# **Dissertation Report on**

# **KNOWLEDGE MANAGEMENT SYSTEM**

# **FOR**

# **DELHI SCHOOL OF MANAGEMENT**

# **Submitted By:**

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Under the guidance of: Prof. P.K SURI, Head of DSM



#### **DELHI SCHOOL OF MANAGEMENT**

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# **Certificate from the Institute**

This is to certify that the Project Report titled <u>Knowledge Management System for Delhi School of Management</u> is a bonafide work carried out by Mr. <u>Chandra Shekhar Rawat</u> of MBA 2012-14 and submitted to Delhi School of Management, Delhi Technological University, Bawana Road, Delhi-42 in partial fulfillment of the requirement for the award of the Degree of Masters of Business Administration.

Signature of Guide	Signature of Head (DSM)
	Seal of Head
Place:	
Date:	

## **DECLARATION**

I <u>Chandra Shekhar Rawat</u>, student of MBA 2012-14 of Delhi School of Management, Delhi Technological University, Bawana Road, Delhi-42 declare that Summer Internship Report on <u>Knowledge Management System for Delhi School of Management submitted in partial fulfillment of Degree of Masters of Business Administration is the original work conducted by me.

The information and data given in the report is authentic to the best of my knowledge.</u>

This Report is not being submitted to any other University for award of any other Degree, Diploma and Fellowship

	Name of the student	
Place:		
Date:		

## **ACKNOWLEDGEMENT**

At outset, I would like to thank Prof. P.K Suri for providing me an opportunity to carry out a project of this significance that helped me a lot as far as my area of interest was concerned.

The essence of this project, i.e. its contents have been compiled with help of varied sources of primary and secondary sources, but I would specially like to acknowledge the support, suggestions and feedback received from my Institute Mentor- Prof. P.K Suri, Head of DSM, Delhi Technological University, Delhi

A lot of other people also contributed directly and indirectly and without their help this project would not have seen light of the day, my sincere gratitude to all of them.

## **ABSTRACT**

Knowledge Management is one of the most concerned area in the today's dynamic world, where the generation of knowledge is at all-time high. It is particularly important at those institutions where quality and volume of knowledge is fairly good and of high importance to society, industry or to the institution itself. Preservation of the generated knowledge at any institute has become crucial for future reference and its better utilization.

This project work analyses the need of a knowledge management system at **Delhi School of Management** from the student perspective and suggests a framework for creating a standard Knowledge Management System for the institute considering its requirements and future strategies.

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# **INTRODUCTION**

- Industry Profile
- Profile of organization
- Objectives of the project

#### **Industry Profile**

Business school is a university-level institution that confers degrees in business administration or management. Such a school can also be known as a business college, college of business, college of business administration, school of business, school of business administration, or, colloquially, b-school or biz school. A business school teaches topics such as accounting, administration, strategy, economics, entrepreneurship, finance, human resource management, information systems, marketing, organizational behavior, public relations, and quantitative methods as well as qualitative methods.

There are several forms of business schools, including school of business, business administration, and management

- 1. Most of the university business schools are faculties, colleges, or departments within the university, and teach predominantly business courses.
- 2. In North America, a business school is often understood to be a university program that offers a graduate Master of Business Administration degrees and/or undergraduate bachelor's degrees.
- 3. In Europe and Asia, some universities teach only business.
- 4. In Europe, major business schools are owned by the Chambers of Commerce
- 5. Privately owned business school which is not affiliated with any university.

In India, business courses have gained so much popularity which is evident from the fact that thousands of applicants try for these courses each year and only a handful of them get admission into good institutes.

Quality of education is also improving day by day with the more use of technology and advanced teaching methodologies adopted by business schools.

#### **Profile of the Organization**

Delhi School of Management (DSM) was established in 2009, with Delhi College of Engineering acquiring the University status and upgrading to Delhi Technological University.

DSM envisages at developing distinctive future managers, keeping up with the tradition of DCE (and now DTU) by providing excellent education.

DSM was established with a vision of inculcating the aspiring managers with a penchant for innovation, research, and experimentation. DSM aims at extending the seven-decade long legacy of DCE by developing the "techno-managers", with the ability to manage the highly complex and dynamic global business environment.

In order to train its students to face the challenges of an information and knowledge driven work environment, DSM provides them with the Triple E: Education, Experience and Exposure. DSM strives to inculcate in its students the managerial competence through specialized knowledge and skills, while simultaneously empowering their minds through quality teaching, consultancy, and other professional services in order to fulfill its role of a vibrant and model institution capable of imparting quality education in the area of Management Studies. DSM envisions at developing a knowledge society by providing equitable access to the masses and broadening the span of their participation in the areas of higher education.

The USP of DSM's MBA Programme is its dual specialization. First two semesters focus on developing a strong foundation and right attitude by teaching general subjects of Management.

# Objectives of the Project

- To Study the need of a Knowledge management system at Delhi School of Management
- Suggest a framework for creating a Knowledge management System at Delhi School of Management

The whole Knowledge Management Project of DSM has been divided into three perspectives: Students, Faculty and Researchers.

