

Development of a Strategic Knowledge Management Model for Thai Universities

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Background of the research

Knowledge Management (KM) has been defined as the process by which an organization creates, captures, acquires, and uses knowledge to support and improve the performance of the organization

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Background

The important of KM in Thai universities

The increase of external pressures such as: competition in higher education, university internationalization, university rankings, decreasing student population, demands for high quality graduates etc., have forced universities worldwide to seek better strategies for competitive advantages.

The requirement by the Office of Public Sector Development Commission of Thailand, has listed KM as a key indicator in measuring a university's performance (It states that the successful level of KM practice in a university is a primary factor in measuring the university's performance)

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Background (continue)

Thai universities, including Khon Kaen University (KKU), use KM as a tool for improving university performances by focusing on general management works

However most Thai universities have not been able to successfully implemented KM due to **a lack of good KM strategic planning**

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Background

In order to successfully implement the KM practice within an organization

it is essential that the KM organizational strategy is well defined

KM strategy is an operating framework or plan that describes how an organization will effectively operate KM.

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Background

This study aimed at developing a KM strategic model for Thai university management by using KKU as a case study

Background of KKU.

- One of the largest and best-known public universities in Thailand
- In response to the requirements of the Office of Public Sector Development Commission of Thailand, KKU has put KM strategies into its corporate strategic plan for the years 2006-2009

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Background

The most of the former KM strategy researches focused on the type of KM strategies which suitable for business organization

Researcher	Finding
Swan, Newell and Robertson,2000	Personalization strategy
Schulz and Jobe,2001	Hybrid or dynamic strategy
Choi and Lee, 2002, 2003	Hybrid or dynamic strategy
Keskin, 2005	Codification strategy
Wu and Lee, 2006	Hybrid or dynamic strategy

Background

Choi,& Lee (2002) studied KM strategy that alignment with KM process

Many researches (For example Choi,& Lee, 2002; Choi, Poon,& Davis, 2008) suggested the study of KM strategy that alignment with KSFs

Choi, Poon,& Davis (2008) suggested the essential to identify relationship among KM factors, KM processed and KM strategies for attaining high levels of organizational performance

Background (continue)

The research approach is based on the components of KM strategic development synthesized from the written research of several well-known scholars

Components which have been developed as objectives of this study are to:

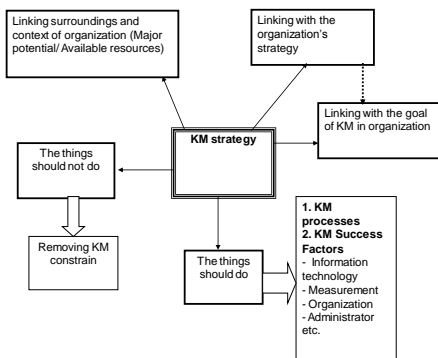
- (1) Study the current situation and/or problems in the development of KM at KKU.
- (2) Identify and analyze the KM processes and key success factors of KM at KKU.
- (3) Develop and propose an appropriate KM strategic model for KKU that can also be applied to other universities in Thailand.

Related literature reviews

Conceptual framework based on review literature in 5 topics

- 1.The concept of KM strategy components
- 2. Types of KM strategies**
- 3. The problems of KM implementation**
- 4. KM process and tools**
- 5. KM Key Success Factors**

KM strategy components



Types of KM strategies

Hansen, Nohria, and Tierney (1999) divides KM strategies into two types

1. **The codification strategy** (or people-to-document) approach is centered on the computer. (to capture, store, disseminate, and allow for the reuse of knowledge)
2. **The personalization strategy** (or people-to-people) approach is centered on dialogue between individuals

Types of KM strategies

In addition, Choi and Lee (2003) divides KM strategies into three types

1. the **system-oriented** style places more emphasis on codifying and reusing knowledge
2. the **human-oriented** style is on acquiring and sharing tacit knowledge and interpersonal experience
3. the **dynamic style** emphasizes both explicit and tacit methods.

