A research on knowledge management Key Performance Indicators and its effect on employee behaviour to share knowledge and the impact on organization performance in organization in the UAE

بحث حول قياس مؤشرات الأداء في إدارة المعرفة وتأثيرها على سلوك الموظف في نشر المعرفة وتأثير ذلك على أداء المؤسسات في دولة الإمارات العربية المتحدة

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Dissertation submitted in partial fulfillment of

MSc Project Management

Faculty of Business

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March -2011
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Acknowledgement

I would like to thank Allah for all his blessings, my parents for continues encouragement to peruse my post graduate study, my wife for her support and my supervising professor for his guidance and advice. I would like to make a special thanks to Mr. Osman Sultan, du’s CEO for his support.
Abstract

Knowledge management system is a powerful management tool which enables organization to manage intellectual assets in the best possible way; people are the creators of knowledge and the ones responsible for sharing it within the organization. The purpose of my research is to examine the effect of implementing a Knowledge management (KM) key performance indicators (KPI) on influencing employee behaviour to share knowledge and it affect on organization performance. The research methodology is a combination of quantitative and qualitative approaches were survey was conducted to five organizations in the UAE, the data collection consisted of interviews with strategy makers and a questionnaire to employees in those five organization. The research findings show, the majority of employees in five organizations have a positive perception towards knowledge management and its effect on organization performance. Moreover the conducted interviews indicated that one organization had successfully implemented a full scale KMS and in process of implementing KM KPI’s for their employees, the rest of the organization have implemented some KM initiatives and have seen a slight improvement in team performance . This is one of the first papers in the UAE which indicates the benefits of incorporating KPI’s in KM and showing the factors influencing employee behaviour to share knowledge and the effect on organization performance.
ملخص البحث

إن منظومة إدارة المعرفة تعد أقوى أدوات الإدارة التي تمكن المؤسسات من إدارة الأصول الفكرية بأفضل طريقة ممكنة. إن الإنسان هو صانع المعرفة وهو المسؤول عن نشر هذه المعرفة في المؤسسات.

إن الهدف من هذا البحث هو الاطلاع على تأثير مؤشرات قياس الأداء على إدارة المعرفة و علاقتها بسلوك الموظفين في نشر المعرفة وتأثير ذلك على أداء المؤسسات في دولة الإمارات العربية المتحدة.

إن منهجية البحث تعكس أن جمعت بين النهج الكمي من خلال المسح الذي تم في جهات حكومية و خاصة والموجه النوعي الذي تم من خلال المقابلات مع صانعي الإستراتيجية في هذه الجهات.

إن نتائج البحث تؤكد أن غالبية الموظفين في الجهات التي شملها المسح مقتنعين بأن إدارة المعرفة من شأنها أن تحسن من أداء مؤسساتهم وشركاتهم. بالإضافة إلى ذلك، فإن من خلال المقابلات التي أجريت تبين إن اتخاذ هذه المؤسسات قرار بإطلاق نظام إدارة المعرفة في المؤسسة وهي في حال لدعم نظام قياس إدارة المعرفة، أما بالنسبة للمؤسسات والشركات المتبقية فإنها قامت بتطبيق بعض المبادرات تتعلق بإدارة المعرفة والتي كان من شأنها أن تحسن من أداء فرق العمل في تلك المؤسسات والشركات.

إن هذا البحث يعد أولى البحوث في مجال قياس مؤشرات الأداء لإدارة المعرفة في دولة الإمارات العربية المتحدة وان من شأن هذا البحث أن يوضوح الفوائد من تطبيق قياس مؤشرات الأداء على سلوكي الموظفين لتسهيل أداء الشركات.
Chapter 1

1.1 Background

Many organizations in the UAE recognize the importance of Knowledge Management (KM) as a management tool to maintain competitive advantages and be in the forefront, nevertheless not many organization were successful in maximizing their efficiency of KM initiatives and translating it improvement to organization success. One of the critical success factors of any KM initiative is promoting knowledge sharing within organization. Procuring computes and creating knowledge base is relatively a simple task if we compare it to influencing employee behavior to share knowledge. HH Sheikh Mohammed bin Rashid Al Maktoum (2008) indicated that knowledge sharing is one of the obstacles which are facing Knowledge management initiatives in the Arab world and in the UAE; this is quite a challenge to organizations in the Arab world as well as organizations in the UAE.

“*The challenge facing the region currently is not only restricted to the lack of knowledge, but goes beyond it as there are graver problems associated with providing the right atmosphere for building knowledge and equipping the right people with proper tools to embrace it,***”

HH Sheikh Mohammed bin Rashid Al Maktoum

At an organization level, it is extremely difficult to convince employee to share knowledge with their colleagues and allow it to be spread in organization, there are many reasons which prevents employee from doing so. Knowledge is perceived as power and it provides certain prestige to its holder, asking them to give it away for no return will result in no knowledge sharing. However when attempting to understand what would help facilitate knowledge sharing in organization.
This dissertation will not deal with lack of knowledge sharing on the Arab region level, but it will help to understand what factors affect knowledge sharing at individual level in public and semi private organizations in the UAE.

1.2 The Importance of Measuring Knowledge Management in Organizations

The purpose of creating a Knowledge Management (KM) in organization is to manage the intellectual properties, this include the creation, transfer, sharing and utilization of knowledge itself to achieve organization strategic and business objectives. Nevertheless as knowledge is classified as intangible assets, it would not be easily to measure it directly. A number of organizations in Europe and US were able to measure knowledge management via creating a special set of performance measures. Those KPI’s will measure both the organization performance and individual performance in managing knowledge.

Furthermore KPI are used in influence the behaviour of individuals in organization, in this research I will examine how knowledge management KPI would affect employees behaviour to share knowledge within their organization with their colleagues and subordinates.

1.3 Employee Behaviour & Knowledge Sharing in the UAE Organization

Employee behavior to share knowledge is governed by a number of factors; those factors are a combination of intrinsic and extrinsic which affect employee response toward sharing knowledge with their colleagues and subordinates. This research will examine both intrinsic and extrinsic factors which will influence employee behavior to share knowledge in organization in the UAE. I will take into consideration also the effect of having a performance measure system to evaluate knowledge management systems.

1.4 Research Aim & Objective
Aim
The aim of this dissertation paper is, to examine if there is a relationship between knowledge management KPI and influencing employee behavior to share knowledge and how would it affect organization performance.

Objectives
Specific objectives of the study are to:

1- Investigate the factors that influence employees behaviour in sharing knowledge in organization in UAE

2- Examine how knowledge management specific KPIs may influence employee behaviour to share knowledge in organization in UAE

3- Examine the impact of having KM KPI and Sharing knowledge on organization performance

1.5 Structure of the dissertation

The structure of this dissertation consists of five chapters as indicated below:

Chapter one contains background on the topic of the dissertation, followed by highlighting the importance of knowledge management to organization in the UAE; then the research aim and objectives.

Chapter two states the literate review of the research; it defines knowledge, knowledge management and key performance indicators. Then the literature addresses the importance of knowledge management to organizations in term of managing organization intellectual assets, risk management and innovation. Following that knowledge management Key performance
indicators for major organization are listed and how did this benefit those organization in terms of improving the overall revenues and reducing the cost.

Following that Knowledge sharing is described and the factors which affect individual behaviour to share knowledge finally the research model was demonstrated.

**Chapter three** indicated the research methodology used in this dissertation and the rational of using a combination of questionnaire and interviews to collect the data.

**Chapter four** will indicate the interview question, interview procedure and the questions and answers during the interview. Then the questionnaire questions, a summary table showing the results of each organization.

**Chapter five** reveals the research data analysis and data discussion

**Chapter six** will state the conclusion and recommendation for organizations in the UAE to promote knowledge sharing within organization via selecting and designing specific knowledge management KPI and influencing employee behaviour to improve organization performance.

In the next chapter I will review a number of literatures and explore the relationship between implementing key performance indicators to knowledge management and how this affect employee behavior to share knowledge in organization would and how is that going to improve organization performance.
Chapter 2 Literature Review

2.1 Introduction

The purpose of this research is to examine how a set of Knowledge management Key Performance indicators influence individual’s behaviour in sharing knowledge within organization in the UAE and what effect it will have on organization performance.

In this section I will be examine the literature that has addressed the effect of knowledge management system( KMS) key performance indicators (KPI) on influencing individual behaviour to share knowledge and how would affect overall organization performance in the areas of customer intimacy, product innovation and operation excellence.

Knowledge management success depends highly social- technical interaction between technology and organization elements Lin & Lee (2005). Technology will be the platform to support the storage and access of the knowledge; social elements will deal with the human factor and what affect knowledge sharing within individuals in organization.

While performance itself is a useful matrix, the ultimate measure of value is the ability to support an organization’s competitive strategy. This especially applies to KM, as knowledge has been considered to be organization’s most strategic resource (Zack et al 2009). Nevertheless organization need to measure knowledge to manage it properly, having a performance measure for knowledge management will improve the management of knowledge and would ensure outcomes are delivered and will avoid its failure.

To obtain improvement in organization performance, implementing KM KPI and influencing individual behaviour to share knowledge would affect organization performance in the areas of customer intimacy, operation excellence and product innovation.

Customer intimacy, will reflect how satisfied the customer by the product or service, this will include after sale care, product or service innovation is the innovation to create new product or
services to increase market share and finally operation excellence is maximum efficiency and low operation cost.

Since knowledge is an essential factor in affecting organization performance, it is important to define knowledge and indicate where it exists in organizations, the next section will discuss knowledge in details.
2.2 Definition of Knowledge

Knowledge is the ability to perform a specialized task or a process in the best possible way, this will requires skills, information and competences. It is starts small and grows with the individual as he/she learn and practice in their career. Knowledge can be transferred from one individual to another by on job training and mentoring. Knowledge is important to many of us, it evolves with the people and increases as individuals learn and develop in their professional life personal life.

Knowledge has many meanings and different interpretations to individuals. There have been so many debates on what is the true meaning of knowledge in the academic field, however this has not been any agreement among scholars on the single definition of knowledge. Hikes et al. (2006, p.2) indicated that knowledge consists of data $\rightarrow$ information $\rightarrow$ knowledge; it is also the power to decide on a course of action and it can be passed to other individuals as well.

From the above definition it can concluded that the main characteristic of knowledge that it can be:

- disseminated clearly
- add value to the receiver and to the holder of the knowledge
- translated to an action
- Used as an input to make rational decisions

Knowledge is imbedded in the employee’s technical skills, past experience, manuals, post project report and training documentation. It is one of the organization resources which enable a company to do business and become profitable. Nevertheless knowledge is an intangible resource it cannot be seen directly however it can be noticed as organization which posses’
knowledge will stand out among other organization and would be noticed as they do things in a different way. This is what it referred to as competitive advantage. Competitive advantage is something which organization has to work hard to create and to sustain it; it is not an item which can be bought from neither a supplier nor a package which can be delivered by a consultant.

Itami (1987) has indicated knowledge is considered one of the invisible assets of an organization; knowledge is necessary for people to perform their job and used as management tool to take crucial decision. Itami added that invisible assets are something which cannot be attained easily as it takes time, training and practice. For example company brand, employees skills, organization reputation are invisible assets which cannot be seen or measured directly and similar is knowledge.

Furthermore knowledge can reside in books, manuals, database and this is name explicit knowledge which can be handled and transferred easily among users within an organization and with supplier outside organization as well. The second type of knowledge is tacit knowledge which resides in individual brains it is the result of years of experience and interpretation and accumulation of diffract information.

Nonaka et al., (2000 cited in Haigh et al 2008) indicated that knowledge can be divided into explicit knowledge and tacit knowledge; explicit knowledge is easy to generate, stored and shared within an organization. However tacit knowledge is people accumulated experience over many years and it is noticed in their decisions, actions and comments towards situation which occurs in personal or professional life.

Considering knowledge as an invisible asset to many organization all over the globe, hence the demand to create, store and mange knowledge has increased in the last few years therefore organization felt the need to manage knowledge is a very efficient way to optimize this asset. The next section will highlights the importance of KMS to organization competitive advantages.
2.3 The Importance of Knowledge management

Knowledge management (KM) is the process of creating, storing and retrieving knowledge to achieve an additional value to the organization at functional level, business level and cooperate level.

KM play a key role in reducing the learning curve of new joined employees, reduce the lead time to start project, improve operation team repose time to work incidents and provide management with a better tool to take rapid and accurate decisions.

Knowledge management is highly important to organizations in the other aspects such as developing information and communication technology within the organization; it enables the growth and innovation of the organization improve the cost saving and enhances productivity by doing things in a smart way. It also develop customer satisfaction and accordingly improve customer loyalty, provides management with more accurate information for a better decision making and finally reduces employee learning curve and increase satisfaction (Nuns et al 2005).

KM is also important in terms of improving the innovation of products and service within the organization. KM will shift the organizational paradigm from a resource based organization depending on plants and work machines to a knowledge based resource organization.

Thus there will be less need for tangible assets and the more need for intangible assets. Skandia in Mar et al. (2004) stated that intangible assets of organization are categorized under “Intellectual Capital” this divide the total value of the organization into two main streams which are Financial Capital and Intellectual Capital and within the Intellectual Capital it is subdivided into:

1. 1-Human Capital
   
   1.1 Competence
1.2. Attitude

1.3. Intellectual Property

2. Structural Capital

2.1. Value Customers Relationship

2.2. Organization

2.2.1. Process Capital, this includes the procedures and routines of the company

2.2.2. Innovation Capital, this includes the enablers of innovation to products and processes

2.3. Renewal & Development

It is difficult to set a monetary value for the above intangible assets of organization; nevertheless those assets can be measured in a non-direct way via relating them to organization performance.