This project work focuses on the student perspective only, hence, various areas to be covered under this work are –

- 1. Knowledge Management in Placement activities
- 2. Knowledge Management in Student & Alumni information

# FRAMEWORK OF STUDY

Theoretical framework

#### Knowledge Management

Knowledge management (KM) is the process of capturing, developing, sharing, and effectively using organizational knowledge. It refers to a multi-disciplined approach to achieving organizational objectives by making the best use of knowledge.<sup>[1]</sup>

An established discipline since 1991, KM includes courses taught in the fields of business administration, information systems, management, and library and information sciences. More recently, other fields have started contributing to KM research; these include information and media, computer science, public health, and public policy.<sup>[5]</sup> Many large companies, public institutions and non-profit organizations have resources dedicated to internal KM efforts, often as a part of their business strategy, information technology, or human resource management departments. Several consulting companies provide strategy and advice regarding KM to these organizations.<sup>[6]</sup>

Knowledge management efforts typically focus on organizational objectives such as improved performance, competitive advantage, innovation, the sharing of lessons learned, integration and continuous improvement of the organization. KM efforts overlap with organizational learning and may be distinguished from that by a greater focus on the management of knowledge as a strategic asset and a focus on encouraging the sharing of knowledge.<sup>[4]</sup> It is seen as an enabler of organizational learning and a more concrete mechanism than the previous abstract research.<sup>[7]</sup>

#### History

Knowledge management efforts have a long history, to include on-the-job discussions, formal apprenticeship, discussion forums, corporate libraries, professional training and mentoring programs. With increased use of computers in the second half of the 20th century, specific adaptations of technologies such as knowledge bases, expert systems, knowledge repositories, group decision support systems, intranets, and computer-supported cooperative work have been introduced to further enhance such efforts.<sup>[4]</sup>

In the enterprise, early collections of case studies recognized the importance of knowledge management dimensions of strategy, process, and measurement.

Key lessons learned include people and the cultural norms which influence their behaviors are the most critical resources for successful knowledge creation, dissemination, and application; cognitive, social, and organizational learning processes are essential to the success of a knowledge management strategy; and measurement, benchmarking, and incentives are essential to accelerate the learning process and to drive cultural change.<sup>[8]</sup>

In short, knowledge management programs can yield impressive benefits to individuals and organizations if they are purposeful, concrete, and action-oriented.

As the discipline matures, academic debates have increased regarding both the theory and practice of KM, to include the following perspectives:

- Techno-centric with a focus on technology, ideally those that enhance knowledge sharing and creation.
- Organizational with a focus on how an organization can be designed to facilitate knowledge processes best.
- Ecological with a focus on the interaction of people, identity, knowledge, and environmental factors as a complex adaptive system akin to a natural ecosystem.

Regardless of the school of thought, core components of KM include people, processes, technology (or) culture, structure, technology, depending on the specific perspective. Different KM schools of thought include lenses through which KM can be viewed and explained, to include:

- Community of practice
- Social network analysis
- Intellectual capital
- Information theory
- Complexity science
- Constructivism

#### **Dimensions**

Different frameworks for distinguishing between different 'types of' knowledge exist.<sup>[7]</sup> One proposed framework for categorizing the dimensions of knowledge distinguishes between tacit knowledge and explicit knowledge.

Tacit knowledge represents internalized knowledge that an individual may not be consciously aware of, such as how he or she accomplishes particular tasks. At the opposite end of the spectrum, explicit knowledge represents knowledge that the individual holds consciously in mental focus, in a form that can easily be communicated to others. Similarly, content and relational perspectives of knowledge and knowledge management are two fundamentally different perspectives. The content perspective suggest that knowledge is easily stored because it may be codified, while the relational perspective recognizes the contextual and relational aspects of knowledge which can make knowledge difficult to share outside of the specific location where the knowledge is developed.

Early research suggested that a successful KM effort needs to convert internalized tacit knowledge into explicit knowledge to share it, and the same effort must permit individuals to internalize and make personally meaningful any codified knowledge retrieved from the KM effort. [6] Subsequent research into KM suggested that a distinction between tacit knowledge and explicit knowledge represented an oversimplification and that the notion of explicit knowledge is self-contradictory. Specifically, for knowledge to be made explicit, it must be translated into information (i.e., symbols outside of our heads) Later on, Ikujiro Nonaka proposed a model (SECI for Socialization, Externalization, Combination, Internalization) which considers a spiraling knowledge process interaction between explicit knowledge and tacit knowledge. [9] In this model, knowledge follows a cycle in which implicit knowledge is 'extracted' to become explicit knowledge, and explicit knowledge is 're-internalized' into implicit knowledge. More recently, together with Georg von Krogh and Sven Voelpel, Nonaka returned to his earlier work in an attempt to move the debate about knowledge conversion forwards. A second proposed framework for categorizing the dimensions of knowledge distinguishes between embedded knowledge of a system outside of a human individual (e.g., an information system may have knowledge embedded into its design) and embodied knowledge representing a learned capability of a human body's nervous and endocrine systems.