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To construct a good KM strategy

Organizations need to study

- KM constraints in organization
- KM process
- Key Success Factors (KSFs)

for helping develop a core area to process KM effectively

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Barriers of KM success

- Lack of supportive organizational culture
- Lack of budget
- ICT
- Organizational administration (Organizational structure, Functional silos, Staff turnover, Individual vice team emphasis, Wrong personnel placed)
- Lack of top management commitment
- Staffs (Lack of ownership, Lack of perceives need, Resistance)
- KM process (Lack of linkage between KM activities and organizational performance, Standardized processes)
- Lack of effective measuring KM tool

(Vass, 1999, Keyser, 2004, Martin, 2004 and Stankosky, ed., 2005)

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KM process

7 KM processes are used in this research

1. K. identification
2. K. creation or acquisition
3. K. capture/codification
4. K. organization
5. K. storage
6. K. distribution
7. K. application

(Demarest, 1997, Nonaka, 1994, Probst et al, 2001, Tyndale, 2002, Landaeta Feo, 2003 and Lawsen, 2003)

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KM Key Success Factors

The 7 groups of KM success factors are used in this research :

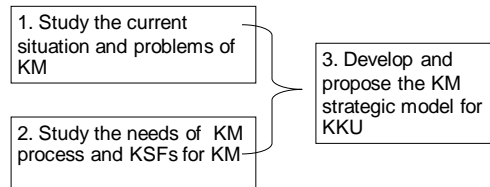
1. Organizational culture
2. Information technology
3. Organizational management
4. Leadership
5. KM processes
6. KM measurement
7. KM strategy

(Baldanza and Stankosky, 1999; Chait, 2000 ; Stankosky and Baldanza, 2001; Alazmi and Zairi, 2003; Roman-Velazquez, 2004, Moslehi, 2004; Keyser, 2004; Martin, 2004)

Research methodology

Methodologies used are, **mixed-research approaches**, qualitative and quantitative research systems

3 steps in research processes



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Target population

1. University top managers (4)
 - President
 - Vice President for Administration
 - Vice President for Human Resource Affairs
 - Chief Knowledge Officer (CKO)
2. KM Committees (12)
3. Heads of Administrative/ Supporting Departments (29)
4. Heads of Administrative/ Supporting Units (154)
5. Experts (2)

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Research tools

- In-depth interview (structured-interview questions)
- Questionnaires (Rating scale, ranking)

Collect data from December 2007 to April 2008 (4.5 months)

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Data analysis

- Descriptive analysis
- Statistic analysis (Frequency, percentage, mean and standard deviation)

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Result of the study

- **Current operation of KM at KKU**
- **Problems of Operating KM at KKU**
- **The need of the KM Process and tools at KKU**
- **Key success factors for encouraging KM at KKU**
- **Proposed KM strategic model for KKU**

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Current operation of KM at KKU

KM was started at KKU at the end of year 2004. KKU by applying and operating KM in many ways.

- **University's Policy.** focuses on KM by using tools that can enhance and develop KKU into a learning organization
- **Needs of Applying KM.** KKU adopted a policy that requires every faculty to practice KM (agreement from the dean's meeting)
- **Plan of KM at KKU.** focuses on improving the performance of support staff in areas such as finance and accounts management
- **Structure of KM Administration.** KKU established a KM team that is composed of a Chief Knowledge Officer (CKO) and a KM committee (representatives from each faculty). They are responsible for assisting and providing advice about the KM process

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Current operation of KM

- Most units have applied KM in the work of support staff, focusing on work Enhancement.
- Joined a consortium of University Knowledge Management (UKM)
- Enhance understanding of KM process for staff. For example, conferences and training to create KM leaders, observation of agencies successful in implementing KM, and sending staff to join seminars
- Provide rewards to whomever joins KM activities

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Current operation of KM

Tools and KM Process

KKU now encourages staff to create and acquire knowledge by knowledge sharing among individuals and groups through the use of various KM tools, For examples: CoPs, Staff meetings, Best practice

But lack of operate in storage, organization, capturing and codifying the working knowledge of staff

Although, KKU does have the potential for an IT infrastructure to support the storage and dissemination of k.

