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Identification and prioritization of influential factors for the knowledge management success using DEMATEL method

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Abstract

This paper aims to use a priority framework based on Decision making trial and evaluation laboratory (DEMATEL) to help organizations build awareness of the critical influential factors affecting successful implementation of KM. To identify critical influential factors, the authors studied and reviewed relevant literature from numerous fields of study associated with the essential issues of KM. This research uses the DEMATEL method as the tool that determines the Prioritization and Influence severity of each factor. The results show culture infrastructure and top management have great impact on success of KM implementation among main aspects. Among criteria of cultural infrastructure, acceptance of knowledge sharing with the positive attitude has Great Influence on other criteria. In addition, among criteria of top management, Support and commitment has Great Influence on other criteria. The procedure proposed here can help organizations to build awareness of the critical influential factors affecting successful implementation of KM. The procedure proposed here can also help organizations that determine the Prioritization and Influence severity of each factor. The DEMATEL methods can assist decision makers to make better decisions for knowledge management success.

Keywords: knowledge, knowledge management, Prioritization, DEMATEL

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Introduction

Knowledge management has generated a lot of interest in recent years (Alavi and Leidner, 2001). In the strategic management literature, the knowledge-based view of the firm shifts the focus on the resource knowledge and proposes that knowledge is the most important resource in creating a sustainable competitive advantage (Kogut and Zander, 1992).Knowledge is an asset that needs to be effectively managed (Davenport & Prusak, 1998). Interest in knowledge management (KM) has grown dramatically in the recent years, as more researchers and practitioners have become aware of the knowledge potential to drive innovation and improve performance (e.g., Cavaleri, 2004).

In today's ''knowledge economy'', knowledge is the most important sustainable competitive advantage (Stonehouse and Pemberton, 1999; Bristow, 2000; Gupta et al., 2000). To sustain a competitive advantage, a company must create, share, and utilize the knowledge it possesses. It is widely recognized that knowledge is a valuable strategic resource for firms to remain competitive, and adequately respond to the needs of their customers (Zack, 1999).

As the knowledge of a company contributes to increased competitiveness (Danskin et al., 2005), and improves decision-making (Jarrar, 2002), the capture, sharing, retention and reuse of organizational knowledge has become of crucial importance for most companies (Hatami et al., 2002).

Knowledge is commonly acknowledged as a critical economic resource in the present global economy and it is progressively becoming evident that organizations should possess the right kind of knowledge in the desired form and context to be successful. Knowledge has become an important component of competitiveness and a nation's economic development (Pinelli et al., 1997).Knowledge is becoming the primary asset and the distinguishing factor that secures the value proposition of nations in their struggle to win the combinatorial realm of economical, environmental, and social sustainable development. In fact, knowledge can be considered as critical foundation for sustainable development innovation (Laszlo and Laszlo, 2002; Sheng and Sun, 2007).

Knowledge management is recently recognized as a routine based capability (e.g. Moustaghfir, 2009), and is the only source of sustainable competitive advantage for an organization (Grant, 1996). Gold et al. (2001) and Lee and Choi (2003) show how some aspects of organizational culture, structure and technology are directly related to knowledge management. Knowledge management is now recognized as a process rather than a product (Moustaghfir, 2009). This recognition has resulted in a plethora of knowledge management frameworks that define the activities that constitute knowledge management in an organization (Heisig, 2009). Gorelick and Tantawy-Monsou, view KM as a system or framework that integrates people, processes, and technology to achieve sustainable results by increasing performance through learning. Therefore, effective KM requires viewing knowledge as a process rather than a resource (e.g., Alavi & Leidner, 2001; Davenport & Prusak, 1998). Knowledge management is a dazzling, multi-faceted, and controversially discussed concept. Voelpel et al. (2005) underlined the importance of knowledge for organizations by pointing out that the sum of knowledge acquired

externally and internally constitutes a sustainable resource for maintaining competitive advantage. Nilakanta et al. (2006) also emphasized that organizational knowledge plays an important role not only in overall performance, but also in the competitiveness of an organization.

