



IBIMA
Publishing

mobile

***Journal of Organizational
Knowledge Management***

*Vol. 2010 (2010), Article ID 756961,
342 mini pages.*

DOI:10.5171/2010.756961

www.ibimapublishing.com

Copyright © 2010 Mostafa Nejati, Amirul Shah Bin Md Shahbudin, and Azlan Bin Amran. This is an open access article distributed under the Creative Commons Attribution License unported 3.0, which permits unrestricted use, distribution, and reproduction in any medium, provided that original work is properly cited

Title

**Putting sustainability at the core
of knowledge management
performance evaluation system**

Authors

**Mostafa Nejati,
Amirul Shah Bin Md Shahbudin,
Azlan Bin Amran**

Universiti Sains Malaysia, Malaysia

Abstract

With the transformation of managerial views and the increasing focus on knowledge and intellectual capitals as the most important resources to the

organizations, the necessity for retaining these resources and monitoring their effectiveness in order to know how they are utilized becomes significant. As for the universities, this

requirement is even higher compared to other organizations, due to the fact that almost a complete chain of knowledge management processes and practices exist in

the universities, from
knowledge creation, planning,
creation, development, and
acquisition to knowledge
updating, sharing,
dissemination, utilization, and

protection. Therefore, it is crucial to assess the performance of these knowledge management processes. Yet, it is noteworthy to re-look at universities to find

out about their position in the community and their responsibilities towards the society at large. Universities do not operate in vacuum; rather their actions and decisions

affect the society and the environment. Hence, any program aimed at evaluating the knowledge management performance of universities must also take into

consideration their responsibilities toward the society and its sustainable development. This study emphasizes on the importance of putting sustainable

development view at the core of
any knowledge management
performance evaluation effort
and proposes a sustainable
development-led framework for
evaluating knowledge

management performance in the university setting.

Keywords: Sustainable Development, Sustainability, Knowledge Management,

Performance Evaluation, Knowledge Framework

Introduction

As one of the most valuable resources to any organization, knowledge has become a determiner for success or failure of firms. Indeed, managing

knowledge (as the process is called knowledge management) has become the key in creating competitive advantages for the firms (Connor and Prahalad, 1996; Hall, 1993; Nonaka &

Takeuchi, 1995) and a driver of organizational excellence.

Organizations are now, more than ever, aware of the uniqueness of knowledge and

intellectual capitals in bringing competitiveness to their firms.

At the present time, organizations are seeking their competitive advantage in the

effective and unique use and development of their knowledge so that it creates new areas of core competencies for them. As Choi, Poon, and Davis (2008) point out, knowledge has

nowadays become a major source for organizational competitiveness.

It is now widely recognized that knowledge assets and

technological enhancements are essential strategic resource for any organisation to achieve sustainability and competitive advantage (Nejati and Nejati, 2008).

Organizations are now, more than ever, aware of this unique resource; therefore, they are planning to manage it more effectively through various

initiatives including knowledge management projects or practices. This way, they can better survive in today's challenging world and can improve their performance. Yet,

having knowledge management systems and plans will not guarantee organizational success. It is crucial to monitor the knowledge management practices and evaluate their

performance in the organization.

Of course, it is worth noticing that organizations do not operate in the vacuum. Instead,

their actions and decisions affect a larger group than their direct customers and shareholders. Organizations should therefore be responsible toward different stakeholders

and the society at large and comply with the sustainable development requirements.

The evaluation of Knowledge Management (KM) performance

has provides the reference for managing organisational learning and enhancing competitiveness and excellence (Nejati et al., 2009b).

As knowledge is created and disseminated throughout the organisation, it can contribute to the organisation's performance and improve its readiness to face unusual situations, and turn

threats into new opportunities. As a source of competitive advantage, knowledge can also enhance organizational performance if it is applied and managed effectively; therefore it

is necessary that some indicators and measures are defined to enable managers to control the performance of the applied knowledge and make decisions about knowledge management

activities (Carrillo & Gaimon, 2004; Pfeffer & Sutton, 1999; Ribiere & Sitar, 2003) to ensure effectiveness of KM initiatives (Ahn & Chang, 2004).