Knowledge management (KM) was incorporated in other management tools to improve and add value to it. One of those tools is the introduction of knowledge management to risk management; the next section will explore this field in more elaboration.
2.4 Risk Management and Knowledge management

Risk management is a tool used by management to identify risk associated with organizational activity; this might include risk definition, risk assessment and risk mitigation. It is common that risk management needs certain knowledge to achieve the end objective of minimizing the harm effect on the organization.

The lack of knowledge of the top executives of what is taking place at the lower levels of the organization might lead to an ethical disaster. Neef (2005) addressed the area of risk management and how knowledge management can be incorporated in the process of risk management.

Many incidents might have been avoided if the top executive and board members were aware of these violations to corporate ethics; if organization had a proper KMS then those risks would have been mitigated. Thus for organization to be more proactive in risk management process...
the organization should be able to mobilize knowledge and expertise of its staff so that top management are receiving accurate information at the right time with regard to any incident that might harm the organization’s reputation cited in (Neef 2005).

Globalization and open market completion forced organizations to find new innovative solutions to maintain their competitive advantage the next section will address the relation between knowledge management and innovation.
2.5 Knowledge Management and Innovation

The competition between organizations has increased in the last few years, the need to improve revenues and reduce the overhead cost became a priority for organization to sustain profitability and meet stakeholder expectations. Innovation is a process which will lead to the creation of a new product or a new service; innovation utilizes the existing knowledge to create a new knowledge to meet the demand of internal and external customers.

Harkema (2003) referred to innovation as the process of exploit the current knowledge possessed by organization to create new product or service, further more it can be a new idea or a new behaviour which the organization decide to adopt to create new products, service or even new technology; Harkema (2003) further add to the definition of innovation as the ideology which express itself by of learning.

Another definition of innovation is that it’s the force which drives value creation in the organization; innovation is strongly related to the working environment and considered to be the holy force which needs knowledge to create it and sustain it (Ahmed 1998).

Organization needs to be more innovative by the full exploitation of their knowledge to improve their competitiveness (Druker 1993) cited in Snyma net al (2004); knowledge is the source of organization innovation it can be the input and it can the output of the innovation process, thus organization should strive to nurture and grow their knowledge to boost their innovation, this is achieved by establishing a successful knowledge management system act as a repository system for organization intellectual prospect and would allow knowledge sharing among employees.

Knowledge sharing is a critical element of the success of any knowledge management system, if people are not willing to generate new knowledge and exchange it, then existing knowledge would become obsolete and the entire knowledge management system would lose its purpose.
The entire success of any knowledge management initiative depends mainly on sharing knowledge; Akhavan (2006) indicated that one of the critical success factors of any knowledge management system is knowledge sharing as it ensures the dissemination of knowledge within team to ensure lessons learned and past mistakes are avoided in the future.

Nevertheless some scholars argue that Knowledge sharing is not beneficial to organization, as there are some implications associated with it. For clarification purposes suppose that there are two manufacturing department in one organization whom relay on the same source of knowledge and both departments share knowledge extensively among their team. They will end up building similar product and end up competing each other. HANSEN et al (2005) indicated that there are negative implications to uncontrolled knowledge sharing within organization as it might cause counter competitive among teams within organization this will lead to wasted resources and duplicate work.

The next section will define key performance indicators and how knowledge management key performance indicators would affect influencing individual’s behaviour to share knowledge within organization
2.6 What is KPI

In an open market companies compete against each other to increase profitability and meet stakeholder expectations. The success of the business is achieved by benchmarking and measurement of both the financial and non financial gains to the organization. Many organizations uses Key performance Indicators (KPI) or balanced score cards to as a performance measure tool to calculate the effectiveness and efficiency of the organization in certain key fields. Those areas of evaluation or measurement vary from one organization to another. A service based organization will have more weight on customer satisfaction KPI and product based organization would have more weight on KPI related to product quality.

Measuring performance is essential to evaluate the progress achieved in certain area, another definitions is setting characteristics of output for the purpose of evaluation Ahmed et al (1999).

Several journal articles described Key Performance Indicators (KPI) as either financial or non financial indicators which are used to evaluate performance of individuals, teams, department and organizations.

Tovy (2001) referred to KPI are extrapolated from the corporate mid and long term targets, it is designed in a certain way to determine the efficiency of the day to day activity of an organization. (Cited in Zhao, F. 2002)

Collin (2002) has indicated that KPI’s are wide-ranging indicators for measuring the critical characteristic of outcomes. Therefore to decide on the current performance of an organization and future desired performance of that organization; KPI’s are used to measure important aspects of the organization performance it may be financial targets and non financial targets.

There are critical areas of the organization performance; those are what need to be measured for example the board member would be interested to know the market share of the organization in the previous years to determine the grown rate and set the KPI for next financial
year. KPI’s needs to related to important factors associated with the growth of the organization; none significant factors does not require KPI.

“KPI represent a set of measure focusing on those aspects of organization performance that are the most critical for the current and future success of the organization” Parmenter (2009)

There are certain characteristic of KPI which determine which performance indicator can be set as a key performance indicator or not; furthermore KPI’s might vary from one department to another; commercial departments has Profit & Loss target which they need to meet; HR might have KPI related to training, turnover and hiring; Technology department will have KPI related to project deployments, product performance and quality of service (QoS).

Also Parameter (2009) explained some of the characteristics of KPI’s is:-

1- KPI’s are not reflected in any type of currency  
2- KPI’s are measured in a timely manner 
3- KPI’s are executed by all employees in the organization 
4- KPI’s highlighted on what needs to be done 
5- KPI’s compute every individual needed action 
6- KPI’s are critical to the success of the organization 
7- KPI’s encourage action to be taken by the concerned person 

Other researchers have listed different criteria’s for KPI, Collin (2002) cited in Chan (2004) indicated that KPI are:-

1- KPI’s will focus on specific outcomes either financial or non financial  
2- Over listing of KPI’s might lead to inefficiency in performance and time waste
3- For similar projects KPI should be consistence

4- KPI will reflect the target which is needed to be archived and this will be measured agenised the actual figure of performance. Thus the data collection of the actual figure should be made easy and reliable

5- KPI’s should be communicated to the concerned employee for his/her action.

6- KPI’s tend to evolve with the organization

The above criteria’s describes KPI in construction industry; nevertheless it can be used with other product and service based industries as well.

Further to add to the above researches, I tend to describe KPIs as:-

1- KPI’s can be financial and non financial

2- KPI’s are acted by all employees of the organization, however KPI are extrapolated from the vision, mission and annual focus targets of the organization

3- KPI’s do not indicate the action needed, they only state what needs to be achieved, developing the action plan needed to achieve the KPI’s are broken down into the three levels of the organization, the corporate level KPI’s and the plan needed to achieve it, the business level KPI’s and the action plan and finally the function level KPI’s and the plan needed to achieve it. As we go vertically down in the organization hierarchy the plan to achieve the KPI’s is more detailed.

In the next section I will define certain KPI’s for Knowledge management in organization

Further to add to the above, it is important to map KPI’s to important aspect of organization performance, placing KPI’s for non significant aspect might result wasting time and will provide misleading results.
Ahmed et al. 1999 indicated that it is not important to measure all the performances across the organization would be irrational; however it is important to measure the vital indicators which show how well a process or an activity was performed. Then the overall performance of the individuals, team, departments and divisions needs to correlate to the organization’s goals.
2.7 KPI's in knowledge management

Many organizations perceive KM as a complementary feature, it is good to have but nothing would go wrong if we did not implement it, others corporate executives believe it is important to have a KM system in the organization but find it difficult to justify the investment capital with no clear return on KM.

Knowledge management is considered a relatively new concept; it consists mainly of two parts:

- The definition

  Knowledge management is defined as the process of controlling the generating, transferring, sharing, utilizing and preserving an organization intellectual asset (Al Ghassani 2004)

- The outcome

  As for the outcome perspective it is what the direct benefit to the organization’s if they decide to proceed with implementing KM system, many researchers indicate that the organization will gain more competitive advantages. Other research indicates that the organization will add value to the business.

An expected outcome of implementing KMS is building a successful and innovating organization (Kanter, 1999) cited in Al Ghassani 2004.

Thus there is a need to measure how efficient is the knowledge management; will determine how successful the organization was in implementing this management tool; however none of the above articles indicate how knowledge is going to be measured or what are the KPI for a KM. KM being a non tangible resource of an organization it could be difficult to measure. Nevertheless several researchers were able to create key performance indicators for knowledge management.
Nonetheless measuring knowledge management is not an easy process Prusak (1998) described “knowledge as a fluid mix of framed experience, values, contextual information and insight that provides a framework for evaluating and incorporating new experiences and information.” Cited in Sharma et al 2007)

The other objective of measuring knowledge would be to indicate the involvement of KM in improving the business processes and how can this involvement be quantified. Roy et al (2000)

Knowledge management KPI’s should measure the performance of individuals, team, groups after exposing them to knowledge, this similar to evaluating the performance of an employee after he/she go thought an On Job Training (OJT); the line manager or Human Resource (HR) would like to know how beneficial the training was by placing certain KPI and observe the employee efficiency or deliverables.

Sharma 2007 indicated that outcomes of knowledge can be measured using the flow indicator that is:-

1- Number of new products or services

2- Number of new customers

3- Number of processes reviewed

4- Number of processes changed

5- Number of patent fields

6- Number of ideas implemented from suggestion box

7- Traditional quality indicators

8- ISO and customer Satisfactions
The above knowledge indicators can be used as Key performance indicators for the individual employees, teams, departments and divisions in an organization. Then the organization starts implementing a knowledge management strategy which will identify the valuable knowledge assets and execute the business proposal which will develop that assets to improve organization performance cited in Sharma 2007.

Having a sensible KPI’s makes it possible to achieve by the organization and created positive competition among team member to excel and shine among other staff.

Shahin et al( 2006), stated that one of the characteristic of KPI’s should be SMART which stand for specific, measurable, attainable, realistic, and timely manner; those are the description on any KPI reflected and driven from the organization goals

KPI’s will indicate if the organizations goals were achieved for that specific year or not (Shahin et al 2006); an organization which considers implementing successful knowledge management system (KMS) should have this as one of the goals to be achieved. This will be simpler to fulfil if there were certain KPI’s to ensure the maximum utilization of KMS in the organization.

Shannak (2009) indicates that in order to accurately measure performance of a knowledge management system we need to have a clear and strong relationship to the KM strategy.

Hence it is importance to draft the strategy on what needs to be measured and how to measure, as difference companies required different KPI to measure their knowledge management.( Shannak 2009) has provided some examples of knowledge management KPI used by international companies:-

(Shannak 2009) stated that Ericson is a mobile phone manufacture located in Sweden and some of the performance indicators used by them:-

1. Number of best practices identified.
2. Number of contributions.
3. Number of contributions in the re-use database related to the total number of projects delivered in the market unit.

4. Number of contributions proven to have led to new/repetitive business.

5. Number of contributions rated as re-usable.

6. Number of individuals in the community and each individual's activity.

(Shannak 2009) indicated that another example from the computer industry is Hewlett Packard (HP) the computer giant adapts a decentralized policy where employees are empowered to take decision; nevertheless knowledge sharing across business units is little. For that reason HP has adapted a KMS and had placed the following indicators to measure KM:

1. Active involvement.

2. Number of participating employees in knowledge database

3. Number of postings/contributions in knowledge forums or SharePoint

4. Number of downloads.

5. Number of calls to support function.


7. Unique log-ins.

The final example is from the consulting sector is KPMG a well known organization in the management consultancy market, the drive for implementing a KMS was to maximize the benefit of the vast experience of the employees within the organization and then disseminate this knowledge from the Head Quarter of the organization in Sweden to all its international operation offices. Its aim in doing that was to increase client satisfaction. KPMG selected the following KPI’s for its KMS:

1. Adoption curve to see knowledge culture progression.

2. Generated business.

3. Individual contributions to the further development of the organization and its employees.

5. Number of contacts gained.
6. Attitude of knowledge sharing.
7. Efficiency & visibility on the market.
8. Employee satisfaction.
9. Re-use of information and/or experience.

(Shannak 2009) pointed that the impact of using KPI’s in knowledge management for the above companies were very positive; for Ericsson the result of implementing a KPI’s for knowledge management has improved organization performance and resulted in the following listed achievement:

1. Reduce the operating cost of managed services by 20% and improve organization profitability
2. Improve customer satisfaction via faster response to customer needs, accurate billing and personalized rates and payment options
3. Enhance operation excellence by better planning and faster response to risk
4. Protecting revenues by identifying fraud cases and the management of default subscribers

As for Hewlett-Packard (HP) using KPI’s for Knowledge management had improved many aspects of the organization; Andrew Gannon (1998) had indicated that HP has achieved the following:

1. Improve turnover from USD $ 6.4 Billion to USD $ 40 Billion in 13 years
2. Operational excellence has improved by 48% on annual basis
3. Improve end user experience by reducing response time and improve quality of service
In KPMG the benefits were remarkable as indicative in KPMG knowledge management research report, 2000 as well in the blow points:

1- Improve customer focus by 7.3%
2- Increase product innovation by 7%
3- Enhance competitive advantage by 7.7%

It is clearly indicated that organization who implemented KPI’s for knowledge management had achieved an improvement in organization performance by wither improving operation excellence, increase customer satisfaction and enhance product innovation (Shannak 2009).