#### **Strategies**

Knowledge may be accessed at three stages: before, during, or after KM-related activities. Organizations have tried knowledge capture incentives, including making content submission mandatory and incorporating rewards into performance measurement plans. Considerable controversy exists over whether incentives work or not in this field and no consensus has emerged. One strategy to KM involves actively managing knowledge (push strategy). In such an instance, individuals strive to explicitly encode their knowledge into a shared knowledge repository, such as a database, as well as retrieving knowledge they need that other individuals have provided to the repository. This is commonly known as the Codification approach to KM.

Another strategy to KM involves individuals making knowledge requests of experts associated with a particular subject on an ad hoc basis (pull strategy).<sup>[10]</sup> In such an instance, expert individual(s) can provide their insights to the particular person or people needing this. This is commonly known as the Personalization approach to KM.

Codification focuses on collecting and storing codified knowledge in previously designed electronic databases to make it accessible to the organization. Codification can therefore refer to both tacit and explicit knowledge. In contrast, the personalization strategy aims at encouraging individuals to share their knowledge directly. Information technology plays a less important role, as it is only supposed to facilitate communication and knowledge sharing among members of an organization.

Other knowledge management strategies and instruments for companies include: [10]

- Rewards (as a means of motivating for knowledge sharing)
- Storytelling (as a means of transferring tacit knowledge)
- Cross-project learning
- After action reviews
- Knowledge mapping (a map of knowledge repositories within an Organization accessible by all)
- Communities of practice

- Expert directories (to enable knowledge seeker to reach to the experts)
- Best practice transfer
- Knowledge fairs
- Competence management (systematic evaluation and planning of competences of individual organization members)
- Proximity & architecture (the physical situation of employees can be either conducive or obstructive to knowledge sharing)
- Master-apprentice relationship
- Collaborative technologies (groupware, etc.)
- Knowledge repositories (databases, bookmarking engines, etc.)
- Measuring and reporting intellectual capital (a way of making explicit knowledge for companies)
- Knowledge brokers (some organizational members take on responsibility for a specific "field" and act as first reference on whom to talk about a specific subject)
- Social software (wikis, social bookmarking, blogs, etc.)
- Inter-project knowledge transfer

#### **Motivations**

There are a number of claims as to the motivations leading organizations to undertake a KM effort. [11]

KM efforts can bring long term benefits in an organization. However, various realized benefits are listed below.

- Achieving shorter new product development cycles
- Facilitating and managing innovation and organizational learning
- Leveraging the expertise of people across the organization
- Increasing network connectivity between internal and external individuals
- Managing business environments and allowing employees to obtain relevant insights and ideas appropriate to their work
- Solving intractable or wicked problems

- Managing intellectual capital and intellectual assets in the workforce (such as the expertise and know-how possessed by key individuals)
- Making available increased knowledge content in the development and provision of products and services

# RESEARCH METHODOLOGY

- Need of the Project
- Scope of the Project
- Data Collection
- Tools for Analysis

#### Need of the Project

<u>Delhi School of Management (DSM)</u> is one of the premier management institute in India. DSM continuously analyses and revises its processes as a part of its strategy. To make good sustainable strategies from education perspective, DSM need to assess its processes according to the best practices in Industry and relevant to the Organization.

Knowledge Management System (KMS) will help DSM in managing its knowledge base for future use and also in executing the work more efficiently. A good Knowledge Management System increases the availability, productivity and quality of the Organization by capitalizing on intellectual and knowledge assets.

The project involves assessment of Knowledge assets, knowledge generation process & knowledge Management to bring improvement in quality and distribution of the knowledge.

There are several aspects on which knowledge management can be practiced but from the Educational Institutes perspective and particularly business School point of view, the focus areas gets narrowed down to some essential areas. Areas like placement activities, study material sharing events-work and Knowledge Asset distribution (research work, Surveys, White papers, term papers, summer/winter/ reports) requires KMS.

This project will include a study to find out some of the priority areas from a Knowledge Management point of view. After finding the priority areas, guidelines and framework are being provided to create a KMS for DSM.

## Scope of the Project

The general aim of the project is to suggest a framework for the development of a Knowledge Management System in DSM. The whole Knowledge Management Project of DSM has been divided into three areas: Students, Faculty and Researchers.

This project work focuses on the student perspective only, hence, various areas to be covered under this project are –

- 1. Knowledge Management in Placement activities
- 2. Knowledge Management in Student & Alumni information

So, the scope of the project is DSM only. Processes and functionalities of the DSM are being included in the project

#### **Data Collection**

Collection of data is the essential part of any project. Data is collected from various primary and secondary sources. View of stakeholders and their opinion are gathered and then analyzed to reach to a conclusion which helped in providing solution.

In this project work, data is collected from student survey, observation, interviews and discussions. Both primary and secondary types of data have been used in the project.

