Vexing Issues of Knowledge Sharing: The Case Study of theWiki Initiative in a Malaysian Public Organization

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ABSTRACT

While many organizations have benefitted from the existence of Internet-based web applications such as wikis and blogs as tools for knowledge sharing, many others have failed. In the end, wikis and blogs are reduced to just as the facilities to provide one-way information about the organization. Gone is the exuberance when the wiki or blog was first launched.

Failures of wikis in promoting knowledge sharing are mostly not because their poor design. Many fail because of poor understanding of the ecosystem within which effective wikis operate. To emphasize, this paper presents a case study of a wiki initiative mooted by a public organization to manage and share knowledge.

Notwithstanding the many initiatives introduced to encourage active knowledge sharing participation, maintaining a sustainable knowledge sharing culture within the organization can be very complex. The case study provides useful examples of this and lessons that can be learnt. The findings suggest that that the variables surrounding the organization can be unique. It is necessary to endeavor and continuously learn to determine the critical success factors and the ecosystem before successful and sustainable wiki portals for knowledge sharing can effectively be promoted.

Keywords: wiki, knowledge sharing, stakeholder communities

I   INTRODUCTION

The Internet has contributed significantly to the evolution of knowledge management over the past two decades (Frappaolo, 2006). This has revolutionized the way information and knowledge is managed. Imbued by this belief, the practice of having Internet-based web applications such as web portals, wikis and blogs have become an absolute necessity for organizations today.

Notwithstanding the many successful examples, countless wikis and blogs initiatives have failed this purpose and are reduced to just as the facility to provide one-way information about the organization. Gone is the exuberance when the wiki or blog was first launched.

The failures of many organizations to capitalize this technology-centric approach to promoting closer association the stakeholders and sharing of knowledge between them have been studied by many researchers(Chua & Lam, 2005).Common in the findings is the suspicion that failures that manifest within the initiative are mostly due to neglect of the ecosystem which underpins their success. This consequently tends to result in difficulty to integrate the hard, soft, tacit and explicit knowledge that is so vital for organizations to sustain.

To exemplify, this paper presents the research case-study which investigates the vexing issues of maintaining sustainable knowledge sharing culture in a public organization, after a wiki initiative have been introduced. The premise of the case study is a public organization in Malaysia which was attempting to rectify the problem of poor knowledge sharing within by their wiki. Since its launch, the initial warm response to the web portal is fading and this has prompted several questions on what can be done to address the problem.

The Knowledge Management (KM) team responded by organizing a survey and a special workshop to discuss what can be done to correct the problem. The findings from the survey and meetings are presented and the challenge to find the right solutions to the problem is highlighted. Perspectives to suggest possible strategies to circumvent the problem are discussed. Insights which can be valuable lessons emanating from the case study are highlighted and the way forward for the system to be improved is discussed at the end of the paper.

(For the purpose of this paper, the name and type of organization is not mentioned).

II   AIM AND OBJECTIVES

The aim of the research was to learn how the organization can effectively address the problem of poor knowledge sharing from their wiki initiative. In line with the aim, objectives developed for the research were:

   i.   What are the issues that confront the wiki initiative?
   ii.   What are the root causes of these issues?
   iii.   What can be done to effectively improve the situation?

III   THE RESEARCH METHODOLOGY

An observational approach was adopted for this action research. The concept of wiki was first assessed through the critical review of research and publications. Primary data were drawn from the survey and workshop discussions. These were analyzed to identify the vexing issues and the challenge of finding the way forward for knowledge management sustenance.

IV   LITERATURE REVIEW

A. Knowledge Sharing

Knowledge sharing has been recognized as the cornerstone of knowledge management and is considered vital to the success of any knowledge management implementation (Alavi & Leidner, 2001; Klein, 2008). Upholding knowledge sharing within the organization supports to nurture sustainable competitive advantage (Jasimuddin, 2008). By encouraging individuals within the organization to continuously acquire new knowledge, the shared knowledge itself is refined and enriched, and this tends to benefit the organization with increased value in its process, produces and services(Yang, 2007).

Knowledge sharing is a dynamic process. This involves the mutual exchange of knowledge between individuals or groups for any given purpose or objectives. As the knowledge domain changes, new knowledge is created and this can be beneficial for identifying new competencies (Hooff, Elving, Meeuwsen, & Dumoulin, 2003; Jae-Nam, 2001). For knowledge sharing to work, it is imperative that relevant knowledge is successfully transferred at the right time and between the right people. Failing this, the value of knowledge will depreciate or lose in value (Sheehan, Poole, Lyttle, & Egbu, 2005).

