RESEARCH METHODS REVIEW IN THE KNOWLEDGE MANAGEMENT(KM) AND TOTAL QUALITY MANAGEMENT(TQM) STUDIES

Monira A Mufleh
World Islamic Science Educational University,Amman- Jordan
Email: muflehk@yahoo.com

ABSTRACT
This research gives details on the issues related to the research methods used in the Knowledge Management(KM) and Total Quality Management(TQM) studies ,a review by presenting research methodologies and theoretical philosophies has been evaluated. methodological approach and its justification of use has been examined and chosen. In addition to the research purposes and strategies and research designing components. Finally, the researh clarified the research quality standerds.

keywords: *Positivism philosophy, Interpretive Philosophy, Research Purpose, Research Strategy,research design , research quality standerds.*

1. INTRODUCTION

The research methodology is the direction used to assemble information and data for the reasons of making business decisions, solving problems and increasing knowledge. The methodology may include journal research, interviews, surveys and other research techniques, and could consist of both present and historical data. The research of Kallet (2004) emphasize on the methods which are the most significant part of the research paper because they present the knowledge that the reader needs to evaluate the research's validity. Given that an obvious and accurate explanation of how a conduct test was done, and the justification for specific experimental procedures are crucial characteristics of scientific research.

Related to KM , research and practice embraces a wide range of activities and interests. The KM domain covers,technological interventions that aim to support knowledge dissemination and to appreciate the social approaches that bring people together to share their experiences. The former represents an earlier bias in the field whereas the latter is more indicative of the current emphasis. Such a shift in emphasis has called for a shift in the way that the research and practice is undertaken. This paper focuses on research activities and asserts the appropriateness of a particular methodology for today's knowledge management research (**Kane, et al , 2006).**

In addition , TQM is the process of implementing and adjusting a firm's business strategy to assure customer satisfaction with the quality of goods or services. The level of quality is the degree to which a service is seen as good or bad by customers. Business research provides companies with feedback about the quality of goods and services, implementing a TQM program required considerable survey research, conducted routinely to ask customers to rate accompany against its competitors (**Zikmond, Babin, Carr, and Griffin, 2010**). Moreover, it also measures employee's attitude and monitors company performance against benchmark standards, after identifying customer problems and desires, the firm tracks satisfaction and quality ratings in successive waves. Total Quality Management research is an ongoing process for continuous quality improvements that works for both marketers of goods and service providers (**Zikmond, et al., 2010**).

2. PHILOSOPHICAL PERSPECTIVES

Research philosophy is the research knowledge and its nature. The researcher has to adopt essential suppositions about the way in which he view the world. These suppositions will underpin the research strategy and the methods that have to be chosen as part of that strategy (**Saunders, Lewis, and Thornhill, 2009**). It is, besides, defined as the wide construction which contains awareness, beliefs and thoughts of several theories and practices that are used to carry out a research. It can also be distinguished as an accurate procedure, which involves different steps through which a researcher creates a relationship between the research objectives (**Cohen, Manion, and Morrison, 2007**). Every research whether inductive or deductive is supported on some fundamental suppositions. The most suitable accepting suppositions are those which relate to the underlying epistemology which directs the research (**Myers, 1997).** (**Saunders, et al., 2009**) define epistemology as acceptable knowledge in a particular field of study. Also, it is a supposition about knowledge and how it can be obtained (**Hirschheim, 1992**). The study of **Schultze and**

Leidner (2002) focuses on the congruence between the content of the articles and Deetz's taxonomy of discourses in organization science, which divides research into four areas of discourse: dialogic, critical, interpretive, and normative discourse.
Empirical research about extant business practices is conducted in one or both of the positivist and interpretive research paradigms (**Venable, 2011**). What is more, **Kane, et al., 2006; Blumberg, et al, 2008** classify fundamental epistemology as: (1) positivist research, (2) interpretive research and (3) critical research. There is an increasing argument as to whether one of these types are supposed to be used or more than one supposed to be used in a particular piece of research. What decides it all yet, is our way of thinking, sometimes tagged as our epistemology or paradigm. That disposition we all have about; what stands for truth.