#### **Primary Data:**

Primary data has been collected by conducting surveys, discussion and interviews. This type of data is purely qualitative in nature. A survey is conducted among the students of the DSM to know the current existing practices of knowledge sharing.

#### **Secondary Data:**

Secondary data has been collected from various industry reports, research papers and literatures available in public domain.

#### **Research Instrument:**

Google analytics is used to understand the data gathered through survey. It provides a good insight of the data which is really helpful.

Another instruments used for research is discussions and brainstorming. Because of its flexibility, it is a common instrument used to collect primary data. The main purpose of discussion was to know the functionality of the Knowledge Management System and issues related to it. Moreover, its features and limitations are also discussed which will be useful in better handling the current situation and can show vision to handle the future challenges.

# **ANALYSIS**

- Data Analysis
- Current Practices

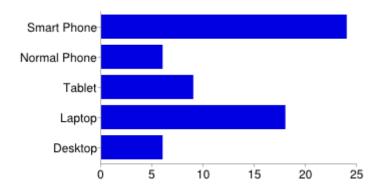
## **Data Analysis**

Responses to the questionnaire are collected from students of DSM through an online survey tool. Responses from both  $1^{st}$  and  $2^{nd}$  year students are collected so as to get the uniformity in students' responses.

Google Docs is used to create an online questionnaire, which collects the responses in an MS excel format which is easy to import and export for analysis.

Below are the questions asked to the students and their reposes in an aggregate form:

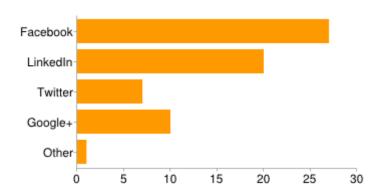
#### 1. Which devices you are using currently?



Smart Phone	24	38%
Normal Phone	6	10%
Tablet	9	14%
Laptop	18	29%
Desktop	6	10%

**Analysis**: It shows the usage of advanced technology among the students of DSM. It also provides a clue about the various possibilities for rendering the services of KMS to multiple platforms like smart phones, laptops or tablets. KMS can be designed for multiple devices for better service accessibility and availability.

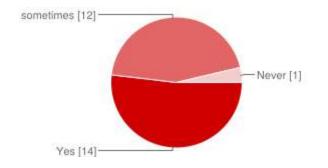
2. Select the social networking websites on which you are active.



Facebook	27	42%
LinkedIn	20	31%
Twitter	7	11%
Google+	10	15%
Other	1	2%

**Analysis**: Presence of students in various social networking websites, it can be utilized for better networking of students with the Knowledge management system and showcasing the brand of DSM to multiple networks.

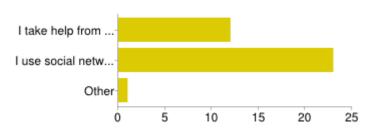
3. Do you use your social networking credentials (login & password) to avoid registration process of any website?



Yes	14	52%
sometimes	12	44%
Never	1	4%

**Analysis**: To know the preference of students to allow their social network for other purposes. It can also be used for easy registration process in Knowledge Management system.

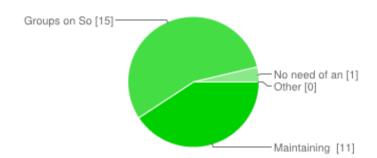
4. How do you find the details of your batch mates / Alumni whenever required?



I take help from my friends	12	33%
I use social networking websites to find the person	23	64%
Other	1	3%

**Analysis**: To know the current practices used for getting contact information of other DSM students and Alumni. As the presence at social networking websites is purely voluntarily and choices based, all students and Alumni may not be present in a single network. So, the use of social networking websites for contact purpose is not recommended.

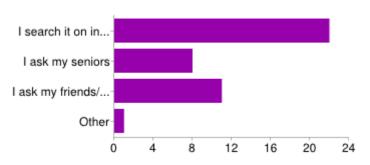
5. According to you, what is the convenient way of getting batch mates/alumna details?



Maintaining a detailed database of all students	11	41%
Groups on Social networking websites	15	56%
No need of any system	1	4%
Other	0	0%

**Analysis**: Preference mode of students for getting contact information of students and Alumni.

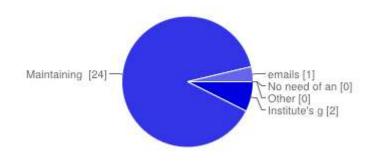
6. How do you get information related to interview-questions/interview-experience/placement-process of companies?



I search it on internet	22	52%
I ask my seniors	8	19%
I ask my friends/acquaintances	11	26%
Other	1	2%

Analysis: To know the existing practice for getting placement related help. This help may include interview question, procedure, company profile and designation offered. Most of the students are using 3<sup>rd</sup> party websites for this purpose which shows the need of such a system exclusively for DSM.

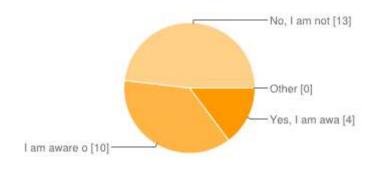
7. According to you, what is the best way of managing placement related details?