There are two commonly known approaches advocated to knowledge sharing namely the process-approach and the people-approach(Jasimuddin, 2008).The process-approach which perceives knowledge as an object is focused to make knowledge explicit, captured in reports, standard operating procedures and manuals. With the advent of technologies, especially with the introduction of Web 2.0 applications, the process of knowledge management now is getting more 'flatten' and the distribution of knowledge can be much faster.

On the other hand, the people-approach is more concern with connecting people by getting round the conventional path of sharing organizational knowledge between individuals. The significance of this approach which lies in its ability to exploit tacit knowledge have seen the emergence of new concepts such as the Communities of Practice (Lave & Wenger, 1991) and After Action Review (Alavi & Leidner, 2001), which are very much in practice today.

B. The Wiki and Blog Fever

Encouraged by the plethora of knowledge management tools and techniques made available with advancements in Information Technology (IT), organizations today are now able to gain deeper insights and understanding of their internal and external knowledge that exist within and surrounding them. The emergence of new forms of technologically advanced web systems, such as Web 2.0 applications have provided organizations with better means of promoting knowledge sharing which extends across time and geographical boundaries. The introduction of wikis and blogs has not only encouraged knowledge sharing activities to take place, but have simultaneously helped organizational members to build communities, trust and healthy relationships.

Lured by the benefits of technologically mediated knowledge sharing tools exemplified by successful examples, organizations worldwide is embracing these innovative technologies at a feverish pace. However, while many organizations have benefited extensively from these Internet-based web applications with the likes of wikis and blogs, there are many others that have failed. In his study,Lucier (2003)notes that almost 84 percent of all knowledge management initiatives have not produced the expected results. Much effort, time and money have been spent, but there are many wikis and blogs that are operating in a low-key mode or left dormant.

C. The Wiki System

Wiki is an Internet-based collaborative authoring tool that allows anyone who has the appropriate access rights to it to make contributions to the site, by adding, editing and removing its content. Underpinning wiki is the philosophy to harness

the community collective intelligence. This technologically mediated communication has generated keen interest from users in society. Corporate organizations are speeding up to deploy this system with its simplified interface and easy-to-use features which requires minimal programming skills (Majchrzak, Wagner, & Yates, 2006; Paroutis & Saleh, 2009).

In addition, wiki promotes openness and transparency, facilitating effective communication and encouraging trust among people. Although there have been some concerns over its data security, the possibility of vandalism and lack of face to face interaction, these issues is seen as can be tackled accordingly by having proper measures and procedures in place (Grace, 2009).

The popularity of wiki has been attributed to its advantage in providing a suitable environment for deep collaboration to take place among its users through continuous social interaction and communication. Thus, it enables users from different backgrounds who share the same interest to come together, contribute their knowledge and experience for the benefit of others.

Albeit its popularity and ubiquitous nature, organizations which are keen to adopt wiki needs to consider putting in place well thought out strategies to increase and sustain the level of participations (Wang & Wei, 2011). These strategies must address the organizational, people, process and technology aspects accordingly. Organizations that do not support the free exchange of knowledge regardless of rank and hierarchy in its culture may find that that wiki would not work for them(Wagner & Bolloju, 2005).

V THE CASE STUDY: THE WIKI INITIATIVE

A. The Project
Realizing the need to manage the significant amount of knowledge within the organization, a wiki initiative was developed and launched by a public organization as part of its strategy to improve the overall performance and service delivery to the stakeholders. To maintain this, a KM team was assembled and tasked to manage the wiki initiative implementation from the onset. To kick start the project a handbook which details the wiki initiative and knowledge management at large was published and distributed to the employees to create awareness on the importance of this project.

Concurrently, a preliminary knowledge audit was conducted to assess the level of knowledge culture within the organization. The findings found issues of knowledge silos, inconsistent practices and processes, brain drain, lack of knowledge sharing culture and limited access to experts confronting the initiative. This made the KM team more aware of the challenge that lies ahead.

B. Wiki as the KM enabler
To generate interest and creating buy-in from the employees, an online knowledge sharing collaborative portal using wiki was developed. The aim was to provide the suitable IT platform where knowledge can be easily shared within the organization and employees. Provisions to encourage employees to post project information, lessons learnt, best practices or questions for the benefit of the other members of the organization was included in the wiki. 70 subject matter experts from different disciplines and units within the organization were requested to upload information on work procedures, processes, project examples and reports into the wiki. They were also appointed to monitor and provide expert opinion feedback to issues posted on the wiki.

