium quality
3.01 – 4.00	Good quality
4.01 – 5.00	Very good quality

Table 3 Results of Internal quality assurance assessment.

Academic Program/ Academic Year	2015-2016	2016-2017	2017-2018
A	Good	Good	Medium
B	Good	Good	Good
D	Low	Good	Medium
E	Medium	Good	Good
F	Good	Good	Good
G	Medium	Good	Good
H	Medium	Good	Medium

After initial launch of KM practices, in this context, technology plays a very important role by providing content management systems and shared information repositories.As a result, there has been decentperformance improvement in terms of increased efficiency and productivity in 2015. Organizational learning has been considered slow, but it has been gradually improved. In 2016, there has been significant performance improvement within the organization.

After people witness the advent of sharing knowledge, this opens new collaborative practices and sharing of knowledge that greatly increase productivity of people.Unfortunately, loss of some experience instructors causes a reduced number of academic publications that may result in poor performance in 2017.This empirical data supports that the international college continue makesmore effort on training and supporting faculty and staff tofurther improve its quality assurance scores.

It is worth nothing that student retention rate was significantly improved from average retention rates of 58% in 2014 to 89.13% in 2017. Table 4 presents the results of student retention that characterises large number of students continued their studiesin the last three years.

Table 4Student retention rates.

Academic Program/ Academic Year	2015-2016	2016-2017	2017-2018
A	72.73%	68.18%	100.00%
B	68.75%	50.00%	100.00%
D	55.56%	85.71%	92.86%
E	40.00%	60.00%	75.00%
F	100.00%	80.00%	77.78%
G	50.00%	53.33%	-
H	-	100.00%	100.00%
Average	64.51%	71.51%	89.13%

The impact of knowledge management on organisational performance is positive in several ways by effectively integrating and sharing knowledge from a variety of diverse perspectives people with technology. Even though there have been considerable improvements in qualitive measurements in the past three years of the international college.

Organisational culture still reflects the norms and beliefs that guide the unfortunate behaviour of the organization's members. In addition, high employee turnover rates have results in intellectual property losses. Thus, the college needs to address these issues by becoming more efficient, more collaborative and more productive.

CONCLUSION

This research investigates the impact of knowledge management on organizational performance in a local international college in the past three years. To improve organization performance, knowledge management processeshas been implemented in several levels to bring out positive changes to people. This approach demonstrates the variety of ways to integrate information technologies to support KM mechanisms that enhance organization performance measurements.

This study found that the impact of knowledge management on organisational performance is positive.It is important to address that a knowledge-sharing culture plays a significant role by both the knowledge seeker and provider in an organization's knowledge management efforts to be more successful.

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