Nevis, DiBella and Gould (1995) divide knowledge processing activities into three steps: knowledge acquisition, knowledge sharing and knowledge utilization. These processes are key factors in a successful organization (Zhang et al., 2006). Knowledge acquisition refers to the processes by which new knowledge is acquired from outside sources, knowledge creation is the process of transforming the newly acquired knowledge to the context of the organization, and knowledge utilization and sharing is the process of continuously applying (or exploiting) the newly created knowledge and sharing it from individual to individual or group. Knowledge sharing involves the sharing of organizationally relevant information, ideas, suggestions, and expertise among the employees of the organization. This exchange can occur both informally in places like the corridor and formally in meetings, seminars and presentations (Bircham, 2003). Knowledge utilization is the effective use of knowledge (Lim and Klobas, 2000). If the receiver is aware of the knowledge, makes sense of the knowledge received and has the freedom to apply it (Lim and Klobas, 2000), knowledge can be utilized.

The goal of KM is to deliver the right knowledge to the right members at the right time, which can help members, take the right actions, and further improve the performance of circulation processes in an organization (O'Dell and Grayson, 1999; Milton et al., 1999). KM enablers do not only promote organizational members' knowledge development, but also encourage them to share knowledge and experiences, which enable the consistent and systematic development of organizational knowledge. In order to improve the effectiveness of the KM process, this study explores whether the importance of a performance index depends on the different levels of enablers.

This paper is organized as follows: in Section 2, we present influential factors for the knowledge management success. Section 3 describes the methodologies of DEMATEL. Section 4 outlines an empirical study to show the process of DEMATEL method to determine influential factors for the knowledge management success. Section 5 provides our conclusions and suggestions.

Influential factors for the knowledge management success

Many enterprises carefully manage their knowledge assets to improve customer service, reduce costs, improve decision-making, innovate and improve corporate agility (Skyrme and Amidon, 1998). KM creates a new working environment where knowledge and experience can easily be shared and also enables information and knowledge to emerge and flow to the right people at the right time so that they can act more efficiently and effectively (Smith, 2001).Based on the previous literature review, we focus on five main aspects, including technical infrastructure, organizational infrastructure, cultural infrastructure, KM architecture and top management. From these main aspects, 25 influential factors for the KM success are selected. The classification of those main aspects and their influential factors are shown in Table 1.

Table 1. Influential factors for the knowledge management success

Main aspect	Influential factors	Reference
Technical infrastructure (TI)	Building IT infrastructure (TI_1); integrating with current systems (TI_2); effective use of software tools (TI_3); the database is updated periodically (TI_4); security of data on internet (TI_5)	Davenport et al. (1998); Skyrme and Amidon (2000); Soliman and Spooner (2000); Ryan and Prybutok (2001); Bixler (2002); Chourides et al. (2003); Moffett et al. (2003); Ebgu (2004); Hung et al. (2005); Wong and Aspinwall (2005); Yeh et al. (2006); Plessis (2007); Chang and Wang (2009)
Organizational infrastructure (OI)	Establishing KM roles and teams (OI_1); having a flat or network structure (OI_2); communities of practice (OI_3); the unit (committee or team) to plan and promote KM (OI_4); the KM implement unit (department) (OI_5)	Leibowitz (1999); Soliman and Spooner (2000); Ryan and Prybutok (2001); Bixler (2002); Ebgu (2004); Wong and Aspinwall (2005); Akhavan et al. (2006)
Cultural infrastructure (CI)	Obtaining the value and advantages of knowledge (CI_1); members' recognition of the importance of intellectual capital and KM (CI_2); providing proper space and time for learning, creating knowledge, innovation and brainstorming (CI_3); mutual trust, openness, collaboration, cooperation between employees (CI_4); acceptance of knowledge sharing with the positive attitude (CI_5)	Davenport et al. (1998); Leibowitz (1999); Skyrme and Amidon (2000); Soliman and Spooner (2000); Ryan and Prybutok (2001); Bixler (2002); Moffett et al. (2003); Ebgu (2004); Hung et al. (2005); Wong and Aspinwall (2005); Akhavan et al. (2006); Yeh et al. (2006); Plessis (2007); Chang and Wang (2009)
KM architecture(KA)	linking KM activities to business process (KA_1); the process and regulations to create and protect knowledge structure and map (KA_2); the regulations or processes to share knowledge with external organizations (KA_3); the process and regulations to protect knowledge (KA_4); the process and regulations to facilitate knowledge sharing (KA_5); the process and regulations to encourage employee to participate projects and share project results (KA_6)	Davenport et al. (1998); Leibowitz (1999); Skyrme and Amidon (2000); Soliman and Spooner (2000); Moffett et al. (2003); Ebgu (2004); Wong and Aspinwall (2005); Akhavan et al. (2006); Plessis (2007); Chang and Wang (2009)
Top management (TM)	Support and commitment (TM_1); the link between business vision, mission and task, and KM strategy (TM_2); clarifying what types of knowledge are most important to the company; (TM_3); providing necessary resources and budget (TM_4)	Davenport et al. (1998); Leibowitz (1999); Skyrme and Amidon (2000); Soliman and Spooner (2000); Ryan and Prybutok (2001); Bixler (2002); Chourides et al. (2003); Moffett et al. (2003); Ebgu (2004); Hung et al. (2005); Wong and Aspinwall (2005); Yeh et al. (2006); Plessis (2007); Chang and Wang (2009)

