

Investigation for Success Factors In Using Portals as a Knowledge Sharing Mechanism

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Abstract:

Defining the concept of portal as a framework for integrating information, people and processes across organizational boundaries through software solution installed on organization infrastructure which may include internet, intranet, and extranet network. Portals play importance role in knowledge sharing and management as a gateway to all unstructured, structured, and collaborative information and knowledge within organization so that the user can easily work on this personalized platform.

Firstly, i would like to explain the functions of some important concepts like portals and knowledge sharing. Furthermore, I will also explain the role of portals in knowledge sharing process and how it can improve the knowledge management in the organization. This paper will discuss and focus on the success factors for excellent portal implementation and how to use the portal to achieve knowledge sharing in the organization. In conclusion, I will determine the success factor on using portal as knowledge sharing tool and how it can improve the knowledge management overall in the organization and how the portal becomes strong point in the organization to publish knowledge sharing culture and support decision making. As Example for the portals, I'll explain some features for MS SharePoint.

Keywords: knowledge management, Portals , MS SharePoint

Introduction:

In this paper will describe the definitions, framework, business values and implementation issues of portals from different perspective as the aim is to investigate the success factors and discuss how and why we can use portals and the ways of using it for knowledge sharing and improving the knowledge management in the organization especially enterprise information portal.

Enterprise portal, also known as an enterprise information portal (EIP) or corporate portal, is a framework for integrating information, people and processes across organizational boundaries. It provides a secure unified access point, often in the form of a web-based user interface, and is designed to aggregate and personalize information through application-specific portals. *[Boye Janus (2005-01-18) "Portal Software: Passing Fad or Real Value?].*

Some organizations built portals for supporting general knowledge management issue but many organizations implemented portals because of aggressive growth and distributed personnel. Our organizations face several challenges such as rapid change of business environment, information overload, large scale and distributed of both services and staff. Managing knowledge within the large organization is being recognized as an indicator to show how success of the organization is so as to increase the innovativeness, responsiveness and competitiveness of the organization. This is the main objective for this study.

Portals play an important role these days in our organizations; it's the gateway that unifies access to all enterprise information, applications and e-services on one location. It is an excellent tool that helps our organizations to manage its information more easily and through personalized views. Some portals solutions are able to integrate with other systems and portals to get the needed information at any time anywhere.

Scope of this study will focus on investigate the success factors in using portals as a knowledge sharing mechanism in the organization.

Statement of Organization:

In this paper, I will do more investigation on the successful implementation portal in the organizations and analysis the success factors so as to conclude some ideas on how can we use portal as knowledge sharing tools and improve the knowledge sharing and management through a comprehensive survey distributed on line between selected samples and target audiences.

Research methodology depend on defining the problem statement and build conceptual model with variables, then write the hypothesis and test it to reach the conclusion.

Literature Review:

- **Yogesh Malhotra, "Integrating knowledge management technologies in organizational business processes: getting real time enterprises to deliver real business performance" JOURNAL OF KNOWLEDGE MANAGEMENT - VOL. 9 NO. 1 2005.**

Yogesh Malhotra Conduct his study to provide executives and scholars with pragmatic understanding about integrating knowledge management strategy and technologies in business processes for successful performance. He uses a comprehensive review of theory, research, and practices on knowledge management to develop a framework that contrasts existing technology-push models with proposed strategy-pull models. The framework explains how the "critical gaps" between technology inputs, related knowledge processes, and business performance outcomes can be bridged for the two types of models.

And finally, he suggests superiority of strategy-pull models made feasible by new "plug-and-play" information and communication technologies over the traditional technology-push models. Critical importance of strategic execution in guiding the design of enterprise knowledge processes in addition to explain selection and implementation of related technologies.

- **Rusli Abdullah, Shamsul Sahibudin, Rose Alinda Alias, Mohd Hasan Selamat "Applying Knowledge Management System with Agent Technology to Support Decision Making in collaborative learning environment" Journal of American Academy of Business, Cambridge; Sep 2005; 7, 1; ABI/INFORM Global.**

Rusli Abdullah, Shamsul Sahibudin, Rose Alinda Alias, Mohd Hasan Selamat Conduct their study in Knowledge management system (KMS) with agent technology to clarify its major roles in managing knowledge to support making decision among communities of collaborative learning environment. This service is provided that to ensure utilization of knowledge as the corporate assets could be acquired and disseminated at anytime and anywhere, in the context of reaching and sharing the knowledge between communities. Agent technology has also been used to speed up and increase the quality of service in KM process of collaborative learning environment in term of creating, gathering, accessing, organizing and disseminating knowledge.

