Knowledge Management in Narrative

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ABSTRACT
The majority of the research on knowledge management (KM) in Malaysia has been testing-theory
and deductive research in nature where elements and characteristics of good knowledge
management are being identified. Also, limited researches that suggest effectiveness of different
knowledge management system implementation. Such research does not really study the
implications of KM and whether their implementations are successful or not. The limitation of such
research in Malaysia necessitates exploring the use of new approaches in the pursuit of exploring
and understanding further the subject matter. This article firstly, explains different types of research
approaches. Secondly, proposes and argues on the suitability of a case study research with
narrative inquiry as the main data gathering tool as an alternative. Thirdly, with a research example
conducted on one organisation in Malaysia explains how data can be gathered and analysed.

Keywords: Knowledge management, Malaysia, Narrative

1.0 INTRODUCTION

This article argues out a case study together with narrative research as an appropriate
methodology to be employed in research on knowledge management (KM). Guided by the
research objectives and approach where the reasons for choosing narrative inquiry methodology
are explained in details. Also, every steps of the research process are outlined and explained
giving details of what were done and the rationales. The article closes with a section that discusses
the biases involved in this research and how the biases can be mitigated. To guide the
comprehension and rationale on the choice of the proposed research methodology the following
objectives are used:

1. To explore and understand why the organisation studied implement their KM programme
2. To explore and understand the elements involved in KM and their relationship among each
other
3. To explore and understand how the organisation studied through its KM programme retains its
   strategic knowledge assets,
4. To explore and understand generally, the barriers in implementing KM and specifically
   knowledge retention, and
5. To learn and understand the policies, structure, resources and activities involved in the effort of
   retaining knowledge assets through its KM programme.

2.0 RESEARCH APPROACH

Fundamentally research paradigm can be classified into either Ontology, Epistemology or
Methodology (Guba and Lincoln, 1994). Research methodology in general is divided as
quantitative and qualitative study. Ethnographic study originated from the field of anthropology. In
their effort to study certain society or culture, anthropologists would spend a period of time observing them. Their objective is to investigate why certain culture or society has certain beliefs, values or attitudes rather than trying to determine the meaning (Merriam, 1998; Kelly and Gibbons, 2008). Although there is certain aspect of this research that would potentially deal with a cultural discovery it is not the intent to just solely observe any cultural phenomena.

Grounded theory is an approach introduced by two sociologists A. J. Strauss and J Corbin. (Merriam, 1998). It has three basic elements and they are concepts, categories and propositions (Corbin & Strauss, 1990). Concepts are the basic units of analysis where the theory is developed from the conceptualisation of data rather than from the data itself.

Phenomenology on the other hand seeks to find the meaning in certain society or cultural experience (Van der Mescht, 2004). In this type of qualitative research the researcher would mostly describe the experience and try to find meaning from that experience (Merriam, 1998). In general qualitative research is phenomenal is nature and based on the research objectives phenomenology is appropriate for this research. Based on the data gathered this kind of research will try to find meaning in the human experiences within the organisation in implementing a KM programme. The fourth type of qualitative research methodology is case study. This particular method is useful for this kind of research because the intent of the study is to describe and analyse a single unit of organisation intensively so as to learn from its experience.

Another form of qualitative research is narrative inquiry research methodology that has gained momentum over the last two decades (Webster and Mertova, 2007). According to Clandinin and Connelly (2000) it is an umbrella term that captures personal and human dimensions of experience over time, and takes account of the relationship between individual experience and cultural context.

It is an investigation of how humans experience the world through their stories. In his context KM stories narrated by respondent be captured, constructed and reconstructed. This will allow researcher to present the life experiences of the respondent holistically and to find meaning from the experiences. As Webster and Mertova (2007) said, it is well suited to addressing issues of complexity and cultural and human centredness because of its capacity to record

Historically research on KM was perceived to be technology, systems and knowledge object related with limited human elements. As the understanding on the subject became clearer researchers started to link culture, human behaviour and perception towards knowledge process and activities. This development opened up opportunities for qualitative research to be used to explore new perspectives. The qualitative research methodology is seen as more appropriate for research on KM as it is leaning more towards gathering data with elements of human behaviour and it’s relationship with KM elements. Furthermore, qualitative research is more suitable for social science types research.