DEMATEL method

The DEMATEL method assumes a system contains a set of components C= {C1, C2… Cn}, with pairwise relations that can be evaluated. The methodology, according to the properties of objective affairs, can confirm the interdependence among the variables/attributes and restrict the relation that reflects the properties with an essential system and development trend. The product of the DEMATEL process is a visual representation, an individual map of the mind by which the respondent organizes his or her own action in the world (Kamaike, 2001; Yuzawa, 2002).The procedures of the DEMATEL method (Fontela & Gabus, 1976) are discussed below.

Step 1: *Generating the direct-relation matrix.*

We use five scales for measuring the relationship among different criteria: 0 (no influence), 1 (very low influence), 2 (low influence), 3 (high influence), and 4 (very high influence). Next, decision makers prepare sets of the pair-wise comparisons in terms of effects and direction between criteria. Then the initial data can be obtained as the direct-relation matrix which is an $n \times n$ matrix T where each element of a_{ij} is denoted as the degree in which the criterion i affects the criterion j.

Step 2: *Normalizing the direct-relation matrix.* Normalization is performed using the following,

$$K = \frac{1}{Max_{1\le i\le n}\sum_{j=1}^{n} a_{ij}}; \quad i, j = 1, 2, ..., n \tag{1}$$

$$S = K.T \tag{2}$$

Step 3: *Attaining the total-relation matrix.* The total relation matrix M can be acquired by using Eq. (3), where I is denoted as the identity matrix

$$M = X(I - X)^{-1} \tag{3}$$

Step 4: *Producing a causal diagram.* The sum of rows and the sum of columns are separately denoted as vector D and vector R through Eqs. (4-6). Then, the horizontal axis vector ($D + R$) named ‘‘Prominence’’ is made by adding D to R, which reveals the relative importance of each criterion. Similarly, the vertical axis ($D - R$) named ‘‘Relation’’ is made by subtracting R from D, which may divide criteria into a cause and effect groups. Generally, when ($D - R$) is positive, the criterion belongs to the cause group and when the ($D - R$) is negative, the criterion represents the effect group. Therefore, the causal diagram can be obtained by mapping the dataset of the ($D + R$, $D - R$), providing some insight for making decisions.

$$M = [m_{ij}]_{n\times n},\ i, j = 1, 2, ..., n \tag{4}$$

$$D = \left[\sum_{j=1}^{n} m_{ij}\right]_{n\times 1} = [t_{i,}]_{n\times 1} \tag{5}$$

$$R = \left[\sum_{i=1}^{n} m_{ij}\right]_{1\times n} = [t_{i,}]_{1\times n} \tag{6}$$

where D and R denote the sum of rows and the sum of columns, respectively. Finally, a causal and effect graph can be acquired by mapping the dataset of (D + R, D - R), where the horizontal axis (D + R) is made by adding D to R, and the vertical axis (D - R) is made by subtracting R from D.

Empirical study

The aim is to determine the relations among the influential factors for the

knowledge management success. In this section, we implement the DEMATEL method to determine the relations among the influential factors for the knowledge management success. At first, steering committee was formed comprising of the twelve experts. In second step a questionnaire was designed for DEMATEL composed of two parts. The first part outlines each criterion, definition for easy understanding and response. The second part is a pair-wise comparison to evaluate the influence of each score, where scores of 0, 1, 2, 3 and 4 represent: (no influence), (very low influence), (low influence), (high influence), and (very high influence), respectively. In final step, data collected from the experts was analyzed with the DEMATEL method. The degree of central role ($D_x + R_x$) in DEMATEL represents the strength of influences both dispatched and received. On the other hand, if ($D_x - R_x$) is positive, then the evaluation criterion x dispatches the influence to other evaluation criteria more than it receives. If ($D_x - R_x$) is negative, the evaluation criterion x receives the influence from other evaluation criteria more than it dispatched. Total relationships matrices are demonstrated in Tables from 2 to 6.