- **SHOUHONG WANG, HAI WANG "AN INDUCTION MODEL OF INFORMATION TECHNOLOGY ENABLED KNOWLEDGE MANAGEMENT: A CASE STUDY" Journal of Information Technology Management Volume XX, Number 1, 2009.**

Shouhong wang and Hai wang Conduct their study to explain Knowledge management (KM) and how it becomes an important discipline in the field of management. They presents the development of an induction model based on five real-life cases of successful KM. Based on a so-called Joint Qualitative Analysis, their case study has identified several common aspects of the IT enabled KM process. In brief, KM occurs when the new business strategies of the organization requires KM. New IT strategies and new organizational strategies are then developed to align with the new business strategies to implement KM. A crucial component of the IT enabled KM is the development, the use, and the maintenance of IT supported products and services for KM. The IT supported products and services foster the transformation between information, and explicit and tacit knowledge. The development of metrics and measures for KM assessment is a key task of the KM process. The induction model is significant as it supports KM process design in the context of IT applications.

- **Hind Benbya, Giuseppina Passiante and Nassim Aissa Belbaly "Corporate portal: a tool for knowledge management synchronization" E-Business Management School, Department of Innovation Engineering, University of Lecce-ISUFI, Via per Monteroni sn-73100 Lecce, Italy.**

Hind Benbya, Giuseppina Passiante and Nassim Aissa Belbaly Conduct their study as the basis of value creation and success of organizations increasingly depends on the leverage of knowledge available internally, knowledge management systems (KMS) are emerging as vital tools for competitive advantage. Among these KMS, corporate portals present the potential of providing organizations with a rich and complex shared information workspace for the generation, exchange, and use of knowledge. But developing corporate portals and building the critical mass of users required to make them successful is not an easy task. In this paper, drawing upon the literature review and an analysis of early adopters of corporate portals, we address the strength of this tool which consists mainly in synchronizing and supporting knowledge processes, put the emphasis on factors inhibiting its adoption by companies and finally propose some perspectives for a successful implementation.

Statement of Work (SOW):

Determine the success factors for excellent portal implementation that lead the portal to be strong point in the organization, and how can the organization select the most suitable technology to implement portal, In addition to determines the reasons that make MS SharePoint is a good tool to implement portals. These factors will be investigated through a comprehensive survey distributed through employees, managers, IT people and concerned in the field study.

Portals Support for KM Processes:

Before focusing on portals as knowledge management system (KMS), it's necessary to define Portals, Types of portals, knowledge and knowledge sharing.

What is portal?

Portals enable e-business by providing a unified application access, information management and knowledge management both within enterprises, and between enterprises and their trading partners, channel partner and customers. From this definition, we can distinguish two types of corporate portals: extranet portals which provide depth content rather than breadth of content, offer special advantages for business-to-business, e-commerce because they can provide something closer to a solution; and enterprise intranet portals that support knowledge management and internal communications and they are emerging as home bases for employees. [*Hind Benbya, Giuseppina Passiante, And Nassim Aissa Belbaly "Corporate portal: a tool for knowledge management synchronization*].

Types of Portals:

There are many types of portal according to their function [*Chun Man Lam. How to use portals as knowledge-sharing mechanism?*], we can group them into five primary categories. See Table (1) that shows the main categories for portals and it's environment, sub-category, and their way for handling information type.

Primary Category	Environment	Sub-category	Handle Information Type
Internet Portals	Public		Structured
Application Portals	Corporate	<ul style="list-style-type: none"> • Business Intelligence Portal • Database Vendor Portal • ERP Vendor Portal • Balanced Scorecard Portal 	Structured
Enterprise Information Portals	Public/ Corporate	<ul style="list-style-type: none"> • Collaborative Processing Portal • Decision Processing Portal 	Structured/ Unstructured/ Collabrative
Information Management Portals	Corporate	<ul style="list-style-type: none"> • Workgroup Server • Knowledge Portal • Intranet Unstructured Portal 	Unstructured/ Collaborative
Horizontal/Vertical Portals	Public/ Corporate	<ul style="list-style-type: none"> • Corporate Interest Portal • Electronic Commerce Portal • Employee Portal • Internet Hosting Portal 	Structured/ Unstructured/ Collabrative

Table 1. Types of portal

Table (1): Types of portals.

Knowledge:

There are lots of definitions for knowledge that differ according to point of view. For example IT people define data as raw numbers that once processed becomes information, and when put in specific context this information becomes knowledge [Vance, 1997]. The perspective of knowledge as a state of mind posits that individuals expand their personal knowledge through the inputs received from their environment. Further, the view of knowledge as a capability to act suggests that it is not the specific actions of knowledge, but the ability to interpret and use information and experience that influences decisions [Watson, 1999].