Institute's group on Social networking websites	2	7%
Maintaining an online Placement-Help database which is accessible to all students	24	89%
emails	1	4%
No need of any system	0	0%
Other	0	0%

Analysis: Almost all students feel the need of a placement help system at DSM.

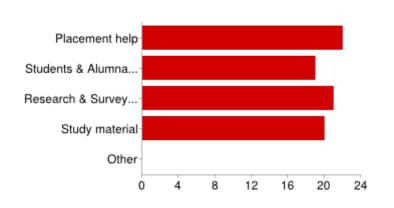
8. Are you aware of the Research/Survey/Project work done by other students of DSM (Batch mates/Juniors/Seniors)?



Yes, I am aware of most of the work	4	15%
I am aware of few of the work	10	37%
No, I am not aware of others work	13	48%
Other	0	0%

**Analysis**: To know the level of knowledge sharing among students and hence the need of a System for this purpose.

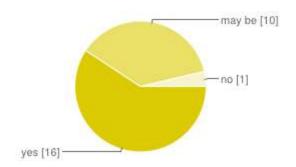
9. According to you, in which areas DSM needs a knowledge management system.



Placement help	22	27%
Students & Alumnae details	19	23%
Research & Surveys work done at DSM	21	26%
Study material	20	24%
Other	0	0%

**Analysis**: Requirement of Knowledge management system by the student, students want to have Knowledge management system in almost all areas uniformly.

10. Would you like to contribute to the knowledge System of DSM? (By sharing & liking it on Social networking websites and by providing valuable content)



yes	16	59%
may be	10	37%
no	1	4%

Analysis: To know the support level of students towards knowledge management initiative.

This data analysis clearly shows the need of a knowledge management system and its acceptability at DSM. By focusing on the implementation of knowledge management in the identified areas, DSM can enhance in its performance delivery and ultimately the quality of education.

#### **Current Practices**

DSM is one of the leading business school in India. It continuously adopts better and efficient practices for providing quality education to its students and creating Brand DSM. It is important for the DSM to study its current practices and bring changes in them if required.

#### **Student & Alumni Database**

In 2013, DSM organized its first alumni meet. The association with its alumni is very helpful for any business school. During the Alumni meet, the need of a systematic alumni database was felt. So, by creating and maintaining a database of all students and alumni will help DSM to be in touch with its students in future and it will also enable its students to have significant industry exposure.

Currently there is no accessible Student & Alumni database provided to the students which sometimes makes it difficult to contact other students or alumni directly.

There are some groups created in Social networking websites like LinkedIn and Facebook which are still not a sustainable system to get full benefits of Alumni base as profiles making in such websites is voluntarily and choice depended exercise.

#### **Study Material Sharing**

The existing methodology of teaching in DSM involves:

- Presentations using PowerPoint slides
- Discussion on cases in the form of hard & soft copy
- Assignment submission in both forms (soft and hard copy)
- Sharing of study material between faculty and students is done either in offline mode or through emails attachment.
- Sharing of study material among students is done by creating a drive on third party server (Google or Microsoft drives)

Sharing study material through 3<sup>rd</sup> party websites is convenient but the benefit of the study material cannot be passed to the subsequent batches and creates ownership issues.

#### **Placement Preparation**

There is no systematic placement help mechanism available in DSM. Individual and group efforts are taken to prepare for the placement. Interview experiences and exams details are shared with the student verbally and not stored or recorded anywhere for future reference.

Placement information between subsequent batches is passed in a personal one-to-one method and which may get broadcast through friend circles. Further, Company profiles, selection procedure and JDs are shared through emails.

# KNOWLEDGE MANAGEMENT FRAMEWORK

- KM Framework Design
- KM Architecture

# **Knowledge Management Framework**

The need of an integrated Knowledge management system is apparent in DSM. With a Knowledge management framework, KM can take on the aspects of other management systems, and be made part of normal business, rather than relying on a disparate set of tools.

A Knowledge Management Framework ensures that all the necessary parts of KM are in place and interconnected. Various parts of KM are:

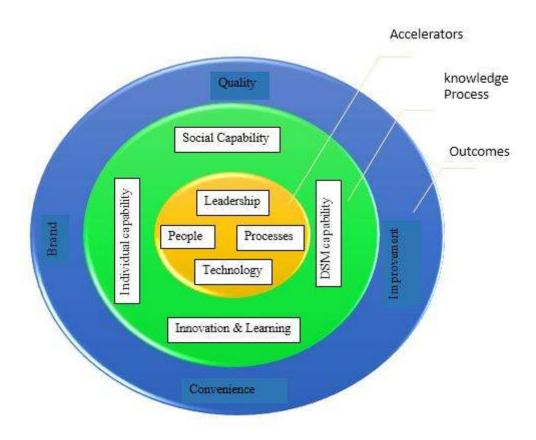
- **Accountabilities** With no accountabilities, it is nobody's job.
- **Processes** With no processes, nobody knows how.
- **Technologies** With no technology, nobody has the tools.
- Governance With no governance, nobody see the point.<sup>[11]</sup>

Elements of the Knowledge Management Framework need to not only work together, but also work with the existing infrastructure, systems, technologies and capabilities of its users. So, Knowledge Management Frameworks are always tailor made after studying the system and there is no standard framework which can fit all the systems.