While knowledge management field has extensively been studied before, the question of how to measure KM performance is less explored and is becoming more and more

important (Huang, Chen, & Yieh, 2007) as it can lead to strategic organizational learning and better satisfaction of customers' needs (Mitri, 2003), as well as better organizational

performance. Organizations are now extensively alert to the importance of knowledge and KM practices in order to efficiently use their intellectual assets. Universities, as leading

organizations in creating, disseminating and applying knowledge within the society, are far more concerned about this, because, retaining an effective and efficient

knowledge management process can help them to maintain a sustainable competitive advantage and reach its organizational objectives (Davenport, DeLong,

& Beer, 1998). Although there are some studies on KM in the higher learning institutes, the application of KM needs to be further explored (Yahya and Zahrawi, 2009). As a result, the

evaluation of knowledge management performance in the universities and higher education institutes is very crucial. Yet, we believe that any initiative that aims to look into

the performance of knowledge and intellectual assets in the university-setting should not ignore the responsibilities of the university towards the society. In fact, this has been a drawback

of most previous studies on KM,
as they have ignored
sustainability and failed to take
into account the sustainable
development commitments of

the university in their studies and frameworks.

It is very important to reconsider the social responsibilities of universities

and their roles in enhancing the Sustainable Development (SD). There is no doubt that universities play a significant role in the society and universities are considered to be

heralds in knowledge management processes which their actions and decisions will affect the society. Therefore, it is necessary to take into account the roles and decisions of

universities regarding the sustainable development, and focus on them in the studies; something which has been greatly missing in the previous studies.

Sustainable development view by universities

In December 2002, the United Nations (UN) General Assembly adopted resolution 57/254 and announced the United Nations

Decade of Education for Sustainable Development (DESD) from 2005 to 2014 for which UNESCO was designated to lead it (UNESCO, 2010). Ever since, more and more

universities worldwide have launched programs and projects in order to include sustainable development view in their curricula and strategies; for example Universiti Sains

Malaysia (USM), VU University
Amsterdam, University of
Hawai'i at Manoa, etc.

Universities are now more
aware of their roles in the

society and how they should contribute to it. They do not anymore consider their students, professors and staffs as their only members who will be influenced by the university

decisions. Rather, they know that the decisions made by the university and the outputs from the university processes will have an impact on the society.

Of course undertaking a sustainable approach will bring about numerous benefits, including brand value and reputation enhancement, increasing innovation, increased

revenues and many more
(Sigma Guidelines, 2003), while
failure to take sustainable
development responsibilities
can result in a loss of
competitive advantage and

business opportunities and lower long-term performance (Robinson et al., 2006).

Therefore, universities must focus on sustainable development as a beneficial

requirement and put it at the core of their processes.

Sustainable-development-led KMP evaluation framework

Managing knowledge assets in organizations is inevitable in order to maintain the organizational competitiveness.

That's why knowledge management has become a major determinant of organizational survival (Chang & Wang, 2009).

Yet, having knowledge management processes and systems in the organization does not guarantee better organizational performance. It is necessary that the real

performance of knowledge management practices are monitored and evaluated.

Recently, many scholars have attempted to measure the

contribution of the KM by different methods (Malhotra & Segars, 2001; Maltz, Shenhar, & Reilly, 2003; Ngai & Chan, 2005). Also companies have strived to manage knowledge

more effectively in order to improve corporate performance (Choi & Lee, 2003).

Nejati et al. (2009a) suggested that this KMP evaluation should

be done at four different levels, namely: individual, cross-individuals, organizational, and cross-organizational levels. This categorization is suitable for university-setting as well,

especially because knowledge is created, shared utilized and retained by and among individuals and organizations.

In another study, Nejati et al. (2009b) have already discussed about the importance of knowledge management performance evaluation in the university-setting and how

sustainability can be embedded with it. They have proposed an initial framework for evaluation of knowledge management performance with a sustainable development view. In this paper,

we have developed that initial framework and come up with a more comprehensive and detailed sustainable-development-led evaluation framework for knowledge

management performance (KMP) in the university setting. This framework has been illustrated in Figure 1 (view fig. 1 in full PDF version).