A mix research method is another consideration for this kind of research. As appose to a common mix of qualitative and quantitative research the research may be a combination of several qualitative research methods like case study, narrative inquiry, and autobiographical study. In essence also a different mix of data gathering and analysis tools.
Considering the complexity and the relative infancy of KM as a subject matter and in trying to determine meaning within the real life setting it is deemed that qualitative research method would be more suitable and useful. Qualitative research would be able to capture people's meanings, definitions, and descriptions of events (Minichello et al, 1995). The inductive nature of the approach would create understanding, and build abstraction, concepts and theories.

Furthermore, the research on KM is of an exploratory in nature where not much has been written about the implementation, particularly in Malaysia. Therefore, through the qualitative approach, the researcher seeks to listen to informants and build a picture based on their ideas (Creswell, 1994).

Also, as in most organisations today, the social situation keep on changing with the infusion of younger generation. The culture base evolved over the years that is strong, creating tension within the nature of business considered to be already complex, making the use of positivism research approach also not suitable. As such a study based on generalisation would not be necessary and would not provide a possibility of a good finding. Thus, phenomenology as the philosophy is an appropriate guide to such research approach. Furthermore Saunders, et al (2000) argued that this research approach is suitable for the study of KM because the philosophy's flexibility facilitates the discovery of the reality of a situation or the reality behind a situation. This is especially true in Malaysia as far as KM is concerned as its implementation is still relatively at its infancy. Most of the researches conducted on KM in Malaysia have been mostly quantitative (Bontis et al, 2000; Zainal Abidin et al, 2001; Ramanathan et al, 2001; Asleema, 2002; Ali 2002; Toh 2003; Hafizi and Zawiyah, 2004; Syed Omar and Rowland, 2004; Kalsom et al, 2004; Badruddin, 2004; Niza Adila and Woods, 2004). The value of qualitative research in this case will provide opportunity for the researcher to explore proper important and emerging elements.

The research scenario on KM in Malaysia can be divided into four main areas of perception study, framework and strategy, culture and practices, and technology and systems. Most of these researches are conducted using quantitative method and the findings are limited and the conclusions not easy for organisations in Malaysia to learn and use for KM implementation. In summary all the researches conducted within Malaysian environment are not conclusive as well as not integrative. Thus, a qualitative approach that tries to understand the process and the phenomena within would be more meaningful where it is hoped that this research would achieve a better understanding that could form a basis for a framework of implementation in Malaysia.

Thus, considering the objectives an appropriate research approach is case study research with emphasis on narrative inquiry methodology.

2.1 Why Narrative Inquiry?

Creswell (2007) defines narrative research as a specific type of qualitative design in which narrative is understood as a spoken or written text giving an account of an event/action or series of events/actions, chronologically connected. It can both be method and phenomenon of study. It is a case-centred research that focuses on interpreting stories narrated by individuals. It seeks to understand human experience or social phenomena through the form and content of stories analysed as textual units. Etherington and Bridges (2011) defines narrative inquiry as a means by which we systematically gather, analyse, and represent people's stories as told by them, which challenges traditional and modernist views of truth, reality, knowledge and personhood. The
objectives of narrative research is firstly to understand phenomenon or an experience rather than
to formulate a logical or scientific explanation. Secondly, to understand the outcome of
interpretation rather than explanation (Kramp, 2004). In narrative research stories are gathered
and analyse as evident about the meaning experienced by a subject on events are accurately
described. It is about narrative truth and not historical truth (Polkinghorne, 2007)

There are three common places of narrative inquiry, temporality, sociality, and place. In narrative
inquiry all the three are dimensions that need to be explored simultaneously (Connelly & Clandinin,
2006).

It is, in summary, the study of the ways humans experience the world (Connelly & Clandinin,
1990). Creswell (2007) further explains that the way the process of this research consist of
studying one or two individuals by way of gathering data through their stories. Followed by
analysing the meaning from the experiences derived from the stories in chronological order. In
such research an individual or group of individuals are identified as respondents that have been
involved in KM initiatives both as a user as well as one of the critical players taking up a very
important role. Narratives is useful in this kind of research because it can, among others, construct
individual or group identity, remember, teach a lesson, offer perspective, or make sense of events
that occur in organisations during the implementation of initiatives.