In case of DSM, the framework has to be according to the needs and culture and should contribute towards the goals and mission of the DSM.

## **KM Framework Design**

KM Framework has been divided into three layers. The interior most layer is the group of accelerators. Middle layer comprises of knowledge process and outer layer identifies benefits of the system.



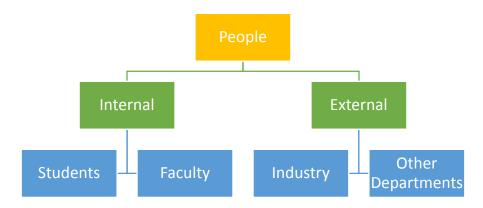
Knowledge Management Framework for Delhi School of Management

#### **Accelerators**

Accelerators will be accountable for running the knowledge management practice across the organization. These accelerators are People, Technology, Process and Leadership.

#### (i) <u>People</u>

People will include internal people and external people. People are the human interface of the system and are the primary users of the KM system. Maintaining the system is the responsibility of the people. Almost every content of the system will be provided by the people and will also be used by the people only.



#### (ii) Technology

Technology will include the prevalent technological capabilities available to most of the users. It will include the consideration of the technological familiarity level of all type of user while creating the KM system. However, there should be flexibility in the technological aspect of the system so as to make it favorable to all types of users.

#### (iii) Process

Processes will include solution to those existing practices for which Knowledge Management has been recommended. In this project work, processes will be Student & Alumni Database, Placement Help and Attendance system.

#### (iv) Leadership

The last element of accelerators is Leadership which is required to lead the people so that they remain engaged with the KM's suggested practices to get the maximum benefits. Through visionary leadership governance of the organization can be better done using KM practices.

#### **Knowledge Process**

In this layer of framework, Individual, organizational and social capabilities are used to learning and innovate knowledge management practices. Knowledge management practices are designed exclusively for the organization in focus and may not be suitable for other organizations. This layer needs more engagement from the users of the system.

#### **Outcomes**

Outcomes are the benefits expected by implementing a knowledge Management System. For an education institute the outcomes are different when compared to the outcomes expected in case of corporates. In case of educational institute, the main mission of Knowledge management is the knowledge sharing and making the life of students better by organizing the crucial information.

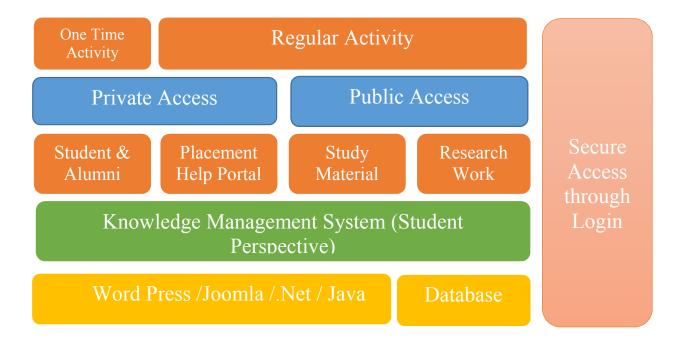
Various outcomes expected from the Knowledge Management are:

- Improvement in the quality of the education
- Convenience to the Students in find information & knowledge
- Improvement in the management process by bringing efficiency through KM practices
- Strengthening of Brand DSM by leveraging the Knowledge base to outsiders

# **Knowledge Management Architecture**

Architecture of any system provides the technical and functional aspect of the system. In Knowledge Management system architecture the lowest level is the technological part and suggests the programming languages and database for the system.

On the top of technological layer, the logical part of the system is defined which comprises of various modules and their specification.



Modules covered under this project are Student & Alumni system and Placement Help system.

**Student & Alumni System** creation will be a onetime activity and can be carried out by allowing new students to fill their detail information in to the system. It should get reflected in the system as soon as it is entered. Moreover, the Alumni system can be integrated with the professional social networks which will provide a better connectivity and interrelated system.

**Placement Help** System is a high involvement practice in which timely responses & feedback has to be collected from students sitting in company placements. It will require efforts from the Placement-team to instruct candidates to fill the response after the placement process of a company get complete. Placement-Help System can be linked with the 3<sup>rd</sup> party placemen portals for detailed information and experiences of outside candidates.