The indicators which are going to be used in this research are a combination from HP, KPMG and Ericsson, the reason for that is I am going to examine the factors which affect employee behaviour in a number of organizations in the UAE some of those organization are technology orientated, service oriented and government sectors departments.
### Knowledge Management KPI

<table>
<thead>
<tr>
<th>Corporate</th>
<th>Ericsson</th>
<th>HP</th>
<th>KPMG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of best practices identified.</td>
<td>• Active involvement.</td>
<td>• Adoption curve to see knowledge culture progression.</td>
<td></td>
</tr>
<tr>
<td>Number of contributions.</td>
<td>• Number of participating employees.</td>
<td>• Generated business.</td>
<td></td>
</tr>
<tr>
<td>Number of contributions in the re-use database related to the total number of projects delivered in the market unit.</td>
<td>• Number of postings/contributions.</td>
<td>• Individual contributions to the further development of the organization and its employees.</td>
<td></td>
</tr>
<tr>
<td>Number of contributions proven to have led to new/repetitive business.</td>
<td>• Number of downloads.</td>
<td>• Statistics of awareness.</td>
<td></td>
</tr>
<tr>
<td>Number of contributions rated as re-usable.</td>
<td>• Number of calls to support function.</td>
<td>• Number of contacts gained.</td>
<td></td>
</tr>
<tr>
<td>Number of individuals in the community and each individual’s activity.</td>
<td>• Support ratings.</td>
<td>• Attitude of knowledge sharing.</td>
<td></td>
</tr>
</tbody>
</table>

### Value Added

| | Reduce the operating cost of managed services by 20% and improve organization profitability | Improve turnover from USD $6.4Billion to USD $40 Billion in 13 years | Improve customer focus by 7.3% |
| | Improve customer satisfaction via faster response to customer needs, accurate billing and personalized rates and payment options | Operational excellence has improved by 48% on annual basis | Increase product innovation by 7% |
| | Enhance operation excellence by better planning and faster response to risk | Improve end user experience by reducing response time and improve quality of service | Enhance competitive advantage by 7.7% |
| | Protecting revenues by identifying fraud cases and the management of default subscribers | |

Table 1 showing the corporate which implemented KM KPI and Values added (Shannak 2009)
2.8 KPI & Individual Behaviour

Key performance indicators is considered one of the tools used as a performance measure which are used a mean to measure organization, team, individual performance for evaluation existing achievement against planed targets and to provide feedback for future improvement.

There is evidence of noticeable changed in employee’s behaviour towards perusing certain tasks once KPI’s was introduced as a mean of performance measure, in addition to the main role of individual KPI’s as a performance measure it acted as a motivators factors, where employees were motivated to achieve their task’s and meet their KPI’s knowing that not doing so will affect their annual performance.

Neely et al (1997) indicated that key performance indicators have certain influence on individual behaviour in organization, especially when KPI’s are tied to certain financial outcomes. It can be assumed that KPI’s will play a duel role, one in providing a performance measures role and the other role will be a external motivation tool, where employees will be motivated to meet their KPI’s either to receive a certain financial outcome or avoid financial penalty for not aching their assigned KPI’s.

Tangen (2004) indicates that employee will strive to meet and exceed their target, by changing their behaviour towards completing their tasks and meeting their deadline, thus establishing the correct sets of KPI’s will ensure that employee adapt the desired behaviour with organization and avoid dysfunctional behaviour.

In the next section I will discuss factors which affect employee knowledge sharing behaviour in organization, and how knowledge sharing is considered a success factors in any knowledge management initiative.
2.9 Influencing Employee Behaviours to Share Knowledge

2.9.1 Definition of knowledge sharing

For a better understanding of how to influence employee behaviour to improve knowledge sharing, it is better to define knowledge sharing; in previous section we have defined knowledge as the ability to perform a specialized task or a process in the best possible way, this will requires skills, information and competences. Therefore knowledge sharing is the dissemination of a specific skills and talent to perform a task in the best possible way. Other scholars have denied knowledge sharing as the process of creating new business and processes via the socialization and learning of knowledge workers. Lin & Lee (2005) Boer (2005) has defined knowledge sharing as social-relation process in which employees attempt to set up a common understanding about topic and create a method of transforming this understanding into an action to improve organization performance.

Several organizations has allocated huge budgets to create knowledge management system and encouraged their employees the spread of knowledge among themselves, nevertheless employees are not willing to give away some of their knowledge for no exchange for that knowledge. Knowledge resides in a person, passed around by people and individuals, nurtured and expanded by people themselves and applied by them eventually. Druker 2001 cited in Nelson and Mc Cann (2009). This made it critical to determine what influence individual behaviour in dealing with knowledge and in this research what would influence their behaviour to share knowledge within organization. The next section will discuss the consequences of not sharing knowledge in organization.
2.9.2 Why employee do not want to share knowledge

Several scholars explained the reluctance of employees to share knowledge, Yang (2010) indicated that attitude is one the factors which affect employee behaviour to share knowledge this is due to the fact that those employee fear of losing a career opportunity if they decide to share knowledge. There for they decide to ignore the benefit of sharing their knowledge with their colleagues. Other individuals would share knowledge freely and with no constrains.

Moreover Yang (2010) added that other employee feel superior to their colleague just because they possess knowledge to certain areas and other doesn’t; another group of employees would not share their knowledge because of their workload or they might not share knowledge of bad experience because of fear of job termination.

Yan and Wu (2008) indicated that as knowledge is considered as a source of competitive advantages for organization and organization strive to protect their intellectual assets, the same applies to individuals who perceive knowledge as power and privilege, in order for them to share this power and privilege with others, and they will require getting something back in return.
2.9.3 The need for sharing knowledge

If knowledge sharing did not take place effectively this might lead to either a partial failure or total failure of knowledge management system; Yang and Wu (2007) indicated that if knowledge is shared within organization, then organization would grow and if no this might lead to a weaken organization.

Lin & Lee (2006) stated that knowledge sharing will influence the success of any knowledge management initiative and governs in effectives, not effectively sharing knowledge with organization will defeat the purpose of having a KMS, moreover the success of organization is due to the collective effort of it employees to meet organization objective.

Akhavan (2006) indicated that one of the success factors of any knowledge management initiative is knowledge sharing which essential to achieve a successful KMS.

Boer (2005) indicated knowledge sharing (KS) is important to establish a common understanding among working team, KS allow the conversion of certain activities to achieve an outcome and finally KS enable conflict resolution via establishing a common understanding of the situation.

2.9.4 Factors Influencing Employee behaviour

Before proceeding forward in this section I believe it is important to indicate the difference between attitude and behaviour, Golob (1999) has indicated that attitude is classified into three types

1. Attitude which is driven by beliefs about an object or a concept
2. Attitude which is driven by feeling or judgment about a specific object
3. Attitude which is driven by wishes and desire to act purposefully

Thus the general definition of attitude the overall belief about a certain objective and it is also the feeling and developed judgment with regards to certain object and it is also the desire to act purposefully.
Attitudes reside in our beliefs and it control our future action, further more attitude influence the human behaviour and is considered a governing factor Siragusa et al(2008)

Whereas behaviour is the on the other hand is either an action or a reaction which may varies depending on the circumstances and the attitude of that individuals, so it can be sees that attitude is an input to the individual behaviour toward a situation. This will be demonstrated further in the literature.
Employees might find it not worthy to share knowledge within organization, this might create an additional work load to have a person to person knowledge sharing or a person to document knowledge documentation also scholars indicated that employee behaviour to share knowledge is dependable on the attitude of employee to share knowledge.

Yang 2010 indicates that it is the employee attitude toward knowledge sharing that affects his/her behaviour to share knowledge with their colleague, is not the motivation. Their attitude might be affected by the following:-

1- Ignoring the importance of sharing knowledge
2- Unwillingness to share knowledge
3- Feeling of insecurity
4- Workload
5- Lack of recognition
6- The desire to feel superior
Yang (2010) indicated that the elements attitude to sharing, attitude to learning, organization support and leadership role which affects knowledge sharing in organization. However no of those elements indicates factors influencing employee behaviour to share knowledge.

Lin & Lee (2006) pointed that knowledge sharing with organization is affected by two main elements social elements and technical elements and those are subdivided into the following Social elements

- Employee characteristics
- Organizational Climate
- Organization Culture

Nevertheless employee characteristic was not explained in relation to employee behaviour and how it can be influenced to share knowledge within organization.

Cheng & Chen (2007) have related influencing employee behaviour to the Theory of Planning Behaviour (TPB) which indicates that attitude, subjective norm and perceived behaviour control affect the employee’s behaviour and intention to share knowledge. Their study was carried out in the health sector were sharing knowledge between doctors the rest of hospital staff is essential. The below table present the predictors which would influence the behaviour of employee to share knowledge within organization.
<table>
<thead>
<tr>
<th>Predictor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>This would indicate if the employee is in favour of sharing knowledge or not <strong>Positive attitude toward knowledge sharing will positively influence employee behavior to share knowledge.</strong></td>
</tr>
<tr>
<td>Norm</td>
<td>This is the amount of social pressure coming from the organization and colleague to the employee to share knowledge, it is also reflect the participant view of whether his/her actions is accepted from their colleague within the organization <strong>Positive norm toward knowledge sharing will positively influence employee behavior to share knowledge.</strong></td>
</tr>
<tr>
<td>Perceived Behaviour Control</td>
<td>This would indicate to which degree the employee feel in control of sharing knowledge within the organization <strong>Positive PBC toward knowledge sharing will positively influence employee behavior to share knowledge.</strong></td>
</tr>
</tbody>
</table>

Table 2 showing the predictors of Theory of Planning Behavior in knowledge sharing created using Chen & Chen (2007)
By manipulating those three predictors we can to a great degree influence the behaviour of employee to share knowledge within an organization. This model would be usable to influence employee behaviour to share knowledge in organization in the UAE, the below research model was constructed using the above predictors.

The above predictors were being manipulated by several factors to control individual behaviour to a certain extent, for example attitude towards sharing knowledge is increased by motivation drives where it is completion, reputation ego or satisfaction (intrinsic) . Yan & Wu (2007).

The organization would give employee extrinsic rewards to encourage employees to improve their attitude towards sharing knowledge. According to Yang & Wu (2007) from an operant conditioning point of view the reinforcement process would be achieved when employees are rewarded for sharing knowledge this would positively affect their attitude and hence improve their behaviour towards knowledge sharing and have a positive outcome on the entire knowledge sharing initiative. To maximize the benefit of the rewarding system, Yang & Wu(2007) indicated that rewarding should be based on the frequency of sharing knowledge, thus the more employees share knowledge among themselves, the more frequent the rewards are given.
Bock and Gulkim (2002) indicated that individuals knowledge sharing behaviour is governed by two main factors which are association and contribution, those two factors will influence employees attitude towards knowledge sharing and then only they will develop a positive intention to share knowledge. Moreover knowledge is perceived as a valuable position for individual thus in order for them to share it with other, employees will demand for a return in exchange for it. Bock and Gulkim (2002) elaborated on this by indicating two motivation theories:

1. Economic Exchange Theory
2. Social Exchange Theory

In economic exchange theory individuals will behave in a self-interest way and knowledge sharing will take place once the reward is more than the perceived cost of the shared knowledge. For organization to ensure that knowledge sharing will take place, it need to incentivizes their knowledge employee with rewards, monetary incentive and this is referred to as extrinsic motivation.

As for the social exchange theory is associated with intrinsic reward, thus the reward has no identified price and it does not have to outweigh the value of knowledge. Social exchange triggers the feeling of personal obligation gratitude and trust towards the possessor of the knowledge.

Bock and Gulkim (2002) finalized their research model which indicates that the three main factors which affect attitude toward knowledge sharing are the following:

1. Expected Reward
2. Expected Association
3. Expected contribution

Nevertheless their research model does not include the organization influence on employees behaviour, nor they indelicate other factors which affect individual behaviour to share knowledge; their model focus on motivation only which I believe is missing other factors which
will influence employee behaviour to share knowledge, and methods to ensure knowledge sharing takes place in an optimum way.

Social dilemma is another factors which will affect employee attitude toward knowledge sharing in a negative way, according to Lame et al (2008) social dilemma occurs to individuals only if there is asymmetrical contribution of knowledge among colleagues; this will lead to two negative results:-

1- People benefiting without contributing with their knowledge

2- People who are contributing will feel that their unique value was lost

Employee benefiting without contributing with their knowledge, this might lead to opportunistic behaviour and employees whom did not contribute and yet still benefit from it and individual gain without investing any effort and those who have participated will gain in an equal matter. Thus causing the motivation to contribute to share knowledge diminishes.

Employees who are contributing will feel that their unique value was lost within the group and they did not benefit at all. This will influence their behaviour in the future and inhibit their contribution to share knowledge with their colleagues.

Furthermore if the non contributing employees within a knowledge sharing are not sanctioned, this would affect negatively the motivation of contributing among the group, and individual the entire knowledge sharing purpose becomes questionable. Lame et al (2008) Addressing employees concerns with regards to the social dilemma would improve employee’s attitude towards knowledge sharing and hence the behaviour towards knowledge sharing would improve.

Yang and Wu (2007) indicated that sharing knowledge is a personal behaviour and the transaction of knowledge from the possessor of knowledge to the recipient of knowledge is perceived as a conflict of interest between the knowledge possessor and the organization. This is also known as social dilemma where the individual benefit will result in organizational loses. Organization will need to address the selfishness of employees by compensating them with incentive scheme.
Osterloh and Weibel (2004) indicated that knowledge sharing is considered as a case of pragmatic social situation, where employees try to maximize their individual benefit at the expenses of the group, and this is known as social dilemma. It is one of the reasons which prevent employees in organization from sharing knowledge; social dilemma can hinder the knowledge sharing in organization if not highlighted and resolved properly.

In the next section I will discuss organization performance and how would knowledge management KPI and influencing employee behaviour in knowledge sharing would affect organization performance, moreover we would look at measures used to evaluate organization performance.
2.10 Organization performance

In organizations, performance is mainly depended on the organization ability to distinguish itself from other competitors in the market this is achieved by competitive advantage, this is what organizations have today which other do not posses or what the organization knows today and other do not.