At its launch the wiki was very well received as active participation by members of the organization can be observed. The post-launch survey carried out soon after, found that the majority of the employees believing that the wiki contents were very useful and beneficial in facilitating them in their job.

C. The Start of the Problem
Over time, gradually interest in wiki fell, and posting by the subject matter experts and employees became lesser and lesser. Notwithstanding the continuing campaigns to maintain the users' enthusiasm, the loss in interest was baffling. This left the KM team with the difficult question of what is happening and why?

D. The Response
The response by the KM team was to organize a survey to assess the declining interest. The findings suggest several major alarming issues which were summarized and reported in a special meeting as follows:

i) Lack of interest especially among the top management
Work-related activities amongst the top management were seen as more important and participating in the portal was treated as secondary. As a consequence, the

responsibility for maintaining the wiki was left to the KM team and subject matter experts.

ii) Lack of sharing culture amongst the various members of the organization
Many were reluctant to share their knowledge with others for the fear that by sharing their precious knowledge, their position and authority may be compromised.

iii) Lack of time
Although the significance of wiki was acknowledged, employees were not visiting the portal because they lack time. Many felt that asking their peers for answers was more convenient and faster, and that the traditional face to face interaction was more reliable.

iv) Reliability of the wiki
Subject matter experts maintaining the wiki complained that in many instances, the available IT infrastructure was unable to support the high number of visits or the file size. Connectivity was also found to be a major issue.

v) Absence of incentives
This has affected the motivation for the employees to participate actively in the wiki. Many subject matter experts felt that it was getting burdensome to respond to information posted by employees, and to act as moderators on a regular basis.

vi) Staff Turnover
The job rotation practiced by the organization, especially on the subject matter experts maintaining the wiki left vacuums in the system. Identifying qualified replacements were difficult and can be time consuming at times.

vii) Heavy workload and timeliness
Subject matter experts had to sieve through a torrent of information to decide which information to be posted online. This not only required them to knowledgeable in their area, but also to be aware of new developments or changes that might have taken place after the original information was posted.

viii) Writing issues
Many of the information deposited into the wiki, unfortunately can only be understood by a certain group of people from a certain discipline. The subject matter experts might have tried their best to express their

knowledge into easy-to-understand formats, but many junior staff found them too difficult to understand.

The KM team is now left to find answers to these problems.

VI   DISCUSSION

The case study provided many examples what can go wrong even when elements of best practices and critical success factors of wiki designs were considered. Notwithstanding all the efforts made, there exist many vexing issues that can create difficulties in the real implementation. The effort expended by the KM team in the case study exemplifies the challenge of providing an effective wiki for knowledge sharing and the difficulty in trying to get everything right for the wiki portal. The effort of the KM team to continue to seek remedies to problems is commended, as not many other organizations would have the stamina to persevere with such difficulties.

The adequacy and consistency in the operation of the IT infrastructure underpin the effectiveness of the wiki directly. Glitches and technical problems related to access, connectivity and training of the people maintaining the wiki portal, as demonstrated by the case study, are fundamental elements of knowledge sharing wiki portals which must be avoided at all cost.

However the case study also demonstrated that there are larger and hidden issues that can impact the wiki initiative. Finding effective solutions often necessitates thinking beyond the realms of the wiki and IT systems itself. At the onset of the project, it was assumed that the prevailing problems of knowledge silos, inconsistent practices and processes, brain drain and lack of knowledge sharing culture would be solved when the wiki is in place. This unfortunately did not happen. It was apparent that the wiki is not the solution to the organization that already has inherent knowledge sharing problems within their culture.

The effort to get support and the participation of the whole organizational members to the wiki failed. Without the support and contribution of the other members of the organization to the issues and dialogues posted on the wiki portal, strain creep in. Consequently many of the subject matter experts felt it was getting burdensome to continue this role. This would not have happened if the wiki had been able to persuade people with special common interest volunteering to form 'communities' and take ownership of the subjects.

The design of the wiki which provides; (i) the website that links all information on the organizational activities to the varied stakeholders, and, (ii) the facility for posting issues or information to get feedbacks were seen as limiting the knowledge sharing platform. The lack of additional provisions to systematically organize, record and re-evaluate issues, good and bad-practices, etc., tends to limit the quality and amount of knowledge that can be captured and organized for sharing, and which can be fed back into the organizational management system to encourage continuous organizational learning.