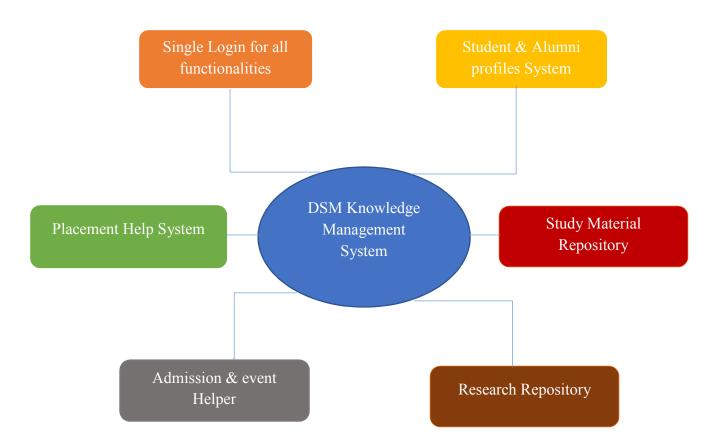
Both these systems are for the internal use of the students of DSM. Hence secured login mechanism has to be given to access the system.

# SYSTEM DESIGN

- Abstract View & Core Processes
- Student & Alumni System
- Placement Help System

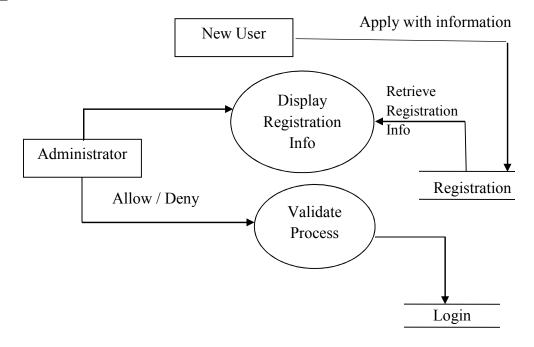
## **Abstract View**

Abstract view of the system represents all the modules of the system in a single view. It is the highest level of the system description.

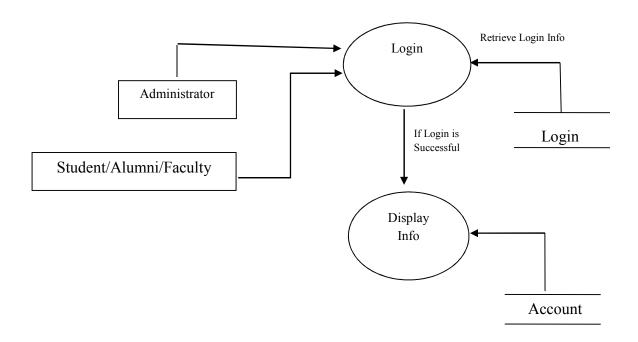


## **Core Processes**

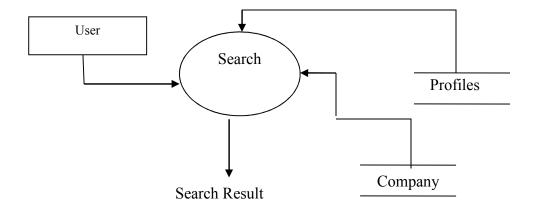
## Registration



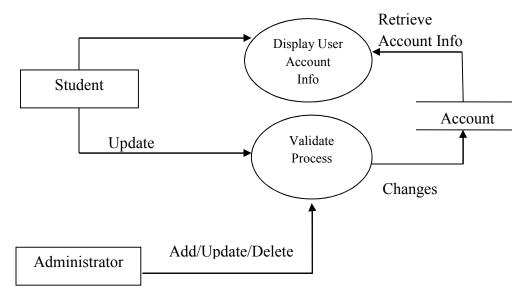
#### Login



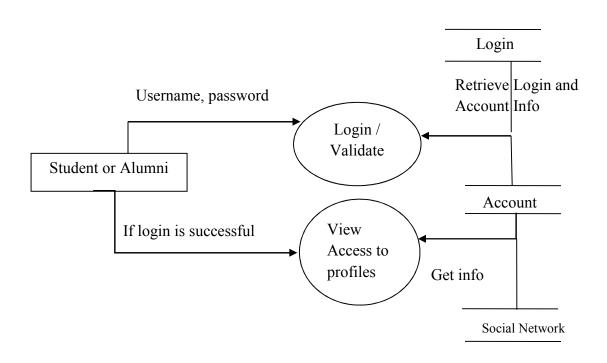
## **Search**



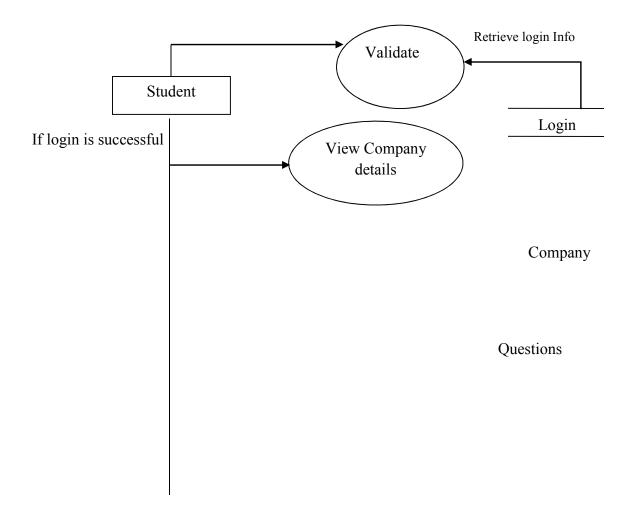
## **Account/Profile Maintenance**



## **Student & Alumni Module**



## Placement Help



# IMPLEMENTATION STEPS

• Implementation

## **Implementation**

Implementation of Knowledge Management System (KMS) needs diligent efforts from its stakeholders. People are the crucial part of any KMS as it facilitates the content provided by the people and without content a KMS would remain just a computer application.