Ho (2008) referred to organization performance at the ability of the organization to achieve its planned or set objectives; furthermore it is pointed at the effectives and the efficiency of the organization in fulfilling its financial and non financial goals.

Organization performance can be measured by financial indicators such as return on investment, return on equity, return on shares increase in market share and new products and services; moreover over there are other indicators to assess organization performance such as employee retention, customer satisfaction, quality of service.


In this research I am evaluating the effect of having implementing knowledge management key performance indicators on the organization performance in the UAE.

Zack et al 2009, suggested that there are three main elements in which organization performance can be measured on; product leadership, customer intimacy and operation excellence.

Product leadership, this is described as the degree of which organization is innovation in creating new products or services.

Customer intimacy, this is described as the degree at which organization understand and satisfy customers needs and fulfill their expectation.

Operation excellence is the degree of efficiency in operating organization assets.
When an organization decides on embracing a knowledge management system, this is due to the need to enhance one or all of the above elements to achieve a better organization performance. The criteria used to indicate organization performance might vary from industry to another, nevertheless the above three elements can be used to extrapolate other sub elements to indicate organization performance in relation to the industry the organization operate in, for example a day care centre would consider Children wellbeing as an element of operation excellent and on the other hand a nuclear power plant would consider safety as one of the sub element of operation excellence.
2.11 Construct the model of Influencing Employee Behaviour to Share Knowledge using KM KPI and how would it affect organization performance

To construct the model of the research it is beneficial to stat the aim of the research:

4- Examine how knowledge management specific KPIs may influence employee behaviour to share knowledge

5- Investigate the effect of attitude, norm and factors would affect employees behaviour in sharing knowledge

6- Examine the impact of having KM KPI and Influencing Employee Behaviour to Share knowledge on organization performance

Based on the above, the below model (figure 3) is created, taking into consideration that employees are the knowledge creator in any organization, and a huge factor which govern the success of any knowledge management initiative is knowledge sharing; this can be achieved if organization knew what would influence their employee behaviour to share knowledge. Having a KPI to knowledge management will act as a performance measure for Knowledge management and would ensure that knowledge shared are beneficial and add values to the recipient.
1- Number of new products or services
2- Number of new customers
3- Number of processes reviewed
4- Number of processes changed
5- Number of patent fields
6- Number of ideas implemented from suggestion box
7- Traditional quality indicators
8- ISO and customer Satisfactions
9- Efficiency & visibility on the market
10- Employee satisfaction
11- Number of postings/contributions in knowledge forums or SharePoint
12- Number of downloads from Knowledge base
13- Number of best practices identified
14- Number of contributions proven to have led to new/repetitive business
15- Number of knowledge sharing sessions with department and teams

Figure 3 Research Model
Chapter 3 Research Methodology

3. Introduction

In this chapter the topic of research methodology will be discussed along with of research philosophy, approach, strategies, choices and time horizons which are according to Sunders et al (2007) are known as the research onion; this would be used as a guideline to further explain the above indicated sections.

![The research onion](source:Sunders et al 2007)

Research design and research objectives are to be going to be highlighted in this section as well.

Research question is the most crucial part of the research methodology and this will be discussed in the next section.
3.1. Research Questions

Research question is critical to the research process as it will promote and lead to a clear distributive answer drawn from the research data.

According to Sunders et al (2007) to achieve the right research questions might take more than one attempts, yet it is important to try to refine the research question.

Jones (2003) indicated that choosing an answerable and significant research question is the core of all successful research projects.

Achieving the research objective is highly dependent on having a rich literature review and creating a clear research questions, the literature review was generated by me in the last chapter

In my dissertation I am trying to explore the effect of having Key Performance Indicators (KPI) for Knowledge management (KMS) in five organization in the UAE and how does it influence employee behavior, plus how those are affect the organization performance ; the research questions are :-

- In what way dose attitude, norms and perceived control influence employee behavior in sharing knowledge in organizations in the UAE.
- How effective having a KM KPI help in measuring KM in organization in the UAE
- What effects have KM KPI on organization performance in organization in the UAE

Research objective are driven from research questions, the next section will examine in details the characteristics of research objective and list the research objectives in details.
3.2. Research Objectives

Research objectives usually bring us to the purpose of this research itself and will address the reasons of undergoing the research.

According to Sunders et al (2007) research objective are perceived as clear proof of the research purpose and course of direction; to achieve the above research objective need to be SMART:

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific</td>
<td>What precise is hoped to be achieved</td>
</tr>
<tr>
<td>Measurable</td>
<td>What measure are going to be used</td>
</tr>
<tr>
<td>Achievable</td>
<td>Are the target achievable</td>
</tr>
<tr>
<td>Realistic</td>
<td>Is there enough time and energy to complete it</td>
</tr>
<tr>
<td>Timely</td>
<td>Will you have the time to accomplish it</td>
</tr>
</tbody>
</table>

Table 3 Created using SMART definition source Sunders et al (2007)

My research objectives are

1. Investigate the factors that influence employees behaviour in sharing knowledge in organization in UAE

2. Examine how knowledge management specific KPIs may influence employee behaviour to share knowledge in organization in UAE

3. Examine the impact of having KM KPI and Sharing knowledge on organization performance
Many organizations in the UAE have either have implemented or in the process of implementing a knowledge management system (KMS) nevertheless there is fear that those KMS will fail and will not successes in managing the intellectual properties. As indicated in the literate a critical success factors to KMS is knowledge sharing (KS) within organization Akhavan (2006). Since employees are responsible for creating, disseminating, transferring and documenting knowledge in organization, it was important to investigate the elements which influence knowledge sharing in organization

Achieving the research objective will complement UAE’s organization efforts in creating a successful knowledge management system in the organization and hence improve organization performance. This will be done by identifying elements influencing employee behavior to share knowledge and then introducing a set of Key Performance Indicators (KPI) which will measure the performance Knowledge management System (KMS)

Moreover literature have indicated that introducing a KPI to knowledge management system will to certain degree affect the organizational performance in the area of product innovation, operational excellence and customer intimacy, this will be demonstrated as we go thought the research and collect the data from interview and from the questionnaire.

Research philosophy is about knowledge and the development of knowledge in a specific field of study; this will be addressed in the next section.
3.3. Research Philosophy

By examining the research onion in Figure 1, it is indicated that the first layer of the research onion is research philosophy and it mainly related to nature knowledge and development of knowledge in that specific field of study Saunders et al (2007).

Moreover, Saunders et al (2007) indicates that there are about three main categories within the research philosophy, they are; epistemology, ontology and axiology. All of them resemble a different way of thinking about research process. Research philosophy will have a cascaded effect of the some other lower layers of the onion; it will determine the research strategy.

Flower (2009) indicates that there are two research philosophies:

1. Ontology

2. Epistemology

Ontology is the study of beings and it will describes the researcher views of certain social matter such asking an employee of who is the company doing? The employee answer will be based on his views whether it is a reality or an illusion and whether it is subjective or objective. Other factors will affect the employees answer such as culture, power and perception, after all each and every one of us has his/her own ontological assumptions which will influence his/her views on things.

On the other hand, Epistemology described as what represent reality and what is the appropriate way to inquires about the nature of the world, more over it is the discipline of knowing what is potential to know. Flower (2009)

The optimum way to select the research philosophy is the look at the research question and see which of the research philosophy will enable me to answer the research question, in my research I am examining the elements which influence employee behavior in sharing
knowledge and having performance measure in knowledge management system in organization in the UAE would it affect organization performance. The objective of the research is real and objective as knowledge management do exists in organization in the UAE with various sophistication levels and therefore epistemology applies to the research philosophy. In addition I will be looking at factors which influence employee behavior such as attitude, norms and perceived control with organizations in the UAE, this indicates a positivism approach.

At the same time human feeling is also present as I am going to conduct several interviews with senior executives, this implies to interpretivism approach which deals with human feeling and the way they make sense of the world around them Saunders et al (2007); the next section will address research approach used in my research.
3.4. Research Approach

Referring to the research onion diagram, the second layer of the research onion is research approach and it consists of deductive approach and inductive approach.

In a deductive approach in which a theory is developed and establish the relationship using a hypothesis and finally test the hypothesis to either confirm the hypothesis or to reject it. In an inductive research it is total the opposite first the research will observe a certain phenomena, gather the date needed to develop a hypothesis and finally write the theory which explains this phenomena.

Deductive approach is closer to positivism and associated with scientific researches it involves in the development of a theory and then testing it a very extensive ways. Moreover deductive approach requires writing a hypostasis which is a proposition of relationship between two or more variable to verify the stated theory. After testing the hypothesis the theory might be modified to reflect the finding from the data output. In a deductive approach a quantitative data would be collected via questionnaire to verify the hypothesis; the researcher is independent from data collection so he/she is not affecting it nor affected with it. Some of the negative aspects of deductive approach are that it is rigid methodology and would not recognize other rationalization to the situation. Saunders et al (2007)

Veal (2005) indicates that if the research process starts by a theory or a hypothesis, then moves to observation, data collection and finally to analysis then the process is called deductive
Veal (2005) also indicates that research can start by observation, description and collection of data at one stage, following that an analysis of the data and finally obtaining the explanation or theory behind that observation; this would be the inductive approach to research as seen in the below figure:

As for inductive approach is closer to interpretivism and associated with understanding human feelings; it will start with an observation, then gathering data from the field, creating a hypothesis and generating a theory to explain the observation. Saunders et al (2007)

In my research I will implementing the deductive approach where the theory indicates that attitude, norm and perceived control would be the elements influencing employee behavior to share knowledge in organization and implementing a knowledge performance measure would improve organization performance. The Knowledge KPI’s are adapted from the KMS KPI used in Ericson HP and KPMG (well known organizations in Telecom, PC’s and consultancy agency).

The rationale behind choosing a deductive research approach is that I will be interviewing senior management in organization in the UAE to explore their views of implementing a KMS KPI and how would it affect employee behavior towards sharing knowledge in their divisions; and how would this affect organization performance.

**H1.** There is a relationship between KM KPI’s and influencing employee behaviour to share knowledge and organization performance.
Following that a short questionnaire will be distributed among employee in the same selected organization to examine three factors which influence employee’s behavior toward sharing knowledge.

The following hypothesis were generated from the literature reviews

**H2.** There is a relationship employee attitude and influencing employee behaviour to sharing knowledge within organizations in UAE

**H3.** There is a relationship between organization norm and influencing employee behaviour to sharing knowledge with organizations in UAE

**H4.** There is a relationship between employee perceived control and influencing employee behaviour to sharing knowledge within organizations in UAE

The organizations which are being examined here are private, government and semi government organization and based on those organization requests I have decided to keep the identity of those organization anonymous
3.5. Research Strategy

The third layer of the research onion indicates to the research strategy adopted to achieve the purpose of the research and fulfill the research questions with the right answers. The strategies listed in the third layer of the research onion are experiment, survey, case study, action research, grounded theory, ethnography and archival research. It is possible to use more than one strategy approach for the same research; researchers should not limit themselves to one strategy only, on the contrary researchers should select the best strategy which will lead to answering the research questions.

In Survey strategy is frequently used with deductive approach, it is famous research strategy in business and management research as it enable to answer the questions of who, what, where and how much and how many questions. It allows for collecting data from a sizable population in a very economical way Saunders et al (2007).

The case study strategy is used in explanatory and exploratory research, it enables us to find answers to why, what and how similar to survey strategy, but the advantage of case study is that it will enable the researcher to gain a rich understanding of the context of the research.

Moreover surveys allow collecting quantitative data which can be suggested to indicate the relationship between variable and in the case of my measuring the elements which influence employee’s behavior to share knowledge

The case study strategy will allow me the gather rich information about having Knowledge Management KPI and how it is going to affect organization performance in organizations in the UAE.

In my conducted research, the reason of the research is explanatory exploratory as it is pointed from the research question and the objective of the research created ; in addition to that the research approach is deductive and the selected research strategy is a combination of survey and case study which is subdivided into interviews and questionnaire.
The primary research strategy in my research is the case study and one of the data collections are interviews of staff with in various organizations in the UAE. I have selected staff from the executive and management level organizations in the UAE; this will allow collecting sufficient data about the Knowledge management system and knowledge sharing is ensured;

In addition to that I will be conducting a questionnaire which is part of the survey data collection method to explore the employee’s attitude toward knowledge management and knowledge sharing; also I will try to identify the organization subjective norm and the perceived employee control to share knowledge within organization.

The next section will contain the list of questions to be used in the case study interviews and the questions which will be used in the survey, I will be using simple analysis tool such as excel to evaluate the total percentage of employees who have positive perception toward knowledge and knowledge sharing, also is the organization norm is positive towards knowledge sharing and to what extend employee have control to share knowledge.
### 3.6. Research Choices

The fourth layer of the research onion addresses research choices and it can be either quantities or qualitative as both research choices are used in business and management research. Both research choices are concerned with the data collection and data analysis; quantitative is associated with questionnaires as a way of data collection and numbers, graphs and other statistics programs such as data analysis; whereas, the qualitative approach is uses words in interviews and the method of collecting data and categorizing data as a way of data analysis and interpretation.

In selecting data collection method research can select either quantities or qualitative and it is called mono method or researches can chose both quantitative and qualitative methods and it is known as multi methods Saunders et al (2007)

Mack et al (2010) indicated that the main differences between quantities and qualitative research are terms of general differences, objectives, question type and data type as indicated in the below table.