In narrative research both the researchers and practitioners have voice in the story. It is a
process of collaboration involving mutual storytelling by the practitioner and restorying by the
researcher (Connelly & Clandinin, 1990). As a process, narrative inquiry starts with the
researcher’s narrative self-studies into his or her own experiences. An autobiographical narrative
base as a starting point that will start shape and develop the research. As in other qualitative
research methods data can be gathered in the form of field notes of the shared experience, journal
records, interview transcripts, observations, story telling, letter writing, autobiographical writing,
documents such as class plans and newsletters, and writing such as rules, principles, pictures,
metaphors, and personal philosophies (Creswell, 2007).

Generally, Clandinin and Connelly (2000) outline the methods of conducting narrative research to
be:

• Determine if narrative research is suitable to answer the research problem or question.
• Select the practitioner or practitioners who have stories or life experiences for your research.
  Gather data based on methods mentioned before.
• Collect information about the context of these stories.
• Analyse the participants’ stories, and then “restory” them into a framework that makes sense.
• Collaborate with participants by actively involving them in the research

As a whole, narrative inquiry in qualitative research, firstly, provides researchers capability to have
rich description, contextual understanding, and explanation of either a person, place or events they
are observing (Wilson, 2007). Combine with the case study research design this research will
result in holistic understanding of the whole KM initiative implemented at organisations.
Secondly, narrative inquiry suits the nature of the study on KM. Especially with the availability of a person or persons that are able to share the whole story of KM initiative. The uniqueness of the individuals and the best is when they were involved from the very beginning of the initiative. To be exact, what is lacking in other research methodology and the interest is the experience from the perspective of someone that is the implementor, stakeholder as well as the benefiter of the programmes. The experiences and perspectives through out the journey, shared via their stories, are important to be captured and shared in a logical manner for the benefits of not only the organisation studied but also the industries, KM practitioners and researchers.

Narrative is a way of knowing (Webster & Mertova, 2007). Where we link events, places, perceptions and experiences in our narrative to create proper context of understanding. Also one of the best ways to preserve our memories. Historically, knowledge have been transferred from generation to generation through the narrative of real life experiences and folklores. It is similar in organisations.

The third reason is that organisation studied is the only organisation in Malaysia that has successfully implemented their KM initiative. The organisation claims to have a holistic KM implementation that they started in 2000. The perceive success is indicated since 2004 by the benchmark visits and study by local and international organisations. It is recorded that since 2012 the KM implementation have been benchmarked by 208 organisations from various countries. An average of 70 organisations every year. In Malaysia its implementation is seen as pioneering and comprehensive.

The implementation is complex and full with human centred issues. Narrative inquiry is able to capture and create an understanding to all these complex human related issues through the respondents’s life experiences. Eventually providing insight of what and why these events occurred. Mishler (1986) and Colombo (2003) supported this as they opined that we make sense of our world by telling and sharing our actions through stories. Stories are constructive as well as reflective (Kothari et al, 2012).

The fourth reason is that the KM implementation at the organisation studies started with initiatives that is hard in nature. Initiatives that dealt with technology, system and repositories for explicit knowledge. As the implementation progressed the organisation faced with more human issues that are tacit in nature relating to the implementation that complex. This necessitates a new way to make sense and understand. Narrative inquiry is best for this as narratives provide a bridge between tacit and explicit knowledge that allows complex knowledge to be explained and learned (Linde, 2001).

Linde (2001) is implying that knowledge is contextual and if the respondent’s experiences were to be captured using other than narrative inquiry the possibility of the meaning getting lost in the translation is very high. Narrative inquiry not only able to capture the stories but also capture in essence how the story being told capturing the tone, the feeling, and body language resulting in capturing a more correct and insightful tacit knowledge.

As a whole, narrative inquiry in qualitative research provides researchers capability to have rich description, contextual understanding, and explanation of either a person, place or events they are observing of the KM initiative (Wilson, 2007). This is important for such KM research because it
enables researcher to firstly chronologically describe the implementations with proper linkages to the importance of the events, places and human behaviour. Secondly, having deeper and contextual understanding on various events and initiatives that were implemented. Thirdly, understand the human complex experiences that are important in studying the success of KM implementation that can be used to help others or simply to enhance future implementations. Combine with the case study research design this research will result in holistic understanding of the whole KM initiative implemented at organisations.