Table 2.The generalized direct-relation matrix M for Main aspect.

	TI	OI	CI	KA	TM	D	D+R	D-R
TI	0.231	0.373	0.236	0.326	0.198	1.364	2.85	-0.122
OI	0.314	0.158	0.421	0.126	0.244	1.263	2.765	-0.239
CI	0.522	0.611	0.523	0.448	0.415	2.519	4.358	0.68
KA	0.145	0.234	0.314	0.326	0.233	1.252	3.142	-0.638
TM	0.274	0.126	0.345	0.664	0.565	1.974	3.629	0.319
R	1.486	1.502	1.839	1.89	1.655			

Note: *Technical infrastructure (TI), Organizational infrastructure (OI), Cultural infrastructure (CI), KM architecture (KA), Top management (TM).*

Table 3.The generalized direct-relation matrix M for Technical infrastructure.

	TI_1	TI_2	TI_3	TI_4	TI_5	D	D+R	D-R
TI_1	0.645	0.512	0.495	0.461	0.318	2.431	4.361	0.501
TI_2	0.278	0.364	0.244	0.327	0.248	1.461	3.5	-0.578
TI_3	0.425	0.387	0.521	0.226	0.304	1.863	3.594	0.132
TI_4	0.356	0.238	0.212	0.219	0.236	1.261	2.816	-0.294
TI_5	0.226	0.538	0.259	0.322	0.341	1.686	3.133	0.239
R	1.93	2.039	1.731	1.555	1.447			

Note: *Building IT infrastructure (TI_1); integrating with current systems (TI_2); effective use of software tools (TI_3); the database is updated periodically (TI_4); security of data on internet (TI_5).*

Table 4.The generalized direct-relation matrix M for Organizational infrastructure.

	OI_1	OI_2	OI_3	OI_4	OI_5	D	D+R	D-R
OI_1	0.246	0.310	0.238	0.473	0.422	1.689	3.655	-0.277
OI_2	0.355	0.411	0.322	0.478	0.418	1.984	3.813	0.155
OI_3	0.313	0.398	0.454	0.466	0.316	1.947	3.707	0.187
OI_4	0.476	0.489	0.511	0.443	0.568	2.487	4.561	0.413
OI_5	0.576	0.221	0.235	0.214	0.349	1.595	3.668	-0.478
R	1.966	1.829	1.76	2.074	2.073			

Note: *Establishing KM roles and teams (OI_1); having a flat or network structure (OI_2); communities of practice (OI_3); the unit (committee or team) to plan and promote KM (OI_4); the KM implement unit (department) (OI_5)*

Table 5.The generalized direct-relation matrix M for Cultural infrastructure

	CI_1	CI_2	CI_3	CI_4	CI_5	D	D+R	D-R
CI_1	0.403	0.211	0.568	0.408	0.233	1.823	3.907	-0.261
CI_2	0.414	0.341	0.344	0.502	0.345	1.946	3.506	0.387
CI_3	0.355	0.231	0.217	0.574	0.307	1.684	3.815	-0447
CI_4	0.427	0.244	0.461	0.326	0.407	1.865	4.1	-0.37
CI_5	0.485	0.532	0.541	0.425	0.419	2.402	4.113	0.691
R	2.084	1.559	2.131	2.235	1.711			

Note: *Obtaining the value and advantages of knowledge (CI_1); members' recognition of the importance of intellectual capital and KM (CI_2); providing proper space and time for learning, creating knowledge, innovation and brainstorming (CI_3); mutual trust, openness, collaboration, cooperation between employees (CI_4); acceptance of knowledge sharing with the positive attitude (CI_5)*

Table 6.The generalized direct-relation matrix M for KM architecture

	KA_1	KA_2	KA_3	KA_4	KA_5	KA_6	D	D+R	D-R
KA_1	0.435	0.327	0.225	0.373	0.450	0.326	2.136	4.348	-0.076
KA_2	0.473	0.519	0.466	0.491	0.316	0.412	2.677	5.002	0.352
KA_3	0.346	0.436	0.311	0.403	0.297	0.398	2.191	4.275	0.107
KA_4	0.375	0.438	0.327	0.361	0.383	0.461	2.345	4.482	0.208
KA_5	0.306	0.256	0.344	0.251	0.329	0.214	1.7	3.722	-0.322
KA_6	0.277	0.349	0.411	0.258	0.247	0.327	1.869	4.007	-0.269
R	2.212	2.325	2.084	2.137	2.022	2.138			