<table>
<thead>
<tr>
<th>Quantities</th>
<th>Qualitative</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>Use methods such as questionnaires, surveys.</td>
</tr>
<tr>
<td></td>
<td>intend to validate theory and hypothesis about phenomena</td>
</tr>
<tr>
<td>Objective</td>
<td>To measure</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Question Type</td>
<td>Closed ended</td>
</tr>
<tr>
<td>Data Type</td>
<td>Numerical</td>
</tr>
</tbody>
</table>

The research choice I will be using in my research is multi method as I will interview executive management in a number of organizations in UAE and conduct questionnaire employees in the organization.
3.7. Research Time Horizon

The fifth layer of the research onion is the research time horizon and it refers to the time frame in which the research is taking place, is it a snapshot (cross-sectional study) or is it a representation of an event taking place over a period of time (longitudinal study). All of that depends on the research question, however for most academic researches it tends to be a snapshot of the problem in the organization Saunders et al (2007).

In the next section I will discuss survey two main elements which is interview and questionnaire.
Chapter 4 Case Study and Survey

4. Introduction

In this chapter I will present the survey conducted on the organizations which I have selected as part of my research strategy used to answer the research question, it will include the examination of the compiled data collected from the interviews conducted with organization executives and members from the management team. The interview questions are semi structured with open ended type questions, this will steer the interview into the research objective. Moreover the interview answers and the feedback generated will be presented in the next chapter in a more detailed manner. The total questions used in those interviews were seven questions evolving around the research objectives, in this section I will present the interview question to allow the reader examine and understand the interview discussions and feedback before proceeding with data analysis. Moreover I will present the questionnaire used as well to evaluate employee perceptions on Knowledge sharing within organization and their willingness to share knowledge in their organization.

I was requested by participants from all organization to use alias instead of stating the organization true name and use designations of the employees without mentioning their names, hence I have decided to use Organization A, B, C.D, E to conceal this identity.
4.1. Interview Procedure

Before each interview, I start by sending a brief email to all optional interviewees and provide them with a small introduction about my research, the interview questions and what do I hope to achieve from conducting an interview with them, most of the interviewees expressed their interest in the area on knowledge management. I have started very interview by introducing myself and provide a brief description about my research and what I aim from this interview, as I start with the questions of the interview I allow the interviewee to understand the question and encourage him/her to take his time to answer the questions and share with me if there are any thoughts which he/she believe is relative to the knowledge management key performance indicators. I take notes as we go through the questions of the interview and at the end I ask the interviewee if there are any final comments they would like to share with me. Then I thank the interviewee and ask them to feel free to ask for a copy of the result of the data result for their review and implementation in their organization. I tried attempting more than one representative of each organization, for some organization I was able to do so however for others I was not due to either their busy schedule or unavailability.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Interviewed Person Job Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization A</td>
<td>CEO</td>
</tr>
<tr>
<td>Organization B</td>
<td>Director Research and Policies</td>
</tr>
<tr>
<td>Organization C</td>
<td>Managing Director</td>
</tr>
<tr>
<td>Organization D</td>
<td>Head of Knowledge Sharing Department</td>
</tr>
<tr>
<td>Organization E</td>
<td>Senior Engineers Satellite Project</td>
</tr>
</tbody>
</table>

Table 5 Interviewees job title
4.2. Case Study interview questions

- Could you explain the role of Knowledge management System in your organization?

- To what degree you believe that KM is crucial to the organization
  
  - Is the top management committed toward Knowledge management?
  
  - Does KM exist in the organization corporate strategy?
  
  - Has the existing KMS affected organization performance?
  
  - How is KM emphasized to the employee?
  
  - Are employees motivated to take share knowledge with their colleagues?
  
  - What are the best motivation tool to encourage employees to share knowledge?

- Are there any KM KPI placed in your organization?
  
  - If yes, What KPI exists?
  
  - If not, Do you believe it is going to be beneficial to have KPI for KM

- To what degree employee’s behaviour is influenced by Key Performance Indicators?
  
  - What of the following factors affect employee behaviour in sharing knowledge:

    - Attitude, employee
    - Organization Norm
    - Perceived Control employee posses to share knowledge
  
  - Is sharing knowledge considered organization norm?
o Is not sharing knowledge considered a selfish behavior and not acceptable in your organization?

• **What performance measure for Knowledge management do you believe is suitable to influence your department team members?**

  o Is your team more focused toward customer service, operation excellence or product innovation?

  o What KPI’s would assist you team to maximize their benefit of the existing KMS

  o How would you motivate your team member to share knowledge with their colleagues?

  o How would you deal with employees who refuse to share knowledge?

  o What disciplinary actions or measure would you take against employee who does not share knowledge?

• **Why it is important to influence employee behavior to share knowledge within his/ her community?**

  o How sharing knowledge is would affect the overall team performance?

  o How is risk management related to Knowledge management?

• **How can organization performance be measure?**

  o What of the following has more weight in determining the organization performance operation excelling, product innovation or customer intimacy and why?
4.3. Case Study 1 Organization “A” Interview

4.3.1. Organization Description
Organization A is a Telecom operator in the UAE, this organization was established six years ago and today it has more than 2,000 employees. Organization A provides Telecom services to all customers segment in all of UAE. Knowledge management (KM) is significant to this organization, yet they have not established any KM system. Organization A would like to explore more of KM and see how other organization benefited from KM.

4.3.2. Interview Person
I have managed to meet the CEO of organization A, the CEO of organization A has an excess of twenty years of experience in telecom industry and he was one of the founders of the organization A, I was surprised by the amount of information he has on knowledge management.

4.3.3. Reply of interview Question

1- To what degree you believe that Knowledge Management (KM) is crucial to your organization

Knowledge is important to any organization; being the chief executive it is my duty to manage the organizations assets and knowledge is one of the organization intangible assets so yes knowledge management is defiantly important, however the challenge is to define the critical knowledge which needs to be management. Today we do not measure knowledge in our organization; however we need to define a scope for knowledge management to define an implementation plan for knowledge management before proceeding forward.
2- To what degree employee’s behaviour is influenced by Key Performance Indicators (KPI)?

Parapets KPI’s will influence employee behaviour to a certain degree, nevertheless it is not the ultimate way to encourage employee to perform better, I do believe that for us to support employees to excel in their tasks we need to secure few factors such as

- Comfort in their work such as physical environment and relationship with management
- Motivation whether it is extrinsic or intrinsic
- Reward when a great job is done by the employee

If the above factors were to exist beside KPI’s I do believe it will allow employee to influence employee behaviour.

3- What Key Performance Measure (KPI) for Knowledge management do you believe is suitable to influence employee’s behavior in organization A?

As indicated KPI’s are not the only factor which would influence employee behaviour, if employees are:-

1- Happy in carrying out their takes
2- The physical environment is appropriate
3- Comfortable
4- Motivation
5- Rewarded
6- Relationship with their line manager

7- Empowerment

Then only we will see a change in employee behaviour, or organization would be able to influence employee behaviour to a certain degree.

4- **What of the following factors affect employee behaviour in sharing knowledge:-**

It is important to define what knowledge is important to the organization and then we can influence employee behaviour to share their knowledge with their colleagues. I do believe that attitude and norm are more significant towards affective employee behaviour to share knowledge, if those two factors are emphasized on.

5- **Why it is important to influence employee behavior to share knowledge within his/her community?**

Sharing knowledge is defined to improve team performance, the challenge is to convince employee to share knowledge among their teams as it will affect organization performance positively. This is determined by the type of knowledge and how significant it is to the organization and to the knowledge strategy.

6- **How can organization performance be measure?**

a. What of the following has more weight in determining the organization performance and why

i. operation Excellency

ii. product innovation
iii. Customer intimacy and why?

Organization performance is accessed via the parameters which you have indicated in your introduction which are operation excellence, product innovation and customers intimacy and to me all of them are important and applicable to the organization, moreover employee engagement is also a measurement of organization performance it is important to see to what degree the employee are satisfied and engaged in their organization.

Event ought there no formal knowledge management system in the organization, knowledge is encouraged among encouraged from the top management, I have noticed also a genuine concern about the welfare of the employees in the organization A, perhaps the delay in deploying knowledge is due to the fact that there is no knowledge strategy which will define what is needed from KM and the fact that the spending was reduced due to the financial crises.
4.4. Case Study 2 Organization “B” Interview

Organization B is a government authority responsible for social development in Dubai, organization B was formed about four years ago and its purpose is to elevate the social standard for Emiratis in Dubai. Organization B has about less than five hundred employee, Organization “B” has focused on KM since days one via attempting to establish a KM platform to allow employee to exchange knowledge within organization, nevertheless this did not take place for several reasons, considering Organization B a start up organization the amount of knowledge was not significant to be managed, moreover the knowledge strategy was yet to be formed, knowledge strategy will explicitly indicate what type of knowledge organization B would be interested in managing.

4.4.1. Interview Person

I have managed to meet the Director of Research and Policy of organization B, the Director of organization is a retired Doctor and has a PhD in Epidemic disease and prior to that has practiced medicine as a doctor in Egypt before becoming a specialist in Epidemic disease. A has an excess of thirty years of experience in social community and have applied knowledge sharing in his early days of Medicine University. The director of Research and Policy has been with Organization B for four years, his role is mainly is conducting research related to community development and create policies which will help improving various areas of the emeriti community in the UAE.
4.4.2. Reply to interview Questions

1- To what degree you believe that KM is crucial to the organization

Knowledge management is critical to our organization to management intellectual properties of the organization, nevertheless currently KMS is not in the focal point of the as it is considered a start up organization and there is no knowledge to manage

2- Are there any KM KPI placed in your organization?

Currently there is no KMS in our organization thus KM KPI is not applicable, however when we deploy a full scale KMS, KM KPI should be placed in executives and employee as well however there will be different KPI’s depends on the employee level in the organization, those KPI’s will be driven from the knowledge strategy of the organization and the expected knowledge contribution from each member of the organization.

3- To what degree employee’s behaviour is influenced by Key Performance Indicators?

KPI’s would influence the behaviour of the employee to share knowledge, moreover it is important to change the employee perception of knowledge I strongly believe that it is important to ensure to employees that sharing knowledge would not affect their job security and lead to replacing them with; on the contrary it will improve the employee status within the organization. Factors such as attitude, norm and perceived control would defiantly affect employee behaviour and as I have indicated if we are able to provide employee with a assurance that knowledge sharing would not reduce their value in organization then his/her attitude towards knowledge sharing would improve.

Knowledge sharing might be considered an organization norm, however this depends on the nature of work associated with that department, and the nature of the core task of each department would determine if knowledge sharing is considered an organization norm or not
for example IT department is involved in KM this also applies to the Politics and Research. In my department knowledge sharing is encouraged and employees are appraised for sharing knowledge.

4- **What performance measure for Knowledge management do you believe is suitable to influence employee behavior in your organization?**

It depends on the core business of the organization itself, government entities would focus on customers and providing innovative services to its customers, other organization might focus on operational activities and efficiency and operation cost.

5- **Why it is important to influence employee behavior to share knowledge within his/her community?**

Sharing valuable knowledge is for sure going to improve team performance and organization overall performance, nevertheless the challenge would be to define organization valuable knowledge.

6- **How can organization performance be measure?**

In our organization it would be customer intimacy, as our goal is to develop community standards and therefore it is important to achieve high degrees of customer intimacy, operation excellence is important as well to any organization to ensure cost reduction and hence improve efficiency.

Organization B had approached IBM to install a KM platform to allow employee to share knowledge within organization, however due to the fact that it is a startup there was no
knowledge to manage, I have noticed that organization “B” had informally established a knowledge strategy which is approved at the level of Research and Policy department in terms of what is knowledge is important and what is the knowledge gap, this will simplify the implementation plan for their KM platform. Furthermore there was an interest in applying KM KPI’s and evaluate its impact on organization “B” performance towards customer intimacy as it is their core function.
4.5. Case Study 3 Organization “C” Interview

Organization C is a federal government entity which is established in the electronic government, it contribute to the implementation of the government IT strategy which evolve around improving life of citizen and improve the government services and make it more modernized. Organization C has less than 500 employees and since its core business is IT service, knowledge management is considered an important pillar for this organization to success and meets its strategic objectives.

4.5.1. Interview Person

I have managed to interview the managing director of organization C, he A has an excess of ten years of experience in Information Technology, his role is mainly is manage the federal entity and ensure that the overall federal government strategy related to information technology is implemented.

4.5.2. Reply to interview Questions

1- Could you explain the role of Knowledge management System in your organization?

We have an intranet set up, tailored made to function as a knowledge management system to basically share information and documents

2- To what degree you believe that KM is crucial to the organization

There is a commitment from top management towards knowledge management and we would like to promote knowledge management in our organization, currently KM is not explicitly stated in the corporate strategy, however it is a known concept to all individuals. We have seen limited effect of knowledge management in our organization perhaps is this due to the primitive KM we have in our organization. The best way to motivate employee to share knowledge is to have it incorporated as part of their daily task and part of their job distribution.
3- Are there any KM KPI placed in your organization?

In our organization we do not have a KPI’s for knowledge management, but we do have a KPI’s used to measure the performance of employees to ensure that progress is measured and related to organization performance. Implementing a KPI ‘s for knowledge management system at an early stage of implementation might not be effective, waiting until the knowledge management system mature and then introduce KPI’s will definitely help measuring progress.

4- To what degree employee’s behaviour is influenced by Key Performance Indicators?

KPI’s might influence to a little degree employee performance, in addition to that I do believe that organization norm would also affect employee behaviour to share knowledge to a greater extent than attitude and perceived control. In our organization sharing knowledge is considered an organization norm and employees are encouraged to do so.

5- What performance measure for Knowledge management do you believe is suitable to influence employee’s behavior in your organization?

My organization is focused in customer service, therefore I would consider KM KPI’s which are more focused on developing employee knowledge to become more customer oriented, in cases where employee do not share knowledge within their team’s then this might affect their performance appraisal in a negative way.

6- Why it is important to influence employee behavior to share knowledge within his/her community?

I believe that sharing knowledge would affect the overall team performance is a positive way, therefore it is important to influence employee behaviour to share knowledge within his/her team.
Knowledge management overlap with a number of management tools used in organization such as risk management, thus I believe that having a well set knowledge management system would defiantly support other management tool used in today's organization.