The proposed research framework consists of different layers. In the core of the model is the sustainable development role of the university as part and parcel of activities that the

university undertakes. This emphasizes on the fact that the responsibilities of university toward sustainable development should be

considered and incorporated into every action taken.

The second layer entails the practices and drivers of knowledge management which

we call each of them as a step.
These include:

KM Planning – KM Planning
consists of determining the aims
for undertaking knowledge

management and organization's expectations from it. Moreover, it entails the planning process for deciding about the types of knowledge that are important to the organization.

Knowledge identification – Once information and knowledge were scarce, but this is not a problem anymore. The real problem is that we are bombarded with loads of

information and piles of knowledge. Therefore, it is crucial to distinguish between the useful knowledge and the other ones. This step entails review of existing knowledge to

identify available sources of knowledge and decide about the areas in which the organization needs to focus to develop required knowledge. As probst (1998) has pointed out, it is

necessary that organizations get to know about the existing knowledge within their organization as well as outside, before they decide to spend huge amounts of money for

developing new sources of
knowledge - which might
already exist.

Knowledge

creation/development – Creating new knowledge sources and developing available knowledge is a very crucial component of

knowledge management which
this step of the model covers it.
Knowledge

Acquisition/Updating –
Acquiring and capturing of new

or existing knowledge in the organization and by the knowledge workers is another important step in the knowledge management practice. Besides, it is important to update the

knowledge repositories and sources of knowledge on a regular basis. This step of the model covers these practices.

Knowledge

Sharing/Dissemination – To share and convey the knowledge with others and at different levels and disseminate information throughout the

organization is another part of a knowledge management process which forms one of the stages of the proposed model.

Knowledge Utilization – The knowledge should be utilized in order to create value added to the knowledge workers and organization. This stage of the

model entails utilization of knowledge in work or daily life.

Knowledge Protection –
Ensuring to preserve the knowledge assets in the

organization and categorizing them according to different access levels is an important part of KM process which is introduced in this step of the model.

KM Drivers – The success of a knowledge management project depends on several factors (e.g. incentives system, organizational culture, etc.). This step looks into the most

important factors which can form the foundation for a successful KM and act as a driver toward its success.

Conclusion

This paper has studied the importance of sustainable development view for universities, and has emphasized on the necessity for

putting sustainability at the core of knowledge management performance evaluation framework. As such, a KMP evaluation framework with the focus on sustainable

development has been proposed and each of its layers and components has been analyzed. The framework can act as an initial tool which based on that, the key performance indicators

can be defined and help to assess the performance of knowledge management practices under the umbrella of sustainable development.

Future research can focus on defining the relevant indicators for the proposed framework and applying it in some pilot cases.

Acknowledgement

Authors would like to acknowledge Universiti Sains Malaysia (USM) for supporting towards the publication of this paper through USM Fellowship.

References

Ahn, J.H. and Chang, S.G. (2004), "Assessing the contribution of knowledge to business performance: The KP3 methodology", Decision Support

Systems, Vol. 36 No. 4, pp. 403-416.

Carrillo, J.E. and Gaimon, C.
(2004), "Managing knowledge-based resource capabilities

under uncertainty",
Management Science, Vol. 50
No. 11, pp. 1504-1518.

Chang, T.H. and Wang, T.C.
(2009), "Using the fuzzy multi-

criteria decision making
approach for measuring the
possibility of successful
knowledge management",
Information Sciences, Vol. 179
No. 4, pp. 355-370.

Choi, B. and Lee, H. (2003), "An empirical investigation of KM styles and their effect on corporate performance", *Information & Management*, Vol. 40 No. 5, pp. 403-417.

Choi, B., Poon, S.K. and Davis, J.G. (2008), "Effects of knowledge management strategy on organizational performance: a complementarity theory-based

approach", Omega, Vol. 36 No. 2, pp. 235-251.

Connor, K.R. and Prahalad, C.K. (1996), "A resource-based theory of the firm: knowledge versus opportunism",

Organization Science, Vol. 7 No.
5, pp. 477-501.

Davenport, T.H., Jarvenpaa, S.L.
and Beers, M.C. (1996),
"Improving knowledge work

processes", Sloan Management Review, Vol. 37 No. 4, pp. 53-65.

