Appendix 2.1 Questionnaire Survey:-

INTRODUCTION

Knowledge management (KM) is process that help organization to create organize , store , use and share and expertise necessary for activities such as problem solving , dynamic learning , strategic planning and decision making . **Knowledge Management system** refer to a type of it – based information system developed to include information , documents , knowledge , experience and perception of employees through e- messaging , e -chatting and other tools . The aim of survey is to capture the initiatives for KM and investigate the critical success factor for implementing knowledge management in construction industry. You are kindly requested to participate insurvey. This will not take you more than 15 minutes to complete.

This survey is not aiming to capture any commercially sensitiveinformation. Nevertheless, all information will be treated as strictly confidential with full anonymity to participating organization

INSTRUCTION

This questionnaire ask for your opinion about KM in general and also KM system in your organization

The answer will depend on your own judgment that comes from your experience in this domain

Note : If you don't know or are unsure of how to response . Please leave box plank.

Note : If your company does not practice knowledge management system please go to section 4

SECTION 1: GENERAL INFORMATION

This section seeks general information about and your company. This information is used only toanalyze the results of submitted questionnaires. It will be treated as strictly confidential.

1. Company name

2. Your name (optional)

3. Job title

4. Your location

5. Number of employees

6. How do you best categories your companies

7. When did your company start implement knowledge management >year

SECTION 2 : KM ACTIVITIES , TOOLS , AND PROCEDURES

This section seeks activities procedures and tools of KM in your company

8. Which of the following KM activities and method has implemented or used in your company, and please indicate the level of importance for each activity or method successful KM implementation.

Implementation		
12	**3**	
Not implemented	Prototype or small scale implementation	Large scale implementatio

Importance					
1	**2**	**3**	**4 5**	**6 66**	
Not important at all	Slightly important	Moderately important	Important	Very important	Extremely important

ACTIVITIES & METHODS

A1. System Analysis   IMPLEMENTATION   IMPORTANCE

                                                    1   2   3 1   2   3   4   5 6

1. Conducting questionnaire and or interviews employees
2. Identify business process and procedures

 3. Identifying data & knowledge available and

Important for Organization.

4. Identifying what tools appropriate for KM system

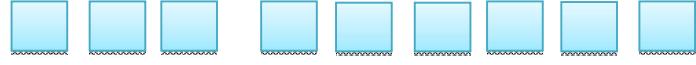## A2. System Design   1   2   3   1   2   3   4   5   6
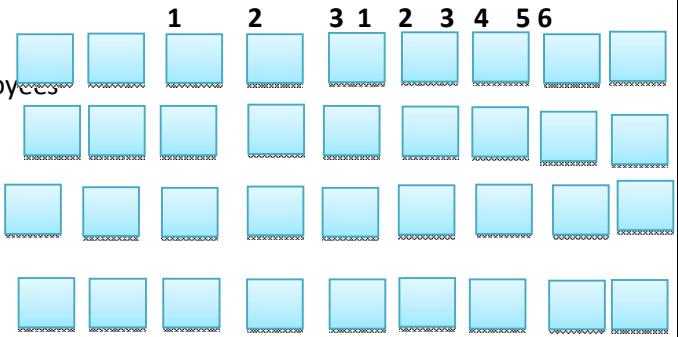
1. Defining aims and objectives for KM .

2. Using KM models to represent KM activities

Method, components.

3. Preparing an action plan and guideline for KM

Implementation.

A3.System Implementation

1. Implementation of a prototype before applying

Wide range KM system.

2. Appointing KM offices to provide training and

Support to employees.

3. Embedding   KM activities into employees work

Processes.

A4. System Maintaining and Monitoring

1. Collecting feed backs from end users regarding

Improvement requirement**.**

2. Observing the differences in operation after

Implementing KM**.**

3. Monitoring the system performance and showing

Bottle necks.

4. Monitoring the environmental factor such as

Management strategy employee's culture and technological factor.

A5.system evaluation

1. Investigating business process improvement

3. Evaluating the system correctness and alignment

With design Specifications**.**

4. Evaluating the system usefulness ease of use

And application.