7- How can organization performance be measure?

I believe organization performance can be measured by the three main categories which is indicated by you which are operation excellence, customer intimacy and product innovation. The core function of the organization will decide on which parameter to select and focus more on. Some organization might focus on all of those elements equally as well.
4.6. Case Study 4 Organization “D” Interview

This is a government entity which is responsible for maintain the city in terms of cleanness, sewage system functioning properly, ensure pests control and perform monitoring on the building construction industry in the emirate of Dubai. Moreover this government entity will supervise the decoration of the city in holy occasions as well as on festival

4.6.1. Interview Person

I have interviewed the head of knowledge sharing in this organization, he supervised the set up of the knowledge management department three years ago, he also participated is creating the knowledge gate which is a web portal which acts as a platform for employee to access knowledge and to share their knowledge with others.

4.6.2. Reply to interview Questions

1. Could you explain the role of Knowledge management System in your organization?

KMS was introduced in our organization to meet the criteria of Dubai excellence award and its main roles are:-

- Documentation of all vital information using databases and intranet to knowledge access
- create an innovation environment to promote new products and services
- A tool used for benchmarking and improving practices
- Try to improve revenues by capitalizing any opportunity or making the best use of any service
- Improve customer satisfaction
2. To what degree you believe that KM is crucial to the organization

Yes KM is crucial to the organization and a KM department has been created for the purpose of promoting knowledge among employees in organization. Our organization knowledge strategy is to manage effectively organization knowledge and competencies.

We were not able to measure if there is a direct effect of knowledge management system on organization performance, perhaps because some of the KPI’s related to measuring knowledge management contribution of organization performance is shared with many stakeholder.

KM is emphasized to the employees; however there is poor response from employee toward knowledge management initiatives. For example when an employee is asked to generate a paper about his/her work and asked to share it with team member, there is no enthusiasm from employee side to contribute to the knowledge within teams.

KM management is an important tool which enables employees to develop and grow, by creating a knowledge worker, employee become more engaged in his work environment, this would lead to improvement in work flow and processes will be streamlined, this would result in improving customer satisfaction and hence improve financial outcomes.

3. Are there any KM KPI placed in your organization?

We have not introduced any knowledge management KPI, creating knowledge management KPI required a maturity of understanding towards knowledge management and identifying where KM can contribute to the organization performance enhancement.

Establishing KPI KM will improve the utilization of knowledge management and unleash its full capabilities; however a clear knowledge strategy is important to define the purpose of KM and defines the knowledge gap in every department.
4. To what degree employee’s behaviour is influenced by Key Performance Indicators?

Employee behaviour is somehow is influenced by KPI’s, this is excepted as employees will strive to meet his KPI’s to his/her to get a better rating in the yearly performance.

However KPI’s are not the only tool which will affect employee’s performance, employee satisfaction would also play a role in affecting employee behaviour within organization.

Even though we have implemented a knowledge management system in our organization, knowledge sharing is not considered an organization norm, perhaps for the reason that there are several offices located in different geographical locations, thus it is difficult to have an organization norm with scattered offices all over Dubai.

5. What performance measure for Knowledge management do you believe is suitable to influence employee’s behavior in your organization?

We are in KMD we considered to be a support function, where we support core function of organization to improve team and departments intellectual assets. Then only specific sets of KPI’s can be tailored to meet that untie or team strategic objectives.

As indicated there is no generic KPI’s which can be used for the same team across the organization, KPI’s should be customized but this will take longer implementation time there for it is better to adapt KPI’s of similar department in other organization implement them on a trial basis, review those KPI’s and amend them to meet the knowledge strategy of that specific department.

Motivation can be apprising that person in front of the entire team or by rewarding them with financial rewards; in my case in Knowledge management department we do not directly reward our employee as we act as support to other department to promote knowledge management, so we advice other department on how to motivate people and selecting the best tool.
We cannot force employee to share knowledge however we try to create the right environment to allow them to share knowledge. In case employee does not want to share knowledge there is no action can be done to force employee to share knowledge.

6. **Why it is important to influence employee behavior to share knowledge within his/her community?**

I am fully confident that sharing knowledge with team would improve overall team performance and quality of work, moreover the credit of performing an outstanding task will be shared between team members other than concentrated on one individual. For this reason people to contribute to the team performance by sharing knowledge should be rewarded by an appropriate method to ensure that they are compensated for their extra effort.

There is a certain overlap between knowledge management and risk management as being a management tool the concept and purpose of both tool’s are different, I might agree that risk management might use knowledge management as a medium to spread information which might help is avoiding risk and harm to the organization.

7. **How can organization performance be measure?**

It depend on the organization strategic objective, what is required from that organization to fulfill, for example in our organization we are responsible for cleaning the city, manage the sewage plants, increasing the green area of the city and finally decorate the city for occasions.

There is a significant focus on the citizens of emirate and how can we improve their experience in terms of finding the city clean, green and decorated. Moreover we also focus on operation excellence as we need our operation cleaning team to clean the city and the same applies for sewage operation team.
4.7. Case Study 5 Organization “E” Interview

Organization D is a regional Satellite Telecommunication Company, based in the UAE and has coverage of about 110 countries. It has less than 500 employees in the organization and had two offices in the UAE and few regional offices in Africa and Far East. There is not formal knowledge management system in organization D, however due to the high sophistication of the satellite industry technology certain actions were taken to manage the knowledge.

4.7.1. Interview Person

I have was successful in meeting their Senior Engineer for Satellite Projects, how is responsible for developing and launching satellite worth of hundreds of millions. This person has an excess of eight years in the telecom industry and had many achievements in his profile.

4.7.2. Reply to interview Questions

1- Could you explain the role of Knowledge management System in your organization?
Currently there is no formal knowledge management system in our organization; knowledge is managed via documentations located in the archiving room. I believe that knowledge management system will play a significant role in managing the intellectual properties of the organization.
2- **To what degree you believe that KM is crucial to the organization**

I believe that one of the major benefits of knowledge management is improving the learning curve of employee, reduce trouble shooting time and provide management with knowledge to take accurate decisions.

As I have indicated there is no formal frame for knowledge management system in our organization, but we do realize that there is a need to manage the organization intellectual properties. Today KM do not exists in our corporate strategy, but there is plan to introduce it soon. In our organization employees are encouraged to share knowledge and best practices to improve team performance, not all employees are motivated to share knowledge as they believe it is additional workload.

3- **Are there any KM KPI placed in your organization?**

The current KPI system is implemented in various departments to measure performance of various departments and teams; no KPI was introduced to KM as KM do not exists in our organization.

4- **To what degree employee’s behaviour is influenced by Key Performance Indicators?**

KPI’s can influence employee behaviour nevertheless it is not the ultimate factor which will influence employee behaviour, as you know KPI’s has to be agreed by the manager and the subordinate most of the time the employee will try to avoid certain KPI’s if they feel that other stakeholder would play a role in its outcome, this will result is loosely KPI’s which cannot measure performance accurately. The above indicated factor would defiantly influence the behaviour of employee to certain degree.

I cannot say that sharing knowledge is an organization norm, but it is an accepted practice, however people who are not sharing knowledge are seen as normal persons as well.
5- What performance measure for Knowledge management do you believe is suitable to influence employee’s behavior in your organization?

It depends mainly on the core activities of that team, department or division, if those departments are customer oriented then they should have customer satisfaction KPI and the same applies to operations department and commercial. There is no generic KPI’s for all employees in the organization.

In my case I am responsible for communication projects, it is important for us to prepare the project scope, project brief, communicate with vendors and plan and execute projects. An important KPI would be

1- proving an accurate scope for the project
2- ensure that the project brief is sent to the vendors within 5 working days
3- Receive the offers from vendors in 5 days
4- Evaluate tenders and award contract within 5 days
5- Coordinate and execute the project as per the project plan
6- Provide a weekly progress report and highlight any project risk
7- Handover the project and prepare final report in 2 working days.

I would motivate employee by appraising their good effort among the project team, I believe this would give a motive to the rest of the team to be motivate and perform better to get the same recognition. We cannot force people to share knowledge as they might resist this, but we can motivate them by recognition or a rewarding system.
6- Why it is important to influence employee behavior to share knowledge within his/her community?

Of course sharing knowledge within team would bring the entire team to a common level of expertise, this would improve the overall performance of the team and as the knowledge and experience comes together to resolve issues or take decisions.

7- How can organization performance be measure?

In our organization I believe all of the above is considered important to any organization, a higher focus would be on product innovation as we are trying to innovate to create new means of cost effective phones to meet customer needs.
4.8. Survey Questionnaire

In this section will present the survey questionnaire results for all of the five organizations, the questionnaire results will be used as support to the case study interviews carried out with decision makers in those organizations. One organization only had implemented Knowledge management system and it is organization “D”, organization “C” had just started with a knowledge management initiative but it is still in progress. The other three organizations have not started with Knowledge management System however they are keen to start providing that knowledge strategy is defined properly. In the next section i will present the questionnaire procedure

4.8.1. Questionnaire Procedure

I have decided to use quantitative approach in my research to support the qualitative approach used in the interview, the sample size was on average of 11 employees from each organization, the participants were chosen from all levels of the selected organization to examine employee’s response on attitude, organization norm and employee perceived control.

The questionnaire was distributed to all of the five organizations and I have indicated that the answer and identities of the participants will not be revealed. The participants have responded back via hardcopies, email and the total response was 55 replies only.

I have used the data analysis package used in excel to examine overall employee attitude, organization subjected norm and perceived control by employee to share knowledge sharing within organization.

The questionnaire is designed in way to examine employee attitude, questions from 7- 12 will show the employee attitude towards knowledge sharing. Question from 13-15 will indicate the organization norm and is the general norm in the organization is supporting knowledge sharing
or not. Questions from 16-19 will reveal the freedom employee posses to share knowledge within his/her organization.

4.8.2. Questionnaire Results

The questionnaire was analyzed using analysis tool kit in excel, the results are indicated in the below tables

Table 3 Q1 has your company implemented a Knowledge Management System (KMS)?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Number of employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>33</td>
</tr>
<tr>
<td>No</td>
<td>22</td>
</tr>
</tbody>
</table>

Table 4 Q2 If so, did your company consult an outside agency to help?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Number of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>7</td>
</tr>
<tr>
<td>No</td>
<td>15</td>
</tr>
<tr>
<td>N/A</td>
<td>33</td>
</tr>
</tbody>
</table>

Table 5 Q3 How long has you worked at your present company?

<table>
<thead>
<tr>
<th>Years of Service</th>
<th>Number of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2 Years</td>
<td>7</td>
</tr>
<tr>
<td>2-4 Years</td>
<td>11</td>
</tr>
<tr>
<td>4-6 years</td>
<td>24</td>
</tr>
<tr>
<td>Over 6 years</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 6 Q4 Describe your position at your company

<table>
<thead>
<tr>
<th>Role in Organization</th>
<th>Number of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Manager</td>
<td>22</td>
</tr>
<tr>
<td>Manager</td>
<td>23</td>
</tr>
<tr>
<td>Executive</td>
<td>1</td>
</tr>
<tr>
<td>Others</td>
<td>9</td>
</tr>
</tbody>
</table>
### Table 7 Q5 Describe your nature of work

<table>
<thead>
<tr>
<th>Division</th>
<th>Number of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>18</td>
</tr>
<tr>
<td>Commercial</td>
<td>12</td>
</tr>
<tr>
<td>Support services</td>
<td>3</td>
</tr>
<tr>
<td>Strategy</td>
<td>2</td>
</tr>
<tr>
<td>Corporate Governance</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>20</td>
</tr>
</tbody>
</table>

### Table 8 Q6 what do you believe is the main advantage of ‘Knowledge Management’

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Number of Employee selected that benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce Time wasted</td>
<td>2</td>
</tr>
<tr>
<td>Share knowledge more effectively</td>
<td>36</td>
</tr>
<tr>
<td>Avoid Repeating the same faults</td>
<td>14</td>
</tr>
<tr>
<td>Others</td>
<td>3</td>
</tr>
</tbody>
</table>

### Table 9 Q7 My company KMS has helped me to perform my job better

<table>
<thead>
<tr>
<th>Response</th>
<th>Response in Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>7%</td>
</tr>
<tr>
<td>Somehow Disagree</td>
<td>11%</td>
</tr>
<tr>
<td>Neutral</td>
<td>36%</td>
</tr>
<tr>
<td>Somehow agree</td>
<td>20%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>26%</td>
</tr>
</tbody>
</table>

### Table 10 Q8 As it pertains to my job duties, I view our Knowledge Sharing is a positive light

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>7%</td>
</tr>
<tr>
<td>Somehow Disagree</td>
<td>11%</td>
</tr>
<tr>
<td>Neutral</td>
<td>20%</td>
</tr>
<tr>
<td>Somehow agree</td>
<td>38%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>24%</td>
</tr>
</tbody>
</table>
Table 11 Q9 Knowledge Sharing adds to my job responsibilities

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>0%</td>
</tr>
<tr>
<td>Somehow Disagree</td>
<td>27%</td>
</tr>
<tr>
<td>Neutral</td>
<td>20%</td>
</tr>
<tr>
<td>Somehow agree</td>
<td>20%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>33%</td>
</tr>
</tbody>
</table>

Table 12 Q10 I often receive feedback when I share knowledge, positive and/or negative

<table>
<thead>
<tr>
<th>Responses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>18%</td>
</tr>
<tr>
<td>Somehow Disagree</td>
<td>4%</td>
</tr>
<tr>
<td>Neutral</td>
<td>22%</td>
</tr>
<tr>
<td>Somehow agree</td>
<td>36%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>20%</td>
</tr>
</tbody>
</table>

Table 13 Q11 My Company has seen positive, tangible results from KMS

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>0%</td>
</tr>
<tr>
<td>Somehow Disagree</td>
<td>15%</td>
</tr>
<tr>
<td>Neutral</td>
<td>38%</td>
</tr>
<tr>
<td>Somehow agree</td>
<td>35%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>13%</td>
</tr>
</tbody>
</table>

Table 14 Q12 KM is vital to improve our organization performance

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>0%</td>
</tr>
<tr>
<td>Somehow Disagree</td>
<td>7%</td>
</tr>
<tr>
<td>Neutral</td>
<td>4%</td>
</tr>
<tr>
<td>Somehow agree</td>
<td>27%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>62%</td>
</tr>
</tbody>
</table>
Table 15 Q13 I will share my working experience and knowledge to my colleagues conditionally that I receive an incentive/reward.