2.1 Positivism philosophy:
Positivist studies focus on accurate and applicable documentation leading to valid generalizations about phenomena (**Trauth, 2011**). It may be argued that this is the most manifest in research that displays the traits of an essentially positivist tradition. Also, the basis for this affirmation take action on the contention that the philosophical roots of positivism emphasize on two characteristics, specifically, the belief of the researcher that there is an objective reality which exists independently of them. This objective reality is capable of measurement and analysis from which may be deduced general theories with potential universal applicability (**Kane, et al., 2006**). Similar to this **Orlikowski and Baroudi (1991)** categorize IS research as positivist if there was evidence of formal propositions, quantifiable measures of variability, hypothesis testing and the drawing of inferences about a phenomenon from the sample to a stated population.

Positivism always, working in the tradition of the natural scientist (**Saunders, et al., 2009)** Also**, Myers (1997**) appoints that a positivist generally believes that realism is objectively given and can be explained by measurable properties which are self-determined. The researcher and instruments, and that positivist studies, in general, try to test the theory in an effort to increase the understanding of phenomena.

2.2 Interpretive Philosophy:
Interpretive research is interested in understanding how the current status of phenomena occurs. Its goal is to understand the processes. In shifting from positivist to interpretive research, the goal would change to exploring the ways in which researcher is influenced by and react with the phenomena (**Trauth, 2011**). Similar to that, **Walsham, (1993**) indicates that interpretive studies generally try to understand phenomena through the meaning that people assign to them, the process whereby the researcher influences and is influenced by the context.
In interpretive research, it is necessary for the researcher to understand differences between humans as social actors. In the same way, the interpretation of everyday social roles in accordance with the meaning are given to these roles (**Saunders, et al., 2009**) to understand phenomena the researcher needs to look at a total picture (**Blumberg, et al , 2008**)**;Ackerman et al (1998)** classify the interpretive researches into conceptual, empirical, ethnography and public discourse. Furthermore, **Kane, et al, (2006)** point out toward the inference of adopting an interpretive philosophy, which is practically implemented, embodies the inherent preconceptions of the researcher. The research process should attempt to make explicit philosophical roots underpinning the research. For example ,**Schultze and Leidner (2002)** examine ninety-four articles related to information systems research from six academic journal selected to evaluate academic research that represents a diversity of epistemological suppositions. The study appoints that a distinct majority of the articles they analyzed were reflective of the normative discourse model, that a meaningful number of articles were characterizable as interpretive discourse. Only three articles fell into the combined dialogic discourse and critical discourse domain.

2.3 Critical Philosophy:
Critical research goes one step further by asking why a phenomenon is constructed as it is, and whose interests are being restricted. Hence, it endeavors to expose problems then find solutions (**Trauth, 2011**), in addition, it is based on critical theory, which assumes that social reality is historically represented and that it is produced and reproduced by people (**Myers, 1997**) which may result in criticism that the research position is ambiguous. Therefore, they are problematic for others in the research community to construct a possible stance by piecing together aspects of the data collection and analysis in an effort to assemble a possible methodology (**Kane, et al , 2006**). Critical researchers identify that their talent to do so is constrained by various outlines of social, cultural and political domination. The main task of critical research is seen as being one of social appraisal, whereby the limiting and isolating situations are brought to light (**Myers, 1997**). For example, **Schultze and Leidner (2002)** examine ninety-four articles related to information systems research from six academic journal selected to evaluate academic

research that represents a diversity of epistemological suppositions. The study appoints that only three articles fell into the combined dialogic discourse and critical discourse domain.

2.4 Choosing the Best Philosophy for the Knowledge Management(KM) and Total Quality Management(TQM) studies:

Through investigation of the different evolutions of scientific research, it can be seen that the philosophical supporting has been liable to decrease the influence of inherent bias of the researcher and highlight the importance of that which is observed. Accordingly, the present research studies about of KM and TQM. As determined before, there are number of reasons that refer to resorting to positivism research approach as an appropriate device for conducting this research:

(1) The requirement to be premised upon the ontological assumption whom the researcher is independent of the research which is undertaken in a value-free way and that the observable world. The research is being conducted is a world that exists independently of the research with external, concrete structures, and that information or data are gathered by careful observation of a particular phenomenon. The researcher cannot change the fact that collecting data would allow the hypotheses to be tested, or allowing a preliminary hypothesis or generalization to be formulated. These hypotheses developed leading to the gathering of facts that provide the basis for subsequent hypothesis testing. To this effect, the positivism approach is valid to generate the research hypothesis.