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Problems of Operating KM at KKU

- Most staff did not understand KM process (56.3%+Interview) since it was new to staff. They had little or no training and did not know how to apply KM.
- does not have a well-established KM policy (37.7%+ Interview)
- Lacks a systematic and standardize KM process to guide staff. (Interview)
- Some staff lack of learning and sharing culture. (41.9%+ Interview)

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Problems of Operating KM at KKU

- Lack of a qualified KM team to advise staff on practicing KM. (in-depth interview)
- Staff had heavy workloads. (40.1%+ Interview) lead to ignored and resistance KM practice
- Problem regarding IT that lacks a KMS for knowledge storage. (35.9%+ Interview)
- Lack in the operation of KM measures. (56.3%+ Interview)

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The need of the KM Process at KKU

7 steps are necessary for a KM process to succeed at KKU.

The highest rank, based on in-depth interview and survey needs are

1. Knowledge shared among staff
2. Preserve the organizational k. by capturing and codifying, storing, and organizing k.

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The need of the KM Process

The details of each KM processes are as follow:

① K. identification.

- Identify and correct the knowledge gaps that are necessary to support staff daily work successful (R.1 (61.1%))

② K. creation / acquisition.

- Encourage and allow for the exchange of ideas and knowledge among individuals and groups (R.1 (62.3%)+ interview)
- Reward staff for new ideas and knowledge. (R.3 (23.4%) + interview)

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The need of the KM Process

③ K. capture / codification.

- Establish mechanisms to absorb and transfer k. of staff, particularly retirees (R.2 (32.9%) + interview)
- to preserve meaningful ideas of staff and document them for further development (R.1 (37.1%) + interview)

④ K. storage.

- Gather and formalize existing internal enterprise and external k. such as policies and procedures, best practices (R.1 (56.3%) + interview)
- Should utilize databases, repositories and IT applications store knowledge for easy access by all staff (R.2 (31.3%) + interview)

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The need of the KM Process

⑥ K. organization.

- Have mechanisms for filtering, cross listing and integrating different sources and types of k. (R.1 (50.3%) + interview)
- Applying the k. learned from experiences and match sources of k. to problems and challenges (R.2 (32.3%) + interview)

⑦ K. distribution.

- Establish methodologies for distributing k. to staff (interview)
- Have k. in the form that is readily accessible to staff who need it (intranets and internet) (R.1 (49.7%) + interview)
- Send out timely reports with appropriate information to staff (R.2 (35.3%) + interview)

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The need of the KM Process

⑧ K. application.

- Establish different methods for staff to further develop their knowledge and apply it to new situations (R.1 (50.9%) + interview)
- Staff can quickly link sources of knowledge to problem solving (R.2 (43.1%) + interview)

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The need of the KM tools

2 types of tools for creation/acquisition and transfer of knowledge.

IT tools: Online discussion via Web blog (interview) Data mining (R.1,30.5%) Directory of expertise (R.2,24.6%) Document management (R.3,27.5%) Lesson learned systems (R.4,39.5%)

Process tools: Best practices (R.1,28.1% +interview) CoPs (R.2,31.7% +interview) KM Forum (interview) Storytelling (interview)

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KSFs for encouraging KM at KKU

KKU needs various critical factors in order to develop a successful KM plan within the university

3 factors, ranked highest to lowest, based on in-depth interview and survey, are:

- Organizational culture (R.1,37.1% +interview)
- KM measurement (R.2,29.3%)
- IT (R.3,25.1%)

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The details of 9 KSFs for encouraging KM

Organizational culture.

- Encourage a strong knowledge sharing culture (R.1,50.3% +interview)
- Motivate staff to learn and share. (R.2,43.7% +interview)

Information technology (IT).