3.0 RESEARCH PROCESS

As depicted in Figure 1 below, there are four (4) processes involved in relation to data for this research. The processes are:

Process 1: Identification of Data Sources

Process 2: Gathering of Data

Process 3: Analysis of Data

Process 4: Findings and Reporting

The following discussions discuss the detail of each processes with the data gathered from the organisation studied as examples.
3.1 Identification of Data Sources

For the purpose of this study, there are multiple sources of data that have been identified and solicited in order to meet the objectives and to answer the research questions. The data sources can be categorised into the following types:

a. Human Data Source

b. Printed Data Source

c. Digital Data Source

a. Human Data Source

Human data source in the main source of data for narrative inquiry research. In this example it refers to individuals, anonymously Mr. A and B, who will provide the major part of the data. The other human data source is the researcher himself through his observations of events and activities in the organisation.

i. Who is Mr. A?

Mr. A is a personality who had been involved in the KBO initiative since its inception in the organisation. His experiences shared through his stories are important for this research to make sense and understand the complex issues experienced by the organisation during the journey to be a better knowledge-based organisation.

ii. Who is Mr. B?

Apart from M. A, Mr. B was also interviewed to understand the initiatives from the strategy point of view. Currently Mr. B is a Senior Manager in the Strategic Management Unit. Just like Mr. A he was also involved in the KBO initiative from the beginning. He was attached to the Strategy Planning Unit then and was the secretary to the Knowledge Management Committee from 2000 to 2004. Mr B was interviewed only once at the cafe of the learning complex of the organisation.

iii. Observation

As part of the data collection the six (6) KM initiatives and activities were observed.

These events and activities were identified through KM programmes and initiatives developed by KMC, Department A and various other departments. The field notes of the observation were written in a log book and coded accordingly in preparation of data analysis.
The observations gave further understanding to some of the initiatives shared by Mr. A. In an actual events certain behaviours were observed from the perspective of the person sharing the information as well as form the perspective of the listeners or learners.

b. Printed Data Sources

The printed data sources in this example comprise of documents such as annual reports, speeches, presentations, and student practical reports. These are publicly available documents that firstly helped to fill the gap in the narratives of the narrator. Secondly to further understand events and initiatives from the point of view of the organisation to capture and create a full complete picture of the initiatives. Thirdly, the information from the documents act as validation tools to triangulate this research. This section will discuss these different types of printed data sources in detail. The types of documents are:

• Annual Reports

There were 16 documents or sections from the annual reports from the period of 2000 to 2014 were used in this research.

• Speeches

Apart from the annual report the speeches by the CEO and leaders of the organisation studied were also obtained and used as an additional information. A total of eight (8) speeches were used.

Apart from validating with an official information the speeches also is an indication of the thinking, aspiration and direction of the leaders in the organisation regarding learning and KM. Most of these speeches are available at the the organisation's official website. The speeches utilised are from the period of 2000 to 2008.

• Trainees Practical Reports

The other supporting documents to understand about the KM initiatives, particularly the role of Knowledge Management Centre (KMC) and its importance in detail, are the students practical reports from the period of 2009 to 2012 that are available at the KMC. Four (4) practical students training reports are used.

• Presentation Slides

Three (3) presentation slides were used.

These presentation slides were available to the researcher by virtue that two (2) of them were presented by the researcher himself. The first presentation slide is available to all that were involved in the initiative from the beginning.

The information from two of the presentation slides were used to firstly chart the history of the KBO initiative. Secondly, giving another perspective of the early journey taken by Mr. A. The third presentation slide on content management policy gave details information about the project and its importance on how the organisation manages strategic knowledge assets (SKA).
• **Research Field Notes**

The researcher’s field notes are rich with reflection of what the researcher observed and felt. Whether it is about and during the narrative interviews or events. The field notes are written in a structured manner along with either the narratives or text of documents. Also some are in the form of mindmaps, doodle and sketches as at times the researcher need to note something quickly.

The field notes generally were structured in two sections or ways. The first one is observational information that considered to be facts of the situation like time, place, and behaviours and actions of the participant. Such as the participants’ reaction to the physical setting and their roles. Also, the impact the researcher might have regarding the setting.