(2) The necessitation to use a highly structured methodology to facilitate replication. Survey strategy that aspires to generate numerical data provides descriptive inferential and explanatory information and manipulates key factors and variables to derive gathers standardized. Moreover, to determine correlations, it is mostly evident in research that exhibits the traits of a fundamentally positivist tradition.

(3) According to the field the researcher study which contains different discipline, knowledge management, total quality management are the previous reasons approved by last literature review. **Guo and Sheffield (2008)** developed an organized method to classify knowledge management research articles, which was applied on 160 articles summarized from ten best-class journals. Their findings exposed that about 75 percent of the articles were empirical in nature and that 77 percent conformed to the positivist paradigm. In addition, **Zikmond et al (2010)** agree that implementing a TQM program required considerable survey research. What discussed above are the reasons for selecting the positivism research philosophy, the research purpose is explained in the next section to recognize ways to carry out the objectives of this research.

3. RESEARCH PURPOSE

Research in business can address a variety of goals, including explanation or evaluation of extant business practices, development of new business practices, critiquing business practice, and examining business goals other than profit (**Venable, 2011**). Classifying research by its purpose shows how the nature of a decision situation influences the research methodology. The researcher introduces the three types of business research: exploratory research, descriptive research and explanatory research (**Zikmond, et al., 2010**). The nature of the study depends on the stages of advancement of knowledge in the research area. The design decisions become more rigorous as we proceed from the exploratory stage where the researcher tries to explore new areas of organizational research. To the descriptive stage, where the researcher tries to describe certain characteristics of the phenomena, she is interested in knowing about the hypotheses testing stage where the researcher examines whether or not the conjectured relationships have been substantiated and an answer to the research question obtained (**Sekaran, 1992**).

3.1 Exploratory Research:

Exploratory research conducted to clarify an ambiguous situation or discover ideas that may be potential business opportunities. Also, it is not intended to provide conclusive evidence from which to determine a particular course of action. It is the first step conducted with expectation that additional research will be needed to provide more conclusive evidence and build the foundation for descriptive research (**Zikmond, et al., 2010**). Exploratory studies are important for obtaining a good grasp of the phenomena of interest and for advancing knowledge through good theory building (**Sekaran, 1992**). There are three principle ways of conducting exploratory research: a search of the literature, interviewing 'experts' in the subject and conducting focus group interviews. Its great advantage is that it is flexible and adaptable to change. If the researcher conducts an exploratory research, she must be willing to change her direction as a result of new data that appears and new insights that occur to her. It does mean that the focus is initially broad and becomes progressively narrower as the research progresses (**Saunders, et al., 2009**). It is particularly useful when researchers lack a clear idea of the problems they will meet during the study. It develops concepts more clearly, establishes priorities develop operational definitions and improves the final research design. It may save time and money (**Cooper and Schindler, 2008**).

3.2 Descriptive Research:
It describes the characteristics of object, people, groups, organizations or environments. It tries to paint a picture of a given situation by addressing who, what, when, where, and how 'questions'. It is conducted after the researcher has gained a firm grasp of the situation being studied, and establishes the basis for causal research (**Zikmond, et al., 2010**). Descriptive research that present data in a meaningful form, thus, help to: (1) understand the characteristics of a group in a situation of interests; (2) aid in thinking systematically about aspects in a given situation; (3) offer ideas for further probing and research; and (4) help to make certain simple decisions such as how many and what kinds of individuals should be transferred from one department to another (**Sekaran, 1992**).

It is necessary to have a clear picture of the phenomena on which you wish to collect data prior to the collection of the data. Description in management and business research has a very clear place. However, it should be thought of as a means to an end rather than an end in itself. This means that if your research project utilizes description, it is tee likely to be a forerunner to explanation. Such studies are known as describto-explanatory studies (**Saunders, et al., 2009**). It tries to discover answers to the question who, what, when, where and sometimes how. It is popular in research because of its versatility across management discipline, in not-for-profit corporations and other organizations, descriptive investigations have abroad appeal to the administrator and policy analyst for planning monitoring and evaluating in this context how questions address issues such as quantity cost, efficiency, effectiveness and adequacy (**Cooper and S.Schindler, 2008**).