Knowledge Sharing:

Knowledge sharing is one of the processes in knowledge management framework apart from knowledge creation, knowledge organization/storage, and knowledge application. Knowledge sharing is a kind of knowledge development cycle, in knowledge sharing cycle. See Figure (1) that shows there are eight processes: identify, collect, classify, organize/store, share, access, using, and generate.

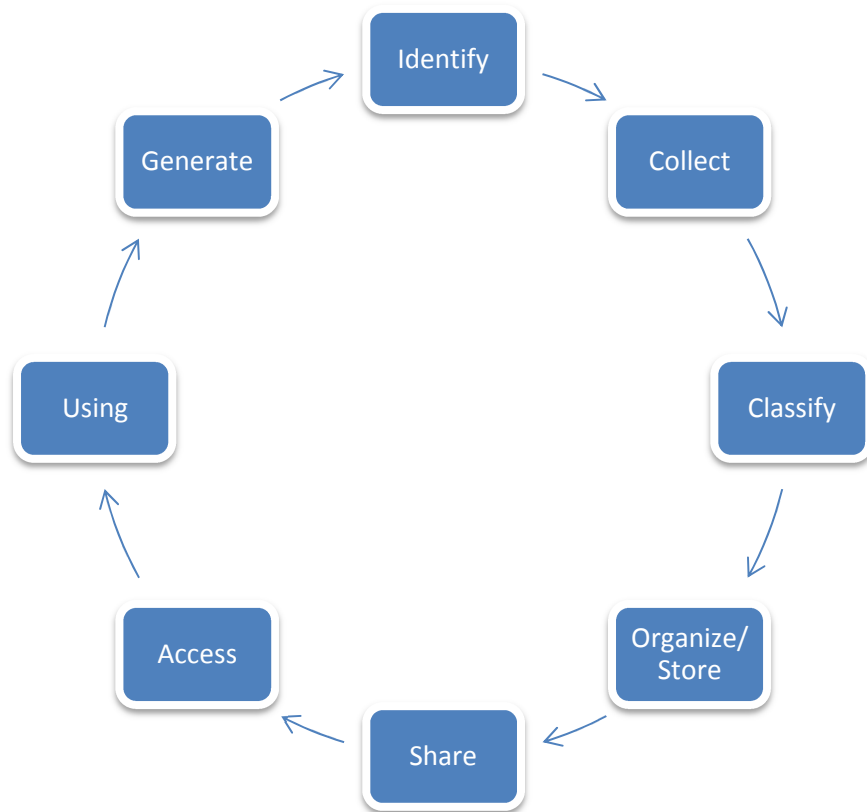


Figure (1): Knowledge sharing process.

MS SharePoint:

Microsoft SharePoint is a web application platform developed by Microsoft. SharePoint is typically associated with web content management and document management systems, but it is actually a much broader platform of web technologies, capable of being configured into a wide range of solution areas.

SharePoint is designed as a broad, central application platform for common enterprise web requirements. SharePoint's multi-purpose design allows for management and provisioning of intranet portals, extranets, websites, document & file management, collaboration spaces, social tools, enterprise search, business intelligence, process integration, system integration, workflow automation, and core infrastructure for third-party solutions. SharePoint's core infrastructure is also suited to providing a base technology platform for custom developed applications. The following figure (Figure (2)) shows the main structure for SharePoint.



Figure (2): Main Structure for SharePoint.

Office SharePoint Server provides a single, integrated location where you can find documents and resources, create workflows, automate business processes, communicate using blogs and wikis, gain visibility for yourself and your team using team sites and My Sites, and discover shared knowledge to make better informed decisions in your business.

Main Features that make MS SharePoint is an excellent tool to implement Portals:

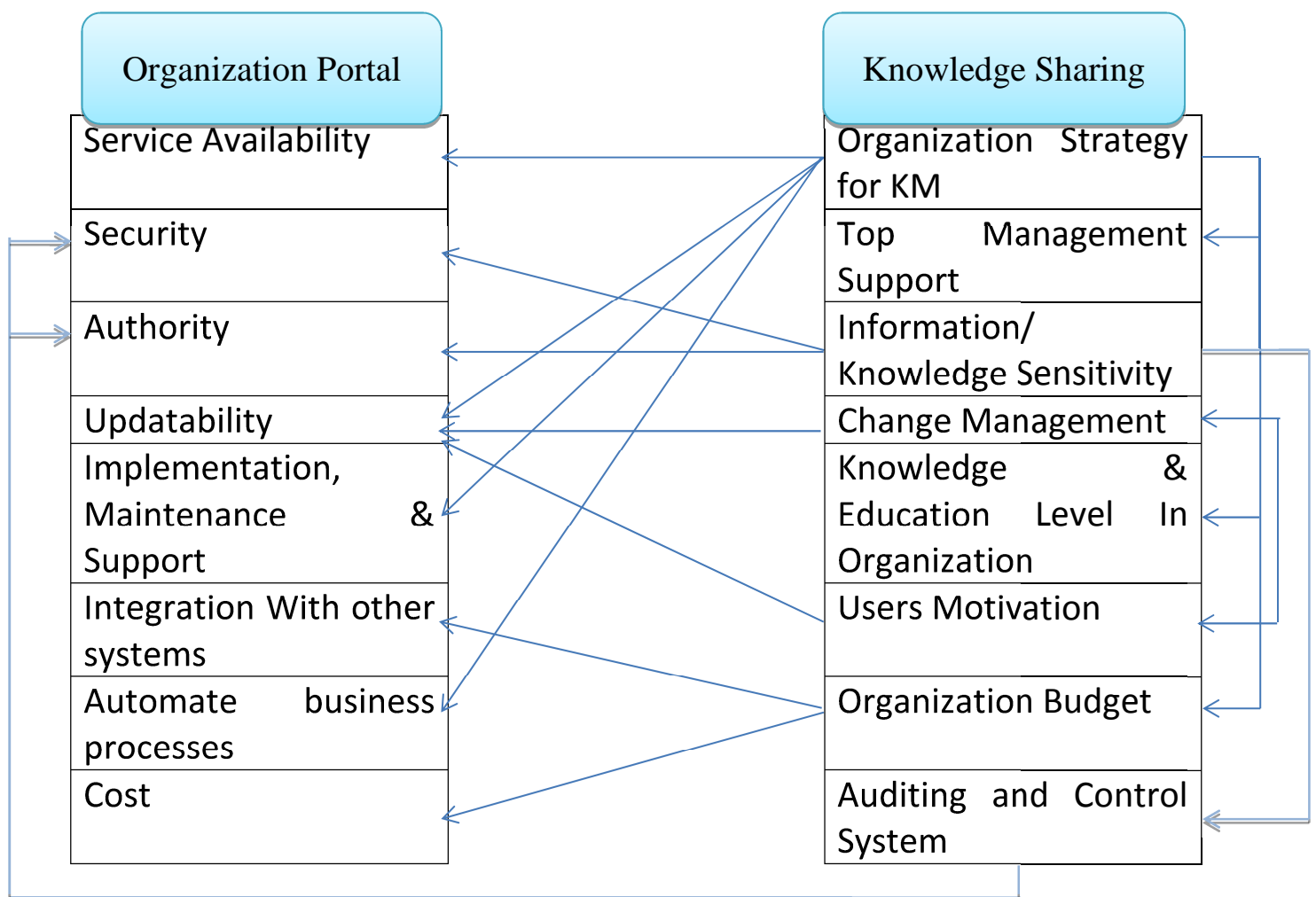
- Collaboration: Team site, clear permissions, Customizing a team site, Linking Calendars to Outlook, Adding Web Parts, Using libraries, lists, and workspaces, Using blogs and wikis to share information.
- Enterprise Content Management: Document management, Records management, Protecting files, Using workflows, Creating and publishing Web pages, Improving compliance and support litigation discovery.
- Search: Finding files, Web sites, information and people.
- Portals and Personalization: Creating My Sites, Targeting content to specific audiences, managing access to your My Site.
- Business Processes and Forms: Streamlining business processes with forms and workflow, Gathering information with browser-compatible forms, designing custom workflows using SharePoint Designer.
- Business Intelligence: Sharing Excel workbooks as interactive reports, working with a Report Center site, Using dashboards to drive decisions, Understanding Filter Web Parts, Integrating external data.
- Provides a secure, scalable, enterprise portal built with WSS as its core, Manage site content and structure, Search through the entire organization, including content, people, and back-end systems, Target information to specific audiences, Integrate with back-end systems for a fully integrated enterprise solution.

Problem Statement:

Many organizations implemented portals because of aggressive growth and distributed personnel. Most of our organizations face several challenges such as rapid change of business environment, information overload, large scale and distributed of both services and staff. Managing knowledge within the large organization is being recognized as an indicator to show how success of the organization is so as to increase the innovativeness, responsiveness and competitiveness of the organization.

This paper will Investigate for success factors in using portals as a knowledge sharing mechanism in an efficient and effective way to reach the requested information anytime, anywhere to just the authorized people.