The second type of section comprises of the researchers reflection of the events, actions, and situation being observed. These are the researcher’s thoughts, concerns, ideas, assumptions and conclusion derived from his observation. This include criticisms the researcher had from what he observed.

To ensure data and the meaning are not lost the field notes were written in conjunction with the narratives or texts. In a way when done properly often enough the field note is the beginning of data analysis as it helps in the interpretation of the data.

In conclusion, most of the printed data sources of information firstly, were used to understand further in detail the history, strategy, rationale and component of the KBO initiative. Secondly, the information gathered from these sources were used to validate information derived from the narrative interviews.

Apart from these publications, ad hoc publicly available documents and reports were also used in this research example.

**c. Digital Data Sources**

The third source of information are data and information collected from digital sources. The main source of this type of data came from the organisation’s website. The website is structured to provide corporate information regarding the organisation and publications of the organisation that includes the soft copy of its annual reports, speeches of the senior management as well as major activities of the organisation.

The second digital data source used is the Facebook of the KMC of the organisation. In this Facebook activities and services of KMC like their current awareness services are visible to the public.

**3.2 Data Analysis**

Data collection and data analysis in this research is an iterative process. Data analysis is done continuously as soon as the data collected. Whether it is data gathered through narrative inquiry or documents analysis the data would immediately be transcribed, noted and filed electronically. In general the data collected will be categorised, coded, tabulated and analysed to identify regularities or pattern within the case data (Darke, et al, 1998). Due to this the process of data
saturation and triangulation would also take place in sequence each time new data is collected. In doing so the researcher is mindful and reminded not to be too restrictive and confine the data analysis through coding, categorisation and tabulation (Feyerabend, 2010; Mills, 1959). Feyerabend (2010) in his book *Against Method* asks three questions, what is science? What is so great about science? And how are we to use the sciences and who decides the matter? To him science will depend on both historical and philosophical inquiries that to be understood within their social and intellectual contexts. He suggests in this complex world we have to be mindful of human dimensions of scientific research and researcher should explore the possibility of introducing what he terms as formal and informal methodologies. Strict procedures will help to ensure data credibility but at the same time being too restrictive would make the process too mechanical. The nature of KM and its close relation and connection to human makes it a complex subject to understand. The researcher follow all the protocol of research but at the same time open the analysis to other possibilities. Especially when the researcher himself has had experience in implementing KM in his previous organisations. There are human dynamics involved in the implementation where Mr. A include it as culture. A topic dear to his heart. Mills (1959) look at this from a wider social context and to observe how interactions and actions are influential for other individuals and situation. In his book *The Sociological Imagination* he argued that biography, history and society are the three co-ordinate points to consider in social science research. The importance of studying power relations, historical realities experienced by humans.

There are two types of data analysis conducted in this research and they are:

a. Analysis of Human Data

b. Analysis of Printed Data

c. **Analysis of Human Data**

In doing so the researcher were guided by McCormack’s lenses of analysis (McCormack, 2000a, 2000b; Dibley 2011) and Emden’s narrative analysis procedures (Emden, 1998).

The four McCormack’s (McCormack, 2000a) lenses are;

- The lens of language
- The lens of narrative processes
- The lens of context
- The lens of moments

Hunter (2009) in her paper explaining narrative data analysis quoted Rosenthal and Fisher-Rosenthal (2004) and concluded to adopt their six stage process of biographical data, thematic analysis, re-construction of the case history or life as it was lived, an analysis of individual texts, a process of comparison between a narrative and life as lived, and the formation of different types of narratives. Together with McCormack’s lenses of analysis, Emden’s narrative analysis procedures
this researcher adopted this six stage process and combine it with approaches of thematic, structural, interactional and performative analysis as discussed by Reissman (2005).

The narrative data analysis processes used are:

- Biographical data analysis
- Thematic analysis
- Structural analysis
- Individual text analysis

As a conclusion the four (4) approaches are best used together and not in isolation that would put the researcher in danger of being restrictive in his analysis.

**b. Analysis of Printed Data**

The data analysis of printed data is quite similar with the data analysis of human data with only a slight variation. In essence this analysis will still be biographical, thematic, structural and individual text analysis. The different is printed data are more structured with coherence standard language. The steps taken to analyse this data begin with the task of organising the documents.