Hall, R. (1993), "A framework linking intangible resources and capabilities to sustainable

competitive advantage",
Strategic Management Journal,
Vol. 14 No. 8, pp. 607-618.

Huang, M.J., Chen, M.Y. and Yieh,
K. (2007), "Comparing with your

main competitor: the single most important task of knowledge management performance measurement", *Journal of Information Science*, Vol. 33 No. 4, pp. 416-434.

Malhotra, G.A. and Segars, A.
(2001), "Knowledge
management: an organisational
capabilities perspective",
Journal of Management

Information Systems, Vol. 18 No. 1, pp. 185-214.

Maltz, A.C., Shenhar, A.J. and Reilly, R.R. (2003), "Beyond the balanced scorecard: refining the

search for organisational success measures", Long Range Planning, Vol. 36 No. 2, pp. 187-204.

Mitri, M. (2003), "Applying tacit knowledge management techniques for performance assessment", Computers & Education, Vol. 41 No. 2, pp. 173-89.

Nejati, M. and Nejati, M. (2008),
Enabling Knowledge Sharing
and Innovation within
organizations. Proceedings of
the 1st Iranian International

Knowledge Management
Conference, Tehran, Iran.

Nejati, M., Md Shahbudin, A.S.,
Amran, A. and Nejati, M.
(2009a), "Knowledge

Management Performance
Award (KMPA) for Universities
& Institutes of Higher
Education", in Managing
complexities in the Asia Pacific
Region proceedings of the 14th

Asia Pacific Management
Conference, Surabaya,
Indonesia.

Nejati, M., Md Shahbudin, A.S.
and Amran, A. (2009b).

Knowledge Management
Performance Evaluation in
Universities: A Sustainable
Development View. Creating
Global Economies through
Innovation and Knowledge

Management. Proceedings of the
12th International Business
Information Management
Association Conference, Kuala
Lumpur, Malaysia.

Nejati, M., Md Shahbudin, A.S.
and Amran, A. (2010),
"Sustainable development: a
competitive advantage or a
threat? Business Strategy Series,
Vol. 11 No. 2, pp. 84-89.

Ngai, E.W.T. and Chan, E.W.C.
(2005), Evaluation of knowledge
management tools using AHP.
Expert Systems with
Applications, Vol. 29 No. 4, pp.
889-899.

Nonaka, I. and Takeuchi, H.
(1995), *The knowledge creating
company*. Oxford: Oxford
University Press.

Pfeffer, J. and Sutton, R. (1999),
The knowing-doing gap, Boston:
Harvard Business School Press.

Probst, G. (1998), Practical
Knowledge Management, in:

Prism, Arthur D Little, Second
Quarter, 17-29, Retrieved March
24, 2010, from
[http://genevaknowledgeforum.
ch/downloads/prismartikel.pdf](http://genevaknowledgeforum.ch/downloads/prismartikel.pdf)

Ribiere, V.M. and Sitar, A.S.
(2003), "Critical role of
leadership in nurturing a
knowledge-supporting culture",
Knowledge Management

Research & Practice, Vol. 1 No. 1,
pp. 39-48.

Robinson, H.S., Anumba, C.J.,
Carrillo, P.M. and Al-Ghassani,
A.M. (2006), "STEPS: a

knowledge management
maturity roadmap for corporate
sustainability", Business Process
Management Journal, Vol. 12 No.
6, pp. 793-808.

Sigma Guidelines (2003),
"Putting sustainable
development into practice – a
guide for organisations", Sigma
Project. Retrieved March 24,
2010 from

[http://www.projectsigma.co.uk
/Guidelines/SigmaGuidelines.pdf](http://www.projectsigma.co.uk/Guidelines/SigmaGuidelines.pdf)

UNESCO (2010). UN Decade of
Education for Sustainable

Development. Retrieved
February 04, 2010 from
[http://www.unesco.org/en/esd/
/decade-of-esd/](http://www.unesco.org/en/esd/decade-of-esd/)

Yahya, Y. and Zahrawi, A.A.
(2009). A Framework for
Knowledge Management System
in Higher Learning Institution: A
Case Study of National
University of Malaysia. 2009

International Conference on
Electrical Engineering and
Informatics, Selangor, Malaysia.