Conceptual Model:



Hypothesis:

- A Strategy for knowledge management in organization is very important to be implemented through clear work plan monitored and supported by top management.
- Work plan to implement knowledge sharing in organization should have change management part that includes employee’s motivation and training.

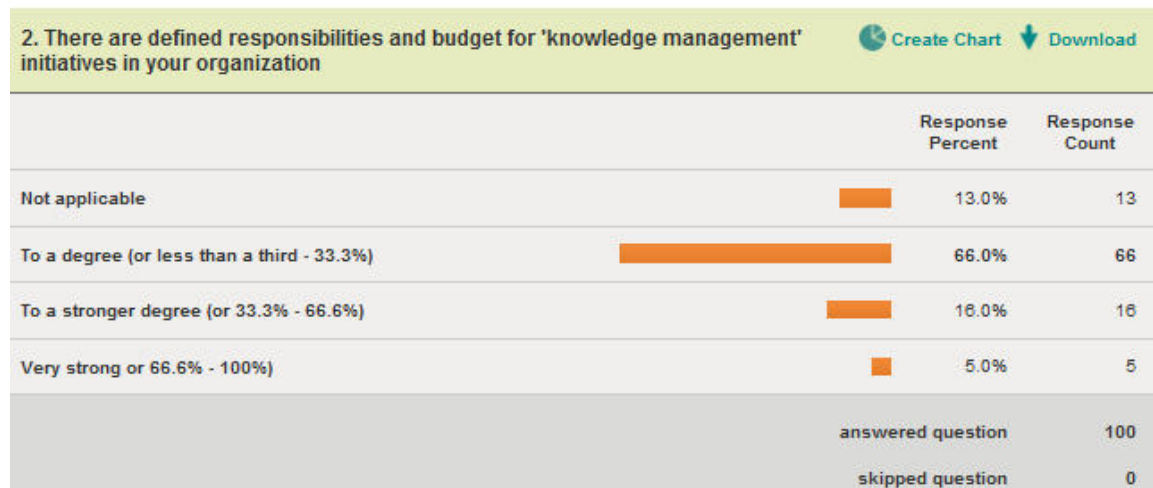
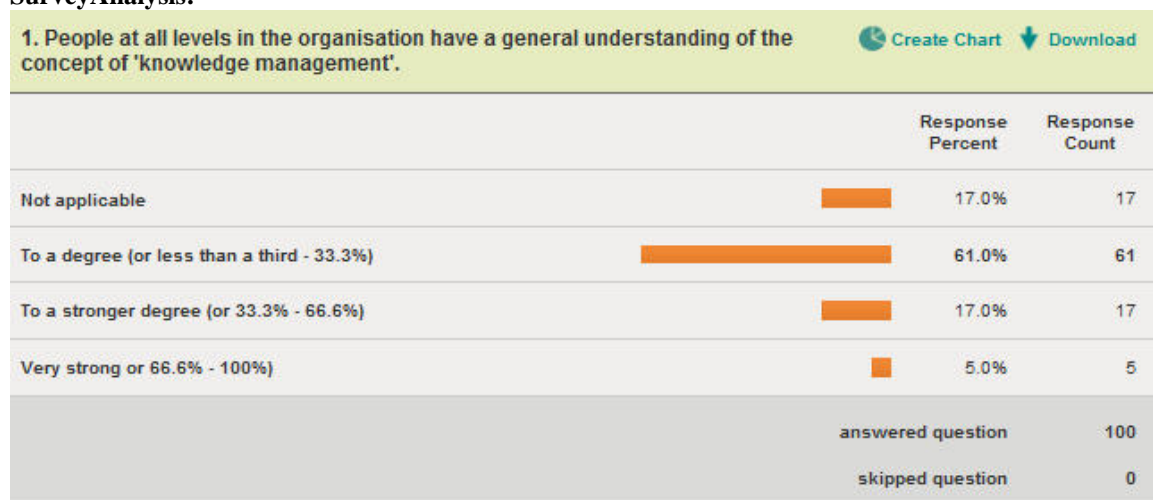
- IT procedures play an important role in portal implementation, Organization portal should be supported by IT people in the organization through these procedures to make sure that the right information are available at the right time to just the authorized people through an auditing/control system that maintain the security and authority issues and to facilitate implement new business processes and integration with other systems through user friendly portal fit with organization budget.