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>22%</td>
</tr>
<tr>
<td>Somehow Disagree</td>
<td>13%</td>
</tr>
<tr>
<td>Neutral</td>
<td>13%</td>
</tr>
<tr>
<td>Somehow agree</td>
<td>36%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>16%</td>
</tr>
</tbody>
</table>

Table 16 Q14 Sharing knowledge with my colleague would enhance my reputation within the organization

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>0%</td>
</tr>
<tr>
<td>Somehow Disagree</td>
<td>7%</td>
</tr>
<tr>
<td>Neutral</td>
<td>22%</td>
</tr>
<tr>
<td>Somehow agree</td>
<td>29%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>42%</td>
</tr>
</tbody>
</table>

Table 17 Q15 My management encourage us to share past experience, new knowledge about my line of work

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>0%</td>
</tr>
<tr>
<td>Somehow Disagree</td>
<td>27%</td>
</tr>
<tr>
<td>Neutral</td>
<td>15%</td>
</tr>
<tr>
<td>Somehow agree</td>
<td>38%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>18%</td>
</tr>
</tbody>
</table>
Table 18  Q16 My management discourage employees from withholding knowledge from their colleagues

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>24%</td>
</tr>
<tr>
<td>Somehow Disagree</td>
<td>33%</td>
</tr>
<tr>
<td>Neutral</td>
<td>11%</td>
</tr>
<tr>
<td>Somehow agree</td>
<td>27%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>5%</td>
</tr>
</tbody>
</table>

Table 19  Q17 It is fairly difficult to share knowledge with my subordinates

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>42%</td>
</tr>
<tr>
<td>Somehow Disagree</td>
<td>16%</td>
</tr>
<tr>
<td>Neutral</td>
<td>36%</td>
</tr>
<tr>
<td>Somehow agree</td>
<td>5%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>0%</td>
</tr>
</tbody>
</table>

Table 20  Q18 I have full control on choosing the time to brief my team on Project development, incident reports and new update in technology

<table>
<thead>
<tr>
<th>Responses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>13%</td>
</tr>
<tr>
<td>Somehow Disagree</td>
<td>24%</td>
</tr>
<tr>
<td>Neutral</td>
<td>16%</td>
</tr>
<tr>
<td>Somehow agree</td>
<td>36%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>11%</td>
</tr>
</tbody>
</table>

Table 21  Q19 I can upload new article related to my field or other fields to the knowledge base

<table>
<thead>
<tr>
<th>Responses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>15%</td>
</tr>
<tr>
<td>Somehow Disagree</td>
<td>27%</td>
</tr>
<tr>
<td>Neutral</td>
<td>25%</td>
</tr>
<tr>
<td>Somehow agree</td>
<td>25%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>7%</td>
</tr>
</tbody>
</table>
In the next section I will discuss the analysis findings and evaluate to what extend organization in the UAE are in favor or implementing a KPI’s to their KMS would influence employee behaviour to share knowledge in organization.
Chapter 5 Data Analysis & Discussion

5.1 Introduction

In this section I will present the data analysis and discuss them in a way to answer the research questions which are:-

- Examine how knowledge management specific KPIs may influence employee behaviour to share knowledge
- Investigate the effect of attitude, norm and factors would affect employees behaviour in sharing knowledge
- Examine the impact of having KM KPI and Influencing Employee Behaviour to Share knowledge on organization performance

The first objective would be examine how KM KPI’s can influence employee behaviour to share knowledge

The second research objective is to investigate the effect of attitude; norm and factors would affect employee’s behaviour in sharing knowledge

As for the third research objective is to examine the impact of having KM KPI and Influencing Employee Behaviour to Share knowledge on organization performance.

Since my research strategy indicated in (3.7) indicated that I will be using two both qualitative and quantitative approaches collect the data, thus the quantities data will be presented in graphs, statistics and number whereas qualitative data will be categorized to examine the on the basis on their theoretical explanation and classified to reveal the similarities and differences among those five organization. (Saunders 2007)
5.2 Organization Interviews Data Analysis

To proceed with the qualitative analysis to the interview, I will categories the data based on:-

A. The degree to which employee behaviour is affected by KM KPIs

B. The importance to influence employee behaviour to share knowledge

C. Measuring organization performance

The above three categories are driven the points discussed during the interviews with strategy makers in organization, the objective observe the similarities and differences between those organization.

Table 22 Data analysis for category A

<table>
<thead>
<tr>
<th>Organization</th>
<th>The degree to which employee behaviour is affected by KM KPIs</th>
</tr>
</thead>
</table>
| Organization A | • KPI’s are integrated with BSC to influence behaviour and improve performance  
• Employee engagement programs to influence employee behaviour to share knowledge  
• There is no formal KMS, therefore for this no clear KPI’s for KM |
| Organization B | • KPI’s are introduced to the organization, but not enforced  
• There is no formal KMS, however there is KM initiatives within department  
• KM KPI’s are incorporated in the Job Description, however it is not measured |
| Organization C | • There is no formal KMS, however this organization uses Intranet to share knowledge and store documents  
• There is no KM KPI’s  
• They have introduced sharing knowledge as a task in the job description of their employees  
• KM KPI’s are incorporated in the Job Description, however it is not measured |
| Organization D | • A knowledge management system is introduced  
• There is no KPI’s for KMS as it is difficult to measure it due to the fact that those KPI’s are shared with more than one department |
| Organization E | • There is no formal KMS, however there are archiving room which acts as repository for document and explicit knowledge  
• No KPI’s to influence employee behaviour to share knowledge  
• KM KPI’s are incorporated in the Job Discretion, however it is not measured |
One of the best practices identified is in organization “A”, KPI’s and BSC are identified to influence employee behaviour and measure performance of individuals, team and department. Employees are engaged and involved to improve the work environment and influence employee behaviour.

Table 23 Data analysis for category B

<table>
<thead>
<tr>
<th>Organization</th>
<th>The importance to influence employee behaviour to share knowledge</th>
</tr>
</thead>
</table>
| Organization A | • Create Knowledge base and encourage employees to use it  
| | • Encourage employees to share best practices and rewards it  
| | • Focus on the general image of the organization and asking employees to be the ambassadors to the organizations |
| Organization B | • Create a common folders to consolidate explicit knowledge and give access to all employee in the organization  
| | • encourage employee to access those common folder  
| | • Reward employee whom contribute to the organization knowledge |
| Organization C | • Make it part of the employee job description  
| | • Reward employee if he/she share knowledge  
| | • Punish the employee if he/she did not share knowledge |
| Organization D | • Reward employee who share knowledge  
| | • Encourage employees to use knowledge gate  
| | • Various initiative to improve employee perception towards knowledge sharing such as knowledge conference and seminars  
| | • |
| Organization E | • Reward employee whom share knowledge by apprising them  
| | • Reward financially knowledge which lead to increase revenue and reduce cost |

The best practice is carried out by organization “D” as the reward employee who participate in knowledge sharing, encourage employees to use their Knowledge Gate (knowledge management web portal) and improve employee perception towards knowledge sharing by participating in knowledge conferences and seminars.
Table 24 Data analysis for category C

<table>
<thead>
<tr>
<th>Organization</th>
<th>Measuring organization performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization A</td>
<td>• Incorporating Balanced Score Cards to most organization levels</td>
</tr>
<tr>
<td></td>
<td>• Creating KPI’s for processes and Service Level Agreement to ensure</td>
</tr>
<tr>
<td></td>
<td>performance is measured in the right time using the correct</td>
</tr>
<tr>
<td></td>
<td>indicators.</td>
</tr>
<tr>
<td></td>
<td>• The focus is on operation excellence, product innovation and</td>
</tr>
<tr>
<td></td>
<td>customer intimacy</td>
</tr>
<tr>
<td>Organization B</td>
<td>• Create KPI’s for various department and tied it to organization</td>
</tr>
<tr>
<td></td>
<td>performance</td>
</tr>
<tr>
<td></td>
<td>• More focus on customer intimacy</td>
</tr>
<tr>
<td>Organization C</td>
<td>• Organization performance is tied to customer intimacy mainly and</td>
</tr>
<tr>
<td></td>
<td>operation excellence</td>
</tr>
<tr>
<td></td>
<td>• KPI’s and BSC are created to measure organization performance</td>
</tr>
<tr>
<td>Organization D</td>
<td>Organization performance is measured using KPI’s tied to the customer</td>
</tr>
<tr>
<td></td>
<td>intimacy and operation excellence</td>
</tr>
<tr>
<td>Organization E</td>
<td>Organization performance is measured using KPI’s tied to the customer</td>
</tr>
<tr>
<td></td>
<td>intimacy, operation excellence and product innovation</td>
</tr>
</tbody>
</table>

The best practice is carried by organization “A” as they have defined KPI’s for processes, KPI’s for process input, KPI’s for process output to ensure every activity is measured, this task is carried out only when there is a shared KPI’s where performance is dependent on more than one department or multiple employees.
5.3 Organization questionnaire Data analysis

In this section I will analyze the questionnaire data and specifically questions intended to examine employee attitude towards knowledge sharing, organization norm towards knowledge sharing and employee perceived control to share knowledge, I have consolidate all the questionnaire responses because I believe it is more valuable to examine the factors influencing employee behaviour to share knowledge in all of those organizations in the UAE. Question 7 to question 12 is intended to measure employee attitude.

My company KMS has helped me to perform my job better

- Strongly Agree 26%
- Somewhat Agree 20%
- Neutral 36%
- Somewhat Disagree 11%
- Strongly Disagree 7%
As it pertains to my job duties, I view our Knowledge Sharing is a positive light

Knowledge Sharing adds to my job responsibilities
I often receive feedback when I share knowledge positive and/or negative

- Strongly Agree: 20%
- Strongly Disagree: 18%
- Somehow Disagree: 4%
- Neutral: 22%
- Somehow agree: 36%

My company has seen positive, tangible results from KMS

- Strongly Agree: 13%
- Strongly Disagree: 0%
- Somehow Disagree: 14%
- Neutral: 38%
- Somehow agree: 35%
KM is vital to improve our organization performance

- Strongly Agree: 62%
- Somewhat Agree: 27%
- Somewhat Disagree: 7%
- Neutral: 4%
- Strongly Disagree: 0%
I will share my working experience and knowledge to my colleagues conditionally that I receive an incentive/reward

Sharing knowledge with my colleague would enhance my reputation within the organization
My management encourage us to share past experience, new knowledge about my line of work

My management discourage employees from withholding knowledge from their colleagues
It is fairly difficult to share knowledge with my subordinates

- Strongly Disagree: 42%
- Somehow Disagree: 16%
- Neutral: 36%
- Somehow agree: 6%
- Strongly Agree: 0%

Legend:
- Blue: Strongly Disagree
- Dark Red: Somehow Disagree
- Green: Neutral
- Purple: Somehow agree
- Cyan: Strongly Agree
I have full control on choosing the time to brief my team on Project developments, incident reports and new updates in technology

I can upload new articles related to my field or other fields to the knowledge base
5.4 Organization Interviews Data Discussion

I will present the interview data discussion using the three categories

A. The degree to which employee behaviour is affected by KM KPIs
B. The importance to influence employee behaviour to share knowledge
C. Measuring organization performance

5.4.1 Point “A “The degree to which employee behaviour is affected by KM KPIs

With regards to the degree to which employee behaviour is affected by KM KPI, all organization agree that employee behaviour can be influenced to a great extend by KPI’s, KPI’s are used in those organization’s today to measure the performance of individuals, team , departments.

In section 2.6 both Neely et al (1997) have indicated that employee behaviour can be influenced by the use of KPI’s especially when there is a certain financial outcomes are associated with it or a financial penalty

Only organization D has deployed a full scale knowledge management system, with knowledge gate web portal which will assist employee to interact and obtain the right knowledge at the right time.

Since the KM department acts as a support to other unite to promote knowledge worker, they have suggest to place a KPI’s to KM and it was implemented.

Nevertheless there is no KPI’s for knowledge management as the difficulty exists in measuring a KPI’s which are shared with multiple department

As for the organization B, C and E KM KPI’s are integrated into the job description of the employee, nevertheless those KPI’s; this might encourage employees to share knowledge but
the difficulties might lie is updating those KPI’s on a periodical basis and measure them in multiple time during the year.

Organization A, have implemented KPIs’ and BSC into the organization to influence employee’s behaviour, other incentive programs were introduced to improve KM. however there is no KM KPI’s.

It can be concluded that the first proposition of H1. which states that there is a relationship between KM KPI’s and influencing employee behaviour to share knowledge

5.4.2 Point “B” The importance to influence employee behaviour to share knowledge

All of the five organizations agree on the importance to influence employee behaviour to share knowledge, as knowledge is perceived a valuable asset by both organization and individuals, there is a tendency to withhold knowledge if employee perceives no benefit from sharing that knowledge. In section (2.7.3) Yan & Wu (2008) indicated the importance of knowledge to employee as source of competitive advantage; therefore it is critical for organization to influence employee behaviour to share knowledge within their team to enhance organization performance.