A6. Knowledge capturing and storing

1. Recording problem solution &experience
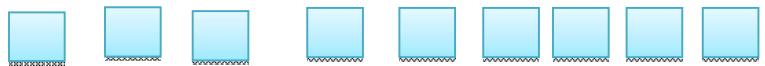
In electronic repository**.**

2. Referring knowledge to its sources

3. Recording new ideas and perception of experts

And engineers.

4. Attachingpictures, video, and text files to clarify

Knowledge content**.**

A7.Knowledge Reusing and sharing

1. Usinginternet to share and transfer knowledge.

2. Using sharing tools to find required knowledge.

3. Showing contact details and experience of employees.

A8.Knowldge reviewing and approving

1. Using internet to publish and edit knowledge
2. Reviewing knowledge contents by experts or
   knowledge team

3. Classifying knowledge to facilitate knowledge

Searchingfunction.

A9.Using database to create data

1. Capturing data and information of projects

In electronic repository.

2. Using data mining, dataanalysis, and reporting tools

3. Recording knowledge and information concluded

By using previous tools.

1. User manual and help desk.

2. Dataminting, analysis and reporting.

3. Document management.

4. Photo and/ or video management.

5. Training and support.

6. Knowledge searching.

7. Knowledge Map.

8. Yellow pages and/or contact details..

9. Subscribing and/or internet password interning

To define authority level

10. E-meeting, messaging, chatting, discussion

Board, forum.

11. Decision support system and or intelligent.

Section 3: critical success factor

This section seek your perception on the importance of factor for successful KM in your company

9. Which of the following statement can be used to describe the KMS in your company? Decide

The level of importance for each statement for successful KMS in general. Please use this scale

Describe your company knowledge system		
1	2	3
Not describing at all	Moderately describing	Extremely describing

Importance					
1	2	3	4	5	6
Not important at all	Slightly important	Moderately important	Important	Very important	Extremely important

Factors

Describing knowledgeimportance

System in your company

    1   2   3   1 2 3   4 5 6

F1.CULTURE

1. Culture that values knowledge seeking

And problem solving.

2. Providing time to employees to perform

Knowledge related activates.

3. Updating employees and other user

About change in KMS.

4. Building up awareness and training

Onuse of kms.

F2.MANAGMENT LEADER SHIP AND SUPPORT

1. Management establishes the necessary

Condition for KM.

2. Leader encourage and support knowledge

Creation,sharing and use.

3. Knowledge managers constantly search

for newApproaches to KM.

4. Development of a km strategy which

Clear objectives andgoals.

5. Sufficient financial resources for

Building up Technological system.

F3.INFORMATION TECHNOLOGY

1. Matching the kms with km objectives

Andusers' needs.

2. Utilization of internet and internet.

3. Ease of use of the technology.

4. Protection knowledge from unauthorized

5. Exposure or being stolen.

6. 5. Ability of system to capture and store

Tacitknowledge.

6. Appropriate categorization and

Updating of knowledge.

7. Application of technological tools.

F4.MEASUREMENT

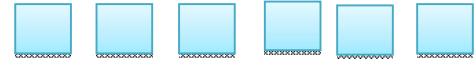1. Measurement benefits per unit

of investment.

2. Mentoring the system performance

and showing bottle neck.

3. Developing indicator for measurement of KM.

F5 ORGANIZATION INFRASTRUCTURE

1. Appointing of km leader and /or km team
   or work.
2. Ensure of sufficient human resource to

Support km initiatives.

3. Specifying activities, tasks and process

For performing km.

4. Specifying roles and responsibilities

for performing km tasks

5. Recruiting and hiring of employees to

fill knowledge gaps

F6 DRIVERS FOR KM

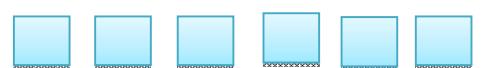1. Buildingup and maintaining employees

2. Sharing employees expertise and perce

3. Identifying internal and or time to solve
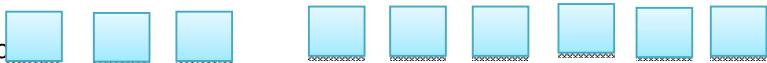
Problem in projects.

4. Enhancing work quality of projects

5. Reducing cost and /or to solve

Problem in project.