Hypothesis Testing:

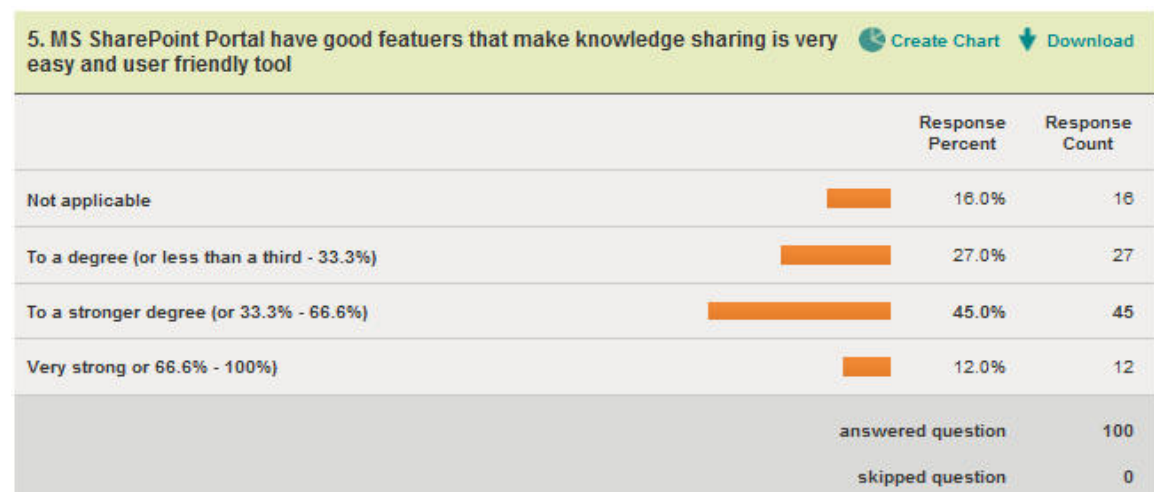
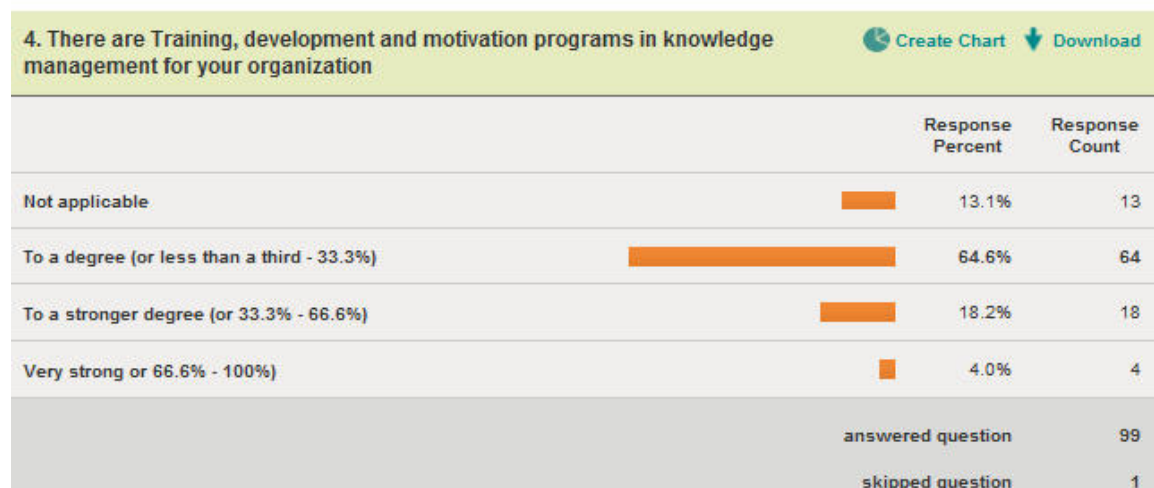
The above hypothesis has tested through a comprehensive survey distributed through employees, managers, IT people and many concerned in the field study through the following link: <http://www.surveymonkey.com/s/9HST92N>

Many ways have been considered in distribution and analysis this survey to make sure that there is no any bias and to ensure the accuracy and transparency.

SurveyAnalysis:

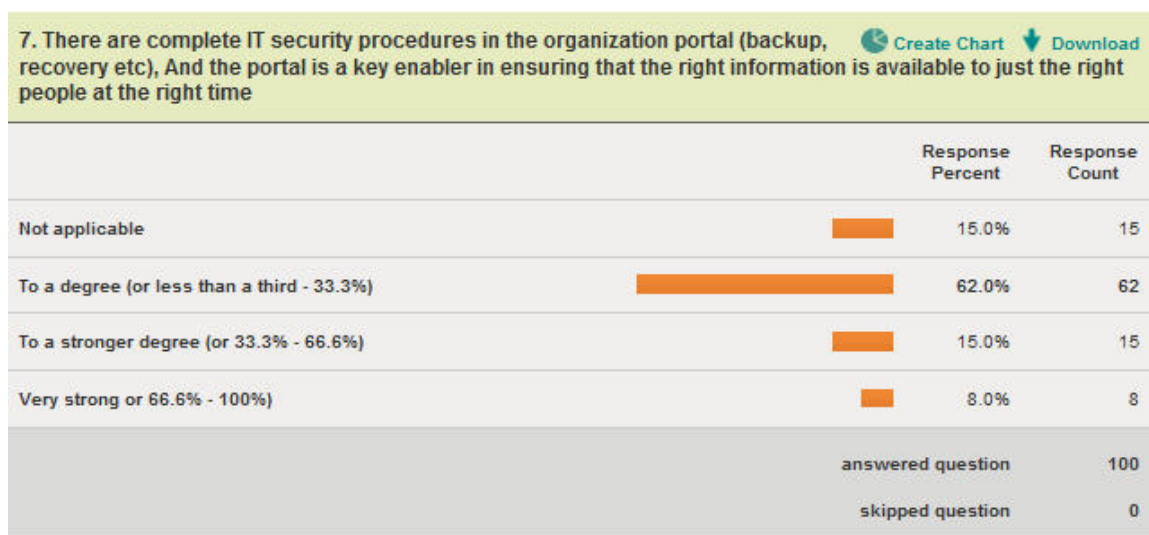
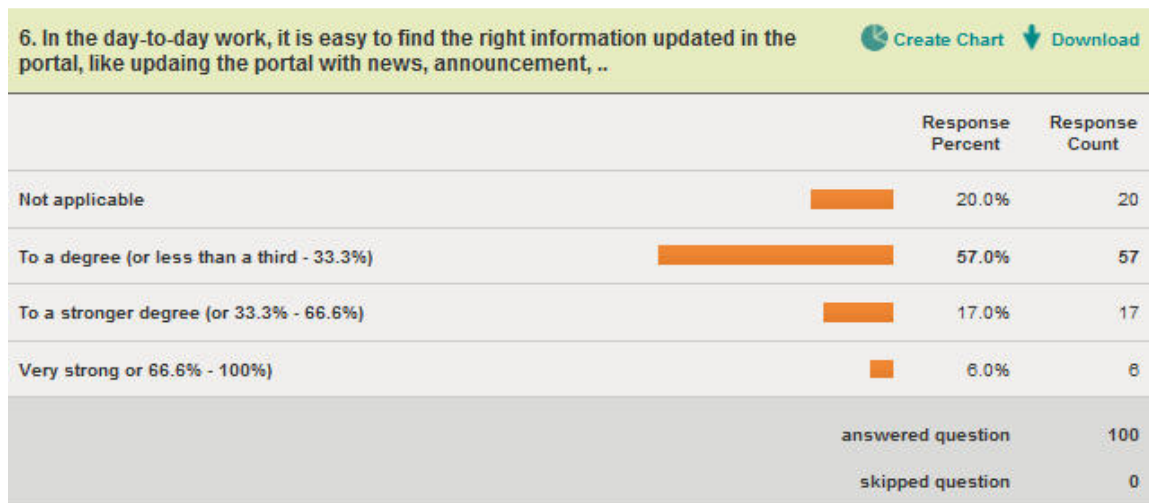


61% from the sample think that the general understanding of the concept of knowledge management is low. This percentage was increased to be 66% they think that level of defined responsibilities and budget for KM initiatives doesn't exceed 33% as percentage.