Note: *linking KM activities to business process (KA_1); the process and regulations to create and protect knowledge structure and map (KA_2); the regulations or processes to share knowledge with external organizations (KA_3); the process and regulations to protect knowledge (KA_4); the process and regulations to facilitate knowledge sharing (KA_5); the process and regulations to encourage employee to participate projects and share project results (KA_6)*

Table 7.The generalized direct-relation matrix M for Top management.

	TM_1	TM_2	TM_3	TM_4	D	D+R	D-R
TM_1	0.586	0.547	0.623	0.548	2.304	4.215	0.393
TM_2	0.451	0.395	0.418	0.376	1.64	3.672	-0.392
TM_3	0.385	0.562	0.487	0.414	1.848	3.868	-0.172
TM_4	0.489	0.528	0.492	0.501	2.01	3.849	0.171
R	1.911	2.032	2.02	1.839			

Note: *Support and commitment (TM_1); the link between business vision, mission and task, and KM strategy (TM_2); clarifying what types of knowledge are most important to the company; (TM_3); providing necessary resources and budget (TM_4)*

The graphical representation (the prominence-causal diagram) and digraphical relationships are now constructed. This step will allow a clearer visualization of the structure and relationships amongst the influential factors for the knowledge management success. Fig. 1 shows the relationships among Main aspect for the knowledge management success. As illustrated in Fig. 1, the Cultural infrastructure represents the most important factor for the knowledge management success. Generally speaking, Culture infrastructure plays an important role in knowledge management success. In addition, based on Fig. 1 the Main aspects were visually divided into the cause group, including "Cultural infrastructure" and "Top management" and the effect group, including "Technical infrastructure", "Organizational infrastructure" and "KM architecture".

Fig. 2 shows the relationships among criteria of Technical infrastructure for the knowledge management success. As illustrated in Fig. 2, the Building IT infrastructure represents the most important factor for the Technical infrastructure factor. Based on Fig. 2 the Technical infrastructure criteria were visually divided into the cause group, including "Building IT infrastructure" ,"security of data on internet" and "effective use of software tools" and the effect group, including "the database is updated periodically" and "integrating with current systems".

Fig. 3 shows the relationships among criteria of organizational infrastructure for the knowledge management success. As illustrated in Fig. 3, the unit (committee or team) to plan and promote KM represents the most important factor for the organizational infrastructure factor. Based on Fig. 3 the organizational infrastructure criteria were visually divided into the cause group, including "the unit (committee or team) to plan and promote KM" ,"communities of practice" and "having a flat or network structure" and the effect group, including "Establishing KM roles and teams" and "the KM implement unit (department)".

Fig. 4 shows the relationships among criteria of cultural infrastructure for the knowledge management success. As illustrated in Fig. 4, acceptance of knowledge sharing with the positive attitude represents the most important factor for the cultural infrastructure factor. Based on Fig. 4, the cultural infrastructure criteria were visually divided into the cause group, including "acceptance of knowledge sharing with the positive attitude" and "members' recognition of the importance of intellectual capital and KM" and the effect group, including "Obtaining the value and advantages of knowledge",

"mutual trust, openness, collaboration, cooperation between employees" and "providing proper space and time for learning, creating knowledge, innovation and brainstorming".

Fig. 5 shows the relationships among criteria of KM architecture for the knowledge management success. As illustrated in Fig. 5, the process and regulations to create and protect knowledge structure and map represents the most important factor for the KM architecture factor. Based on Fig. 5 the KM architecture criteria were visually divided into the cause group, including "the process and regulations to create and protect knowledge structure and map", "the process and regulations to protect knowledge" and "the regulations or processes to share knowledge with external organizations" and the effect group, including "linking KM activities to business process", "the process and regulations to encourage employee to participate projects and share project results" and "the process and regulations to facilitate knowledge sharing".