Following steps should be followed for the smooth implementation of the KMS.

- 1. **Knowledge Audit Review**: Knowledge Audit done for the KMS should be studied thoroughly before initiating the implementation of the system. If there is significant gap of time between the Knowledge Audit and implementation then a new Knowledge Audit should be carried out to know the correct status of Practices and Processes.
- 2. Framework & Architecture Study: After knowing the status of Knowledge in the Organization, Framework & Architecture should be studied. It will help the implementer to decide the technical and functional specification of the system.
  Moreover, the work of creating the system can be divided according to the modules and functionality.
- 3. **Team building**: Following Teams should be build according to the availability and the capability of the resources.
  - UI Designing Team (Front-End design)
  - Development Team (Programming Team)
  - Testing Team (Functional & Integration Testing)
  - Content development & management Team (generation, collection & distribution)
  - Maintenance Team (Troubleshooting and Up-Time assurance)
  - Monitoring & Follow-up Team (Project planning & monitoring Team)

In the absence of resources, teams can be given more than one responsibility. However, care should be taken in assigning conflicting activities (like Development & Testing) to the same team.

- 4. **Development**: Development work should be assigned by breaking modules into functionality. Each functionality should be developed by the individual developer. Programming language should be selected by considering the availability of the resources. Implementation team can either choose a CMS (like WordPress or Joomla) or Development IDEs (.NET / Eclipse with Java) for developing the system.
- 5. **Testing**: Testing is done to confirm that the system is performing in the expecting way. Functional testing is done to test the functionality of a particular module and Integration testing is done to test the behavior of the combined modules and the overall system.
- 6. **Acceptance Testing**: After the integration testing, Acceptance testing is done with the real users (only few) of the system. Live environment should be created for the users to test the system. Once the Acceptance testing is done, KMS can be handed over to the Organization for making it go live.
- 7. **Training & Change Management**: Training of the users of the system should be done in a proper and consistent manner. Users should be conveyed about the advantages of the system and should be encouraged to use it for the benefit of all. This process should also include the Change Management practices id required.
- 8. **Documentation**: Proper documentation should be done by all the teams involved in the project for future reference. Documents should be stored as per the standard versioning and updated regularly in case of any extension of the service.
  - Types of documents:
  - Development & Testing Plan
  - Installation Guide
  - Training Guide
  - User Guide
  - Troubleshooting Guide

## RECOMMENDATIONS

- Recommendations
- Limitations
- Future Scope

### **Recommendations for KMS**

A Knowledge Management system can perform to its best possible way only when its stakeholders are committed towards it. In this age of information, focus on the management of information, capturing and distribution have become vital for institutes' sustainability.

There are 4 important stages in knowledge management and high care should be taken while dealing with any of these stages. Negligence at any stage would degrade the quality of the content which knowledge management system is supposed to manage.

- Knowledge Creation
- Knowledge Capture
- Knowledge Sharing
- Knowledge Distribution

**Knowledge Creation**: In DSM, Knowledge will be created by the internal members (students & faculty). So, the quality of the content can be expected to be of high quality as it doesn't accepts the content provided by external and anonymous users.

Stages of Knowledge Creation are:

- New Admissions
- Placement Activities

**Knowledge Capture**: The most convenient way of capturing knowledge is to capture it when it is generated. Knowledge worker will also be able to provide the accurate knowledge as there will not be any lost memory issues.

For Student & Alumni system, information can be captured at the time of admissions confirmation and for placement help, it should be captured just after a candidate has finished the selection procedures of a particular company irrespective of the result of the selection process.

#### **Limitations**

Due to the difference in the stakeholder's interests, this project is relevant to the educational context and will not be suitable for corporate KM practices. Moreover, DSM's processes and practices are studied to carry out this work so it may also not be suitable for other educational institutes.

Applicability and acceptability of any system also depends on the people and culture of the organization. The survey carried out in this project determines the view of the users towards the acceptability of a KM system and it's been observed that students of DSM are in favor of a KM system. So, this project is exclusively carried out for the DSM and may not fit for other organizations but methodology and design can be referenced (and modified) for creating a new KM system for other organizations.

## **Future Scope**

DSM is a department under Delhi Technological University and this project focuses on DSM. In future the functionalities can be extended to cover the whole University in an integrated way. Further, new modules can be added to the KM system which are relevant at the university level.

After reaching a stability level in the KM system performance, advanced modules can be added to the system. One of the module is Analytics, it can be applied only after a significant amount of data and information is gathered through the KM system. Analytics can provide useful insights for making the future strategies for the system.

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