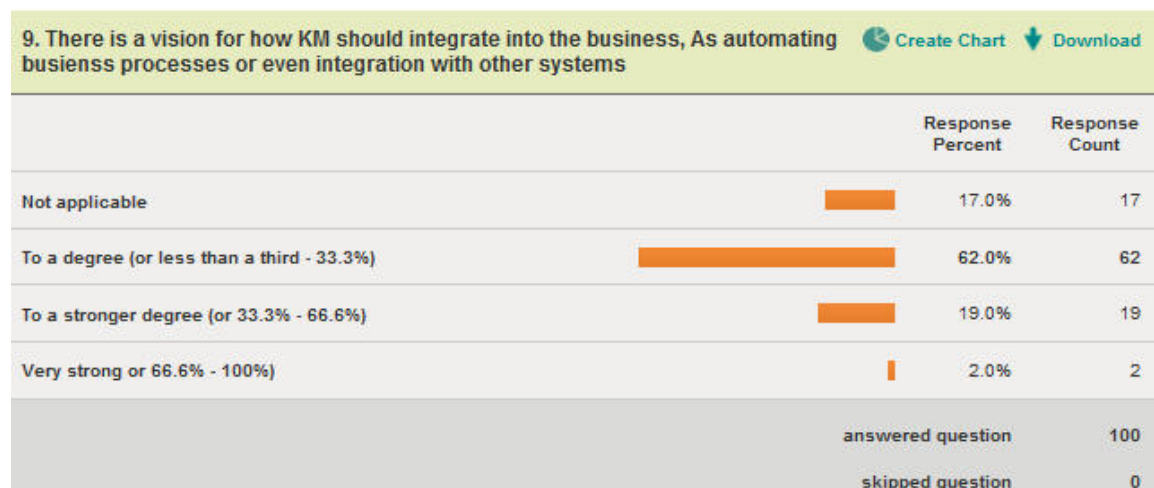
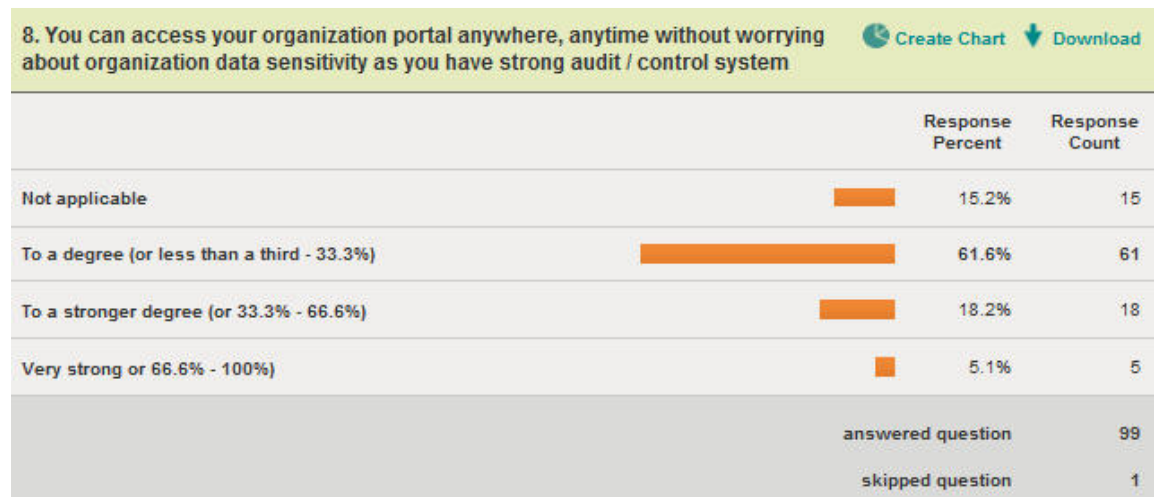
As for Top management support and KM strategy, 58% from the sample think that the level of their support still low and they still doesn't consider KM strategy in their organization. While 64% from the sample blame the weakness of training, development and motivation programs in their organization.

Regarding to use suitable technology like MS SharePoint, as it have good features; 45% from the sample prefer to use this tool to facilitate their work in knowledge sharing and management.



Regarding to portal updatability, 57% from the sample think that it's not easy to find the right information updated in the portal. As for IT security procedures in the organization (For back up, recovery, ..) 62% from the sample think that the procedures are not enough and they are not sure that the right information is available to just the authorized people.

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About accessibility, 61.6% think that the audit control system in the organization not on the degree that makes the user can access his data anywhere anytime without worrying about organization data sensitivity. And finally, 62% from the sample think that organization vision for KM is still weak as it doesn't integrated with business processes and other systems.

Conclusion:

The results from survey analysis help us in investigate the success factors in using portals as a knowledge sharing mechanism, and to focus on the factors that ensure excellent implementation for the portal in knowledge sharing/ management projects.

The main Success factors to implement an excellent portal:

- Clear vision and Strategy for KM in the organization supported by top management.
- KM culture and Clear understanding for knowledge sharing and its importance.
- Work plan and change management plan for motivation and user training.
- Predefined budget for KM to allow implementation the suitable portal tool.
- Strong IT procedural in organization to make sure that the service is available and there is an auditing/control system to maintain security, authority and privacy issues.
- Using suitable technology like MS SharePoint, as its user friendly tool, much related to MS office, integrated with other systems, have an excellent features support KM.

Future Work:

To make sure excellent implementation for the portal in the organization, some important success factors should be considered as discussed above. For the future work:

The above success factors should be reviewed to measure its effectiveness through predefined key performance indicators (KPI's).

Recommendations:

Organization should be aware of Knowledge management importance; it should have clear vision and strategy for KM in addition to get top management support and commitment.

Change management plan is needed to motivate the users and training them on how to use the portals and how to share their knowledge.

IT procedures are needed with full auditing control system that maintains privacy and security issues.

Organization should select suitable technology to implement their portal, it's preferred to be user friendly and much related to daily application that people use like MS SharePoint.

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