Fig. 6 shows the relationships among criteria of Top management for the knowledge management success. As illustrated in Fig. 6, Support and commitment represents the most important factor for the Top management factor. Based on Fig. 6 the Top management criteria were visually divided into the cause group, including "Support and commitment" and "providing necessary resources and budget" and the effect group, including "clarifying what types of knowledge are most important to the company" and "the link between business vision, mission and task, and KM strategy".

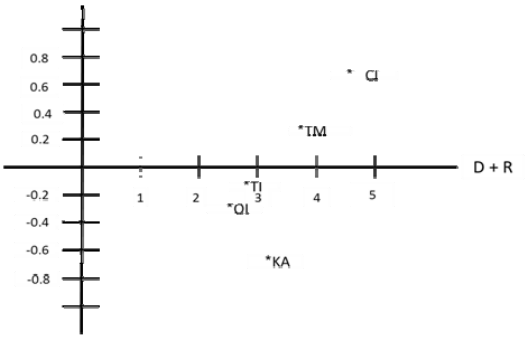

Fig. 1. The causal diagram. Using * as the symbol for Main aspect : Technical infrastructure (TI), Organizational infrastructure (OI), Culture infrastructure (CI), KM architecture (KA), Top management (TM).

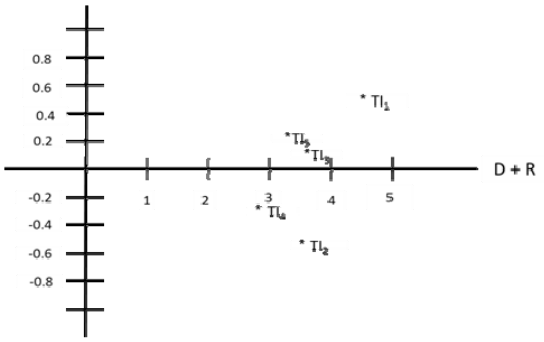

Fig. 2. The causal diagram. Using * as the symbol for Technical infrastructure criteria: Building IT infrastructure (TI_1); integrating with current systems (TI_2); effective use of software tools (TI_3); the database is updated periodically (TI_4); security of data on internet (TI_5).

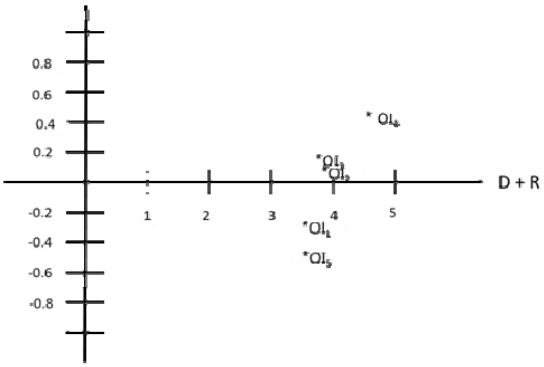

Fig. 3 The causal diagram. Using * as the symbol for Organizational infrastructure criteria: Establishing KM roles and teams (OI_1); having a flat or network structure (OI_2); communities of practice (OI_3); the unit (committee or team) to plan and promote KM (OI_4); the KM implement and measurement (OI_5).

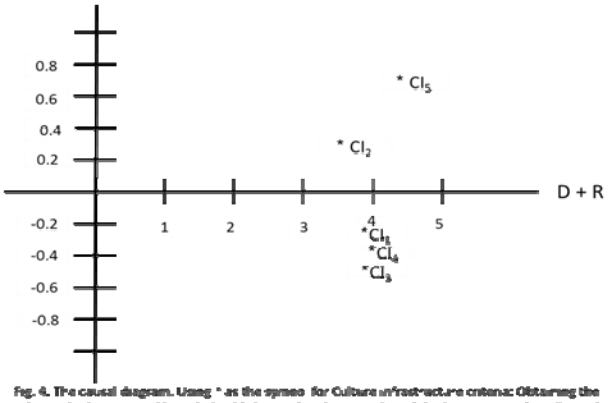

Fig. 4. The causal diagram. Using * as the symbo for Culture infrastructure criteria: Obtaining the value and advantages of knowledge (CI_1); members' recognition of the importance of intellectual capital and KM (CI_2); providing proper space and time for learning, creating knowledge, innovation and brainstorming (CI_3); mutual trust, openness, collaboration, cooperation between employees (CI_4); acceptance of knowledge sharing with the positive attitude (CI_5).