In culminating the observations from the case study, the paper posits that the provision of an effective wiki for knowledge sharing must extend beyond the realms of IT and organizational administrative endeavor to include larger considerations. It is subject to a multitude of interrelated variables which individually and collectively can impact on the whole wiki initiative as conceptualized by Salleh, Alshawi, Sabli, Zolkafli, and Judi (2010) in Figure 1.
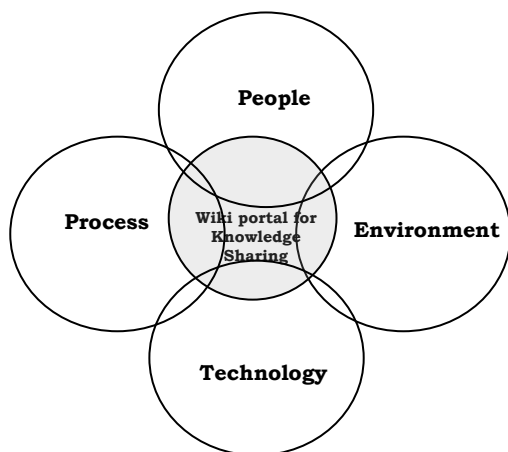

Figure 1: The Maturity Model (Salleh et al., 2010)

The maturity model was developed based on the premise that amid the constant push by organizations worldwide to invest heavily in IT projects to assist them in coping with the changing economic landscape, most of the initiatives failed because of too much focus placed on technical performance while ignoring the soft issues of organizational internal elements such as people, business process and work environment. Failure to recognize these critical factors may result in unnecessary wastage of efforts and resources in later stage.

By integrating four key organizational elements namely IT, people, business process and work environment, the maturity model serves as a useful tool to measure the organization's internal capability and readiness prior to any IT project implementation. Organizations will be able to measure the readiness gap using the proposed six progressive stages of maturity in order to develop the appropriate training programs in bringing the maturity level to the desired state (Figure 2).
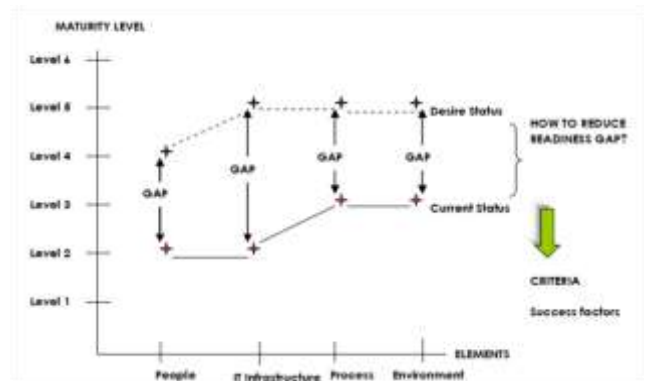

Figure 2: The Readiness Gap (Salleh et al., 2010)

This maturity model can be applied as a guide to evaluate the organization's capability before embarking on any IT projects and to mitigate the issues and challenges faced during the implementation stage as exemplified in our case study. However recognizing the fact that each organization is unique, with its own cultures and beliefs, consideration to adopt any particular model in this context must be taken based on careful and thorough deliberation of the issues at hand.

Decisions that are made without proper planning and a thorough evaluation will not only jeopardizing the success of the initiative but also risking causing unwanted ecological imbalance to the organization. After all, a model that works best in one organization may not necessarily work for another. In other words, there is no such thing as one size fits all solution in knowledge management.

In addition, special consideration must be given to the aspect of both learning and relearning among employees over time to ensure the success of any knowledge management initiative. Moreover as the case study exemplified, organizations that found themselves operating in a rigid hierarchical and bureaucratic structure which potentially could serve as a barrier to collaborative and trust-based work environments must continue to find short and long term solutions to encourage active participation among its employees to use and share their knowledge.

VII   LIMITATION OF THE STUDY

The following limitations are highlighted and acknowledged. The case study was based on one knowledge sharing initiative implemented in a single organization relating to the public sector, thereby limiting the generalizability and may not be representative of those in other organizations. The list of issues proposed in this study may not be exhaustive and future research could explore other factors that are deemed critical.

VIII CONCLUSION

The case study illustrates useful examples of the complexity of maintaining a sustainable knowledge management practice and lessons that can be learnt for the future. The rise of technology-based applications such as wiki as a knowledge sharing tool is a proof that the knowledge management discipline continues to evolve and expand. With that being said, measures to promote wiki usage will not be sufficient if it is not supported by a multitude of interrelated variables which can impact on the effectiveness of the wiki initiative. This underlines the significance for a holistic understanding of the ecosystem that underpins successful wiki portals for the knowledge sharing initiative.

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