- KMS to build a knowledge database and repository (R.3,50.3% +interview)
- Financial and human resources to support Information systems, software and networks (R.5,33.5% +interview)

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The details of 9 KSFs for encouraging KM

Staff

- Develop in staff an understanding KM tools and processes. (interview)
- An able staff who understand KM so that the tool can improve performance. (interview)

Organizational administration.

- Flat structure (R.3,50.3% +interview)
- Reward staff who are consistent with learning and knowledge sharing (R.1,50.3%)
- Empowerment (R.2,30.1%)
- Teamwork (interview)
- Sufficient time to share information (interview)

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The details of 9 KSFs for encouraging KM

KM Administration Structure.

- A qualified and ideal KM team to lead and develop effective KM operation (R.1,51.5% +interview)
- The structure of KM administration should be composed of a CKO, KM members from different faculties, and KM faculty members with expertise in the method of KM processes (interview)

Administrators.

- Understand, support, and participate in KM achievements (interview)
- Strong commitment to KM initiatives (interview)
- Establish clear KM strategies, and vision (R.1,51.5% +interview)
- Maintain an environment that motivates and enables staff to create and share knowledge (R.2,49.7% +interview)

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The details of 9 KSFs for encouraging KM

KM process.

- A standardized KM process that is designed to provide guidelines for staff. (R.1,44.3% +interview)
- Easy to use and understand (interview)
- Encourage staff to integrate KM into their work. (R.2,43.7% +interview)

KM measure.

- Measure the impact of KM activities for performance, including benefits (R.1,39.5% interview)

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The details of 9 KSFs for encouraging KM

KM strategy.

- Establish a clear vision and strategic plan for use of a KM approach. (R.1,51.5% +interview)
- Should address a KM structure that combines IT, process, measures, and roles and responsibilities. (R.2,49.7% +interview)

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Proposed KM strategic model for KKU

The important points of the result show that:

1. Need of KM process is focus on sharing k. (tacit knowledge) between staff and capture, storage k. (explicit k.)
2. Need of KM KSFs is focus on learning and sharing culture, IT (KMS)

CKO and top managers state that “culture is more important than technology”

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Proposed KM strategic model for KKU

The relationship between KM process and KM strategy

- KM strategic model for KKU is hybrid strategy or dynamic strategy which focus on both a personalization (people-to-people) and a codification (people-to-document)
- A personalization strategy is leading role and a codification strategy is supporting role

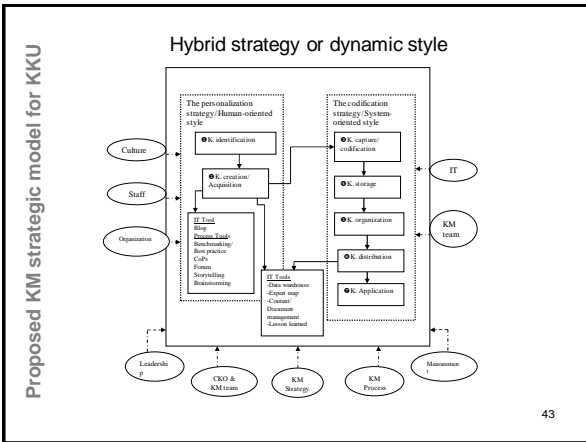
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Proposed KM strategic model for KKU

The relationship between KSFs and KM strategy

- Personalization strategy requires KM factors including organizational culture (Learning & sharing), Staff (Perception & understand) and Organizational (Flat organization, teamwork, empowerment, rewards, time)
- Codification strategy requires IT (KMS), KM team (To build a knowledge database and repository)
- These strategies still need more factors including leadership, KM process, measurements, KM strategy and KM team

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Conclusion

This model developed at KKU can be viewed as a KM strategic model for other Thai universities in their quest for a working KM model.
Because Thai universities have the same surroundings and context

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Conclusion

The highlight of this study
The research approach is based on the components of KM strategic development
Purpose KM model that alignment with KM processes and KSFs (suggested by the recent research of KM strategy)

The limitation of this study
Lack of the process of implementation of the KM strategy (suggest for future research)

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THANK YOU FOR YOUR ATTENTION

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