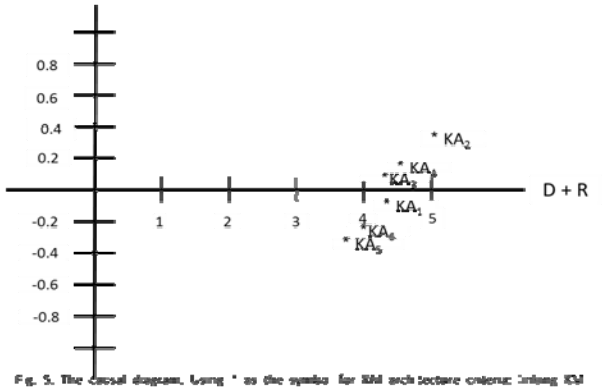

Fig. 5. The causal diagram. Using * as the symbol for KM architecture criteria: linking KM activities to business process (KA_1); the process and regulations to create and protect knowledge structure and map (KA_2); the regulations or processes to share knowledge with external organizations (KA_3); the process and regulations to protect knowledge (KA_4); the process and regulations to facilitate knowledge sharing (KA_5); the process and regulations to encourage employee to participate projects and share project news (KA_6)

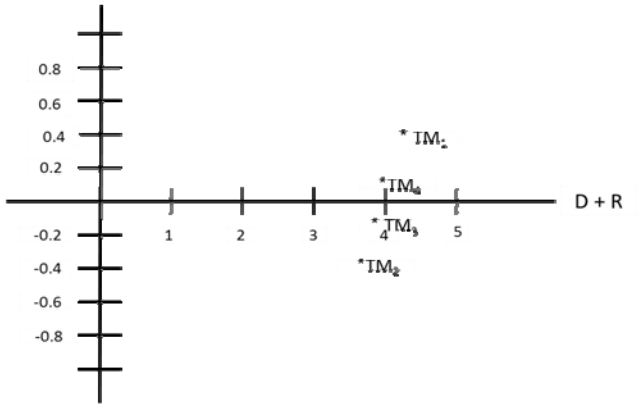

Fig. 6. The causal diagram. Using * as the symbol for Top management criteria: Support and commitment (TM_1); the link between business vision, mission and task, and KM strategy (TM_2); clarifying what types of knowledge are most important to the company; (TM_3); providing necessary resources and budget (TM_4)

Conclusion

It is widely recognized that knowledge is a valuable strategic resource for firms to remain competitive, and adequately respond to the needs of their customers (Zack, 1999). As the knowledge of a company contributes to increased competitiveness (Danskin et al., 2005), and improves decision-making (Jarrar, 2002). Implementing KM effectively requires challenges, which holds back KM from performing well and criteria exploration, which affects KM implementation.

This paper aims to use a priority framework based on Decision making trial and evaluation laboratory (DEMATEL) to help organizations build awareness of the critical influential factors affecting successful implementation of KM.

The results show “culture infrastructure” and “top management” have great impact on success of KM implementation among main aspects and these are the cause group. In addition, “Technical infrastructure”, “Organizational infrastructure” and “KM architecture” are in the effect group.

Therefore, if the organization wishes to reach a high level of knowledge and management performance, it must first control and pay much attention to the cause group criteria. Within the cause group, “culture infrastructure” is the most important factor for the knowledge management success, whereas the “culture infrastructure” and “top management” plays the effective role on the other factors. In contrast, the “KM architecture” is the most easily improved of the effect group factors. Among criteria of cultural infrastructure, “acceptance of knowledge sharing with the positive attitude” has Great Influence on other criteria. Furthermore, among criteria of top management, Support and commitment has Great Influence on other criteria. Among criteria of Technical infrastructure, “Building IT infrastructure” has Great Influence on other criteria. Among criteria of organizational infrastructure, “the unit (committee or team) to plan and promote KM” has Great Influence on other criteria. Among criteria of KM architecture, “the process and regulations to create and protect knowledge structure and map” has Great Influence on other criteria. Therefore, if the organization wishes to reach a high level of knowledge management performance, it must first control and pay much attention to the cause

group criteria, namely Factors listed above.

The procedure proposed here can help organizations to build awareness of the critical influential factors affecting successful implementation of KM. The procedure proposed here can help organizations that determine the Prioritization and Influence severity of each factor. The DEMATEL methods can assist decision makers to make better decisions for knowledge management success.

There are other multiple attribute decision-making methods such as AHP, TOPSIS and VIKOUR, which could be applied to determine the influential factors for the knowledge management success.

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