6. Providing competitive advantages to

The company.

7. Helping senior engineers and manage

to avoid Many problems cause

8. Presenting accurate and timely

Knowledge to Facilitate decision making.

9. Providing an effective tool to train

Juniorengineer.

10. Enhancing relation and coordination

With customer, Partners and suppliers.

11. Encouraging continuous improvement

and/or new Product and services .
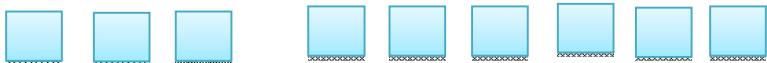
12. Reducing rework and save time of

Solving repeated problem.

F7 . SPECIFICATION OF KM SYSTEM

1. The knowledge system easy to use .

2. It is easy for users to find useful

Information for Problem solving.

3. The system collects knowledge that

Important for organization.

4. The system ignores knowledge that is

not important For the organization.

5. The system facilitate knowledge sharing

6. Between company's employees.

7. The system maintains good

Relationship with Customer and other partners.

8. The role of knowledge team worker

Is very important.

F8. KM barriers and challenges

1. The nature of construction projects (e.g. non repeat

Work, no standard procedure, pressure to complete on

Schedule, changingemployee's different phase).

2. Lack of organization culture for knowledge

Creation and sharing (e.g. build trust among employees

Establish time and place for km transfer provide).

3. Lack of structured procedure and process

to implemented km.

4. Lackthe adoption of well formulated

km strategies and implementation plane .

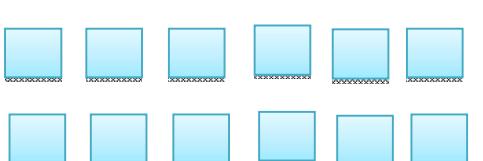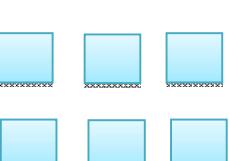5. Lack of knowledge manager or team to

 Implement KM strategy.

6. Lack of awareness of the importance of

 KM organization.

7. Lack of training and support.

8. Lack of technology and techniques for

km capture and sharing

☐ ☐ ☐   ☐ ☐ ☐ ☐ ☐ ☐

9. Lack of leader ship support

10. Lack of recourse in team of a budget,

☐ ☐ ☐   ☐ ☐ ☐ ☐ ☐ ☐

Staff, and it infrastructure.

11. Employee resistance to share knowledge ☐ ☐ ☐   ☐ ☐ ☐ ☐ ☐ ☐

12. Lack of post-projects reviews and

☐ ☐ ☐   ☐ ☐ ☐ ☐ ☐

 Project documentation.

10. To what extent do you consider your company knowledge management effort to

besuccessful?

11. To what extent do you consider the KM activities and critical success factor?

PresentedEelier to successful indescribing thosewhich are

Crucialfor km adoption in construction industry.

SECTION 4: FOR NON-KNOWLEDGE MANAGEMENT ADOPTERS

12. why do you not practise KM in your company (you may tick more than one answer) .

☐ Lack Of Time   ☐ Have Never Hard

☐ Lack Of Financial Resources ☐ Don't Understand

☐ Top Management Does Not Support ☐ Unsure Of Its Potential Benefits

☐ Not Need   ☐ Not Interested

13. Do You Plan To Implement Km In The Future.

Feedback

14. Ifyou're interested to be contacted for follow up short interviews, please tick this box.

15.if your company is intersted in participating in the research case study ,please tick this box .

16. If your require summary of the fuinding of this survey, please tick this box.

17. if you ticked any of the feedback question ,please enter your email address and or contact details .

Other comment

(Please Use The Space Provided To Reflect On How To Improve Km In Construction Industry)

THANK YOU VERY MUCH FOR YOUR VALUABLE TIME AND CONTRIBUTION TO THIS SURVEY.

ALL RESPONSES WILL BE TREATED ANONYMOUSLY.