In organization “A” a knowledge base was created to allow employee to use it and share knowledge among themselves, encourage employees to share the best practices between them and reward it accordingly.

In organization “B” a common folder for each department is created and all employees are provided access to it, this allows them to share knowledge freely and with no constrains. Employee who share knowledge are identified and appraised and reward in the organization, this had influenced other employee to participate effective and share their knowledge with their colleague.

Organization “C” has introduced takes in the job description to ensure that employee share knowledge effectively with their colleagues, then reward employee to outperform in sharing knowledge.
Organization “D” has implemented various initiatives to improve employee behaviour such as encourage employee to access knowledge gate, conduct internal knowledge presentation to internal and external employees and reward participate.
Organization “E” had carried out two initiatives to influence employee behaviour to share knowledge such as appraising employees who share knowledge and reward financially knowledge which lead to improve in revenue and reduce in cost.

5.4.3 Point “C” Measuring organization Performance

Organization performance measurement varies from one organization to another depending on the core business of that organization, nevertheless most organization share three main criteria which are operation excellence, product innovation and customer intimacy. In section 2.8 it was indicated that organization performance is defined as the ability of the organization to achieve its defined objectives Ho (2008).
Zack et al (2009) indicated that the main areas which organization performance can be measured which are operation excellence, product innovation and customer intimacy.
In Organization “A “ Balanced Score Card is implemented in most organization levels , and KPI’s were introduced to measure processes and Service Level agreement to ensure that performance is measured in the right time using the right tool. Organization “A” is using operation excellence, product innovation and customer intimacy in measuring organization performance.
Organization “B” has created KPI’s for various departments and tied it to three main elopements of measuring organization performance, also there is more focus on customer intimacy.
Organization “C” organization performance is tied mainly to customer intimacy and then operation excellence; moreover BSC’s and KPI’s are used to measure performance in various departments.
Organization “D” the organization performance is measured using customer intimacy and operation excellence, there are KPI’s designed for employees in organization. Organization “E” organization performance is measured using KPI’s tired to customer intimacy, operation excellence and product innovation.

5.5 Organization Questionnaire Data Discussion

In this section I will discuss the data resulted from the questionnaire carried out to the five organization I have selected in my research, I have decided to analyze and discuss the questionnaire data as whole not based on organization level, the reason for that is to meet the objective of the research indicated in section (1.4) which is:

- Investigate the effect of attitude, norm and factors would affect employees behaviour in sharing knowledge in organization in UAE

In the literature review indicated in section (2.7.4) Cheng & Chen (2007) indicated that employee behaviour to share knowledge in organization is influence by three main factors:-

1- Attitude

2- Organization Norm

3- Perceived Employee control

In my questionnaire I have examined their response toward knowledge sharing attitude, general organization norm and perceived control by employee to share knowledge with his/ her organization.
The response of the attitude questions were as the following:

Table 25

<table>
<thead>
<tr>
<th>Response %</th>
<th>Questions</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>45% agree and somehow agree</td>
<td>KM has improve job performance</td>
<td>Positive attitude toward the effect of KM on job performance</td>
</tr>
<tr>
<td>62% agree and somehow agree</td>
<td>KM make my job duties more clear</td>
<td>Positive attitude toward the effect of KM on job clarity</td>
</tr>
<tr>
<td>55% agree and somehow agree</td>
<td>sharing knowledge is considered an added responsibility</td>
<td>Placing knowledge sharing as part of the Job description might cause negative attitude toward knowledge sharing</td>
</tr>
<tr>
<td>56% agree and somehow agree</td>
<td>I often receive feedback when I share knowledge , positive and/or negative</td>
<td>Positive attitude towards feedback</td>
</tr>
<tr>
<td>47 % have agree and somehow agree</td>
<td>My company has seen positive, tangible results from KMS</td>
<td>Positive attitude towards the benefit of KMS</td>
</tr>
<tr>
<td>89% have agree and somehow agree</td>
<td>KM is vital to improve our organization performance</td>
<td>Positive attitude towards KMS effect on organization performance</td>
</tr>
<tr>
<td>53% have agreed and somehow agreed that,</td>
<td>I will share my working experience and knowledge to my colleagues conditionally that I receive an incentive/reward</td>
<td>Positive attitude towards rewarding system, this mean that employee want a return in exchange for their knowledge sharing. Not rewarding employees who share knowledge will affect negatively on knowledge sharing in organization</td>
</tr>
</tbody>
</table>

The above data analysis confirms H2. that there is a positive relationship employee attitude and influencing employee behaviour to sharing knowledge within organizations in UAE
The response of the organization norm questions were as the following:-

Table 26

<table>
<thead>
<tr>
<th>Response %</th>
<th>Questions</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>71% have agreed and somehow agreed that,</td>
<td>sharing knowledge with my colleague would enhance my reputation within the organization</td>
<td>Positive organization norm towards knowledge sharing</td>
</tr>
<tr>
<td>56% have agreed and somehow agreed</td>
<td>my management encourage us to share past experience, new knowledge about my line of work</td>
<td>Positive organization norm towards knowledge sharing</td>
</tr>
<tr>
<td>57% disagree and somehow disagree</td>
<td>My management discourage employees from withholding knowledge from their colleagues</td>
<td>Positive organization norm towards knowledge sharing</td>
</tr>
</tbody>
</table>

The above data analysis confirms H3 that there is positive relationship organization subjected norm and influencing employee behaviour to sharing knowledge within organizations in UAE

The response of the perceived control questions were as the following:-

Table 27

<table>
<thead>
<tr>
<th>Response %</th>
<th>Questions</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>58% disagree and somehow disagree</td>
<td>It is fairly difficult to share knowledge with my subordinates</td>
<td>Negative towards employee control to share knowledge</td>
</tr>
<tr>
<td>42% agree and somehow agree</td>
<td>I have control full control on choosing the time to brief my team on Project development, incident reports and new update in technology</td>
<td>Positive towards choosing the medium to share knowledge</td>
</tr>
<tr>
<td>42% disagree and somehow disagree</td>
<td>I can upload new article related to my field or other fields to the knowledge base</td>
<td>Positive towards accessing knowledge portals and intranets</td>
</tr>
</tbody>
</table>

The above data analysis confirms H4 that there is a positive relationship employee perceived control and influencing employee behaviour to sharing knowledge within organizations in UAE
Chapter 6 Conclusion & Recommendation

In this chapter I will present the results, conclusion of my research along with recommendation based on the finding in the in section 5.

6.1 Results

Before proceeding with the result of the research I will state the objective of the research once again,

1- Investigate the factors that influence employees behaviour in sharing knowledge in organization in UAE

2- Examine how knowledge management specific KPIs may influence employee behaviour to share knowledge in organization in UAE

3- Examine the impact of having KM KPI and Sharing knowledge on organization performance

After conducting five interviews and a questionnaire with five organizations, with regards to objective 1 which Investigate the factors that influence employees behaviour in sharing knowledge in organization in UAE the result were that attitude, norm and perceived control, would influence employee behaviour to share knowledge within organizations.

The questioner results indicated that employee behaviour in influenced by those elements, the results indicated that majority of sample size have positive attitude towards Knowledge management. However employees were against having knowledge sharing as part of their job description and they perceived it as an additional work which they should be reward to carry out. Moreover the subjected organization norm was in all of the organizations supporting knowledge sharing with no exception; however the questionnaire results indicated that there is certain restriction imposed on employee freedom to choose a method to share knowledge.
After conducting the five interviews with executives and managers in organization in the UAE, with regards to objective 2 examine how knowledge management specific KPIs may influence employee behaviour to share knowledge in organization in UAE, the findings were that KM KPI’s would defiantly affect employee behaviour to share knowledge within his/her organization.

As for objective 3 which is examine the impact of having KM KPI and sharing knowledge on organization performance, from both the data analysis of interviews and questionnaire it is agreed by both staff of the organization and decision makers that KM KPI’s would have a positive effect on organization performance.
6.2 Conclusion

My research dissertation is about how knowledge management KPI’s would affect employee behaviour to share knowledge and it affect on organization performance in the UAE, the main objective of the research were:-

1- Investigate the factors that influence employees behaviour in sharing knowledge in organization in UAE

2- Examine how knowledge management specific KPIs may influence employee behaviour to share knowledge in organization in UAE

3- Examine the impact of having KM KPI and Sharing knowledge on organization performance

Furthermore my research has presented literature review on knowledge management, it importance to organization, challenges facing organization when implementing a knowledge management system and the importance of knowledge sharing in organization. Then I have presented the research methodology chapter which consisted of research question, research objectives, research philosophy, research approach, research strategy, and research time horizon.

After that I have presented the survey chapter which consisted of interview with five organizations in the UAE along with questionnaire as part of the research approach. After that I have presented the data analysis and discussion where I have presented all of the data gathered from the interview and questionnaire and analyzed it and then I have discussed the data. Finally in the recommendation section I will provide recommendation to improve knowledge sharing in organization and on selecting KM KPI’s in organization.
In summary there I believe that my research is one of the first dissertations written on KM KPI’s in organization in UAE and the elements which influence employee behaviour to share knowledge.
6.3 Recommendation

Based on the research combined results of the interviews and the questionnaire data I am going to present the following recommendation for the employee:-

1- Knowledge management is a powerful tool which will assist you to sharpen the saw and keep improving the quality of work

2- Team success depends on 100% participation from all team member, sharing knowledge improve team performance

As for organizations and based on the results of my research:-

1- Sharing knowledge is perceived as an additional work load which employee should be either rewarded to given an allowance to perform

2- Majority of employee have a positive attitude toward knowledge management and knowledge sharing, this will facilitate the implementation of knowledge management system in organization and improve organization performance

3- Organization need to provide more autonomy to employee to chose the best way to share knowledge within their team; this will positively influence employee behaviour to share knowledge further

4- Using KM KPI’s will influence employee behaviour to share knowledge further and it will help measuring the effectiveness of the KMS

The financial crises had affected both private and government organization and forced them to reduce cost and find new revenue streams, organization such as Ericsson, HP and KPMG had benefited from implementing KM KPI’s , I believe that if organization started adapting those models, they will notice an improvement in cost reduction and improve organization performance.
References

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Hiroyuki Itami & Thomas W. Roehl (1987) mobilizing invisible assets viewed 16th October 2010
[http://books.google.ae/books?id=wEQ2OaD0twC&printsec=frontcover&dq=Mobilisin
g+Invisible+Assets&source=bl&ots=CEL9MJgkz0&sig=9QgHp_YW9ab3Oa9270BiE68
EoAc&hl=en&ei=yUm5TN6wldC6jAf0s9DJDg&sa=X&oi=book_result&ct=result&resn
um=2&ved=0CBoQ6AEwAQ#v=onepage&q=knowledge&f=false](http://books.google.ae/books?id=wEQ2OaD0twC&printsec=frontcover&dq=Mobilising+Invisible+Assets&source=bl&ots=CEL9MJgkz0&sig=9QgHp_YW9ab3Oa9270BiE68EoAc&hl=en&ei=yUm5TN6wldC6jAf0s9DJDg&sa=X&oi=book_result&ct=result&resnum=2&ved=0CBoQ6AEwAQ#v=onepage&q=knowledge&f=false)

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Annex

Knowledge Management Survey

Dear,

I am a graduate student at British University in Dubai working towards my Master of Project Management degree. I am conducting research for my thesis, pertaining to Knowledge Management Key Performance Indicators and it relation to employee behaviour to share knowledge and its impact Organization Performance in organizations in the UAE

Disclaimer: Your participation in this survey is completely voluntary and your responses will remain anonymous. Survey results will be aggregated and summarized for use in the research project.

Section One: Please circle one

1. Has your company implemented a Knowledge Management System (KMS)?
   YES       NO

2. If so, did your company consult an outside agency to help?
   YES       NO       N/A

3. How long have you worked at your present company?
   0-2 years  2-4 years  4-6 years  Over 6 years

4. Describe your position at your company:
   Non-Manager    Manager    Executive    Other

5. Describe your nature of work:
   Technology
   Commercial
   Support Services (HR/ ADMIN/FINANCE)
   Strategy
   Cooperate Governance & External Affairs
   Other

6. What do you believe is the main advantage of 'Knowledge Management'?
   Reduce time wasted
   Knowledge sharing more effectively
   Avoid repeating the same faults
Other, please state:........................................

**Section two: For the following statements, please circle the most appropriate measure to which you agree or disagree with the statement**

<table>
<thead>
<tr>
<th>No</th>
<th>Question</th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neutral</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>My company KMS has helped me to perform my job better</td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>As it pertains to my job duties, I view our Knowledge Sharing as a positive light</td>
<td></td>
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<tr>
<td>3</td>
<td>Knowledge Sharing adds to my job responsibilities</td>
<td></td>
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<tr>
<td>4</td>
<td>I often receive feedback when I share knowledge, positive and/or negative</td>
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<tr>
<td>5</td>
<td>My company has seen positive, tangible results from KMS</td>
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<tr>
<td>6</td>
<td>KM is vital to improve our organization performance:</td>
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<td>7</td>
<td>I will share my working experience and knowledge to my colleagues conditionally that I receive an incentive/reward</td>
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<td>8</td>
<td>Sharing knowledge with my colleague would enhance my reputation within the organization</td>
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<td>9</td>
<td>My management encourage us to share past experience, new knowledge about my line of work</td>
<td></td>
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<td>10</td>
<td>My management discourage employees from withholding knowledge from their colleagues</td>
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<tr>
<td>11</td>
<td>It is fairly difficult to share knowledge with my subordinates</td>
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<tr>
<td>12</td>
<td>I have control on choosing the time to brief my team on Project development, incident reports and new update in technology</td>
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<tr>
<td>13</td>
<td>I can upload new article related to my field or other fields to the knowledge base</td>
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