**3.3 Data Organisation**

Although they are printed data most of them are available in softcopy. Like annual reports, speeches, students practical reports and presentation slide. Firstly, all of them were captured and saved in a separate folders by types of documents and within the documents types they are stored by year of publication. Looking at the computer file directory at first glance the researcher could see the coverage of the documents and would able to identified initial gaps. Guided by the research questions these documents were further categorise at the high level, if possible, according to the questions.

At the computer directory level all the file are tagged according the appropriate theme for easy searching and analysing the files.

The next step is to code and categorise the data accordingly.

**3.4 Coding and Organising Ideas and Concepts**

Accept for the presentation slides all the documents are saved using Apple’s word processing software Pages. To code these documents all the documents are opened with comments pane visible on the left of the documents. Thus the codes will be visible on the documents for the researcher to analyse further.

The documents were coded with specific KM terms like knowledge creation, sharing, retention, loss, application, reuse, and culture. Also, related terms and synonyms like knowledge discontinuity, knowledge audit, knowledge mapping. Concepts that are related to these terms are also coded. Examples are sentences and phases that include words like collaboration and discussion to connote knowledge sharing. Knowledge tools and methods like AAR, World Cafe, coaching, and mentoring. In the case of the organisation the documents are also coded by
systems and initiatives that have been implemented like EDMS, Knowledge Hub, KM Fair, Taxonomy and Enterprise Portal.

The next exercise is to code the text of the documents by meaning in the language used. How certain text are written and structured would give certain ideas about the importance of certain things. As an organisation the organisation studied has certain standard in writing and the language and words being used. For example the word engage to mean to understand and to work collaboratively together to achieve certain objectives. Certain expression reflecting the culture of the organisation like the phrase connecting the dots to mean using ones capability and capacity to fully understand multi events and situations, and analytically able to explain and provide necessary intervention either in terms of solutions or ideas.

The next step is to categorise the coded text or documents with themes

3.5 Themes Derived From The Data

Although some of the documents are already structured with topics that could be very well be considered as themes nevertheless the researcher browsed through the document to identify relevant themes. The coded terms were grouped manually Apart from themes emerging from similar types of documents, as a group, similar themes also emerged from the fours types of printed data sources. History of the KM initiative, knowledge sharing, culture, knowledge process, environment and leadership are six key major themes that emerged. Out of these themes three (3) high level themes knowledge ecology, knowledge loss and retention, and talent development emerged.

4.0 BIASES AND HONESTY

In conducting such research particular attention should be given to the issue of biases and honesty. In their paper Shenton and Hay-Gibson (2009), using the terms debates and dilemmas, discuss the issue of biases in research. Apart from all the biases in relation to qualitative research the biggest bias that this researcher need to be mindful of is in this research he is the instrument of the research. Compounded by the fact that he may also be one of the main contributor to the knowledge management initiative in the organisation. Objectivity had to be maintained as the researcher was subjected to his own thinking, perspective and knowledge at every steps of the process in this research. Especially in evaluating the data and reporting it as he would like to write and report. In dealing with this subjectivity the researcher, in general, faced with the following types of biases (Pannucci and Wilkins, 2010):

- Moderator bias
- Biased questions and biased answers
- Biased sample
- Biased reporting

5.0 CONCLUSIONS

In conclusion this article giving examples of limitation of using quantitative research on knowledge management. Such research does not really study the implications of KM and whether their
implementations are successful or not. This article firstly, explains different types of research approaches. Secondly, it was argued that qualitative research methodology in the form of case study research as the most suitable framework and narrative inquiry as the main method in achieving the objectives. Reasons for the choice of case study research as the framework and narrative inquiry as the main method were also given. Thirdly, with a research example conducted on one organisation in Malaysia, the research design was discussed including the inclusion, roles and importance of narrative inquiry as one of the methods used in the gathering of data. It was explained how data can be gathered and analysed. The proposed research methodology was also subjected to check and balance of reliability and validity. Finally the article closed with a short paragraph to remind researcher of the roles and possibilities of being bias during such research. Being honest through out the research is the key to avoid biases.

REFERENCES