3.3 Explanatory Research (Causal):
Explanatory research allows causal inferences to be made. It seeks to identify cause and affect relationship. When something causes an effect, it brings or makes it happen in which the effect is the outcome (**Zikmond, et al, 2010**). The emphasis on studying a situation or a problem in order to explain the relationships between variables is that the researcher may find, for example, that a cursory analysis of quantitative data on manufacturing scrap rates shows a relationship between scrap rates and the age of the machine being operated. It, then, could be gone ahead and subject the data to statistical tests, such as correlation in order to get a clearer view of the relationship. Alternatively, you might collect qualitative data to explain the reasons why customers of your company rarely pay their bills according to the prescribed payment terms (**Saunders, et al., 2009**). If we can provide a plausible explanation for an event after it has occurred, it is desirable to be able to predict when and in what situations the event will occur. Predictive study the fourth type is just as rooted in theory as explanation (**Cooper and S.Schindler, 2008**).

3.4 Justification of Selecting the Descriptive and Explanatory Research
Subsequent to performing a contrast of the three research purposes, this study relates to descriptive and explanatory purposes due to the following causes: (1) the research purposes of the study: to understand the implications of implementing both the concept of KM and TQM practices. In order to clarify this, it is essential at the beginning to give clarification for both concepts which makes sense that this study is descriptive because the data will be collected and examined to prove the hypothesis of the study. Also the data collected will be used to describe the area of research and draw some conclusion. (2) it is also explanatory that allows causal inferences to be made; it seeks to identify cause, integration of KM process and TQM practices, and effect relationship. It means that it makes it happen and the effect is the outcome. It also improves productivity in the current research. When the researcher develops hypothesis to be tested and examines whether the data collected can be requested to prove or disapprove those hypothesis which will be used to explain the the variables related to KM and TQM
For such a motivation, the descriptive and explanatory research is chosen for the current study. The following steps after locating a research purpose are to attach with the actual application. The purpose of the study can be handed out in different ways depending on what research approach the researcher decides to apply. This is applied by describing how to carry out the research that includes the research question and research hypothesis. Consequently, the next section will concentrate on the type of quantitative and qualitative approaches and will talk about the significance of these approaches to the present study and suggests proposition to the suitable practice for the existing study.

4. RESEARCH APPROACHES
Every approach either quantitative or qualitative has a particular involvement to make to our understanding of topics. Quantitative data in a raw form transmit very little meaning. These data, therefore, need to be analyzed to make them useful; that is to turn them into information. Quantitative analysis techniques, such as graphs, charts and statistics allow the researcher to do this (**Saunders, et al., 2009**). Qualitative data refer to all non-numeric data or

data that have not been quantified and can be a product of all research strategies. It can range from a short list of responses to open-ended questions in an online questionnaire to more complex data such as transcripts of in-depth interviews or entire policy documents. To be useful in these data needs to be analyzed and the meanings understood (**Saunders, et al , 2009**).

4.1 Quantitative Methods:

Quantitative approach is the business research that addresses research objectives through empirical assessments that involve numerical measurement and analysis (**Zikmond, et al., 2013).**also**, Trauth (2011)** reviews the applications of such approach as provides explicit, objective documentation of a phenomenon. It enables a wider reach and population Generalizations appoint to the same idea in that quantitative research endeavors to generalize to a population (**Lee and Baskerville 2003**). Some examples of quantitative methods which are well acknowledged in the social sciences include different survey methods, laboratory, experiments, formal methods, econometrics and numerical methods such as mathematical modeling (**Myers, 1997**). With regard to ontology, quantitative research tends to view the existence of an independent reality as unproblematic and, therefore, capable of being studied. Although acknowledging that it can only be approached imperfectly in terms of epistemology, quantitative research takes the independence of phenomena and the possibility of the researcher maintaining an objective stance towards the researched, creating the idea of 'value free' investigation partially (**Glogowska, 2011**).

4.2 Qualitative Methods:

Qualitative approach is a research that addresses business objectives through techniques that allow the researcher to provide elaborate interpretations of phenomena without depending on numerical measurement. Its focus is on discovering true inner meanings and new insights (**Zikmond, et al , 2010**). Besides, such a research opens the door to epistemological variety. It enables not only interpretive but critical research as well (**Trauth, 2011**). The goal of qualitative research is to generalize to theory (**Lee and Baskerville, 2003**). In addition, a more interactive relationship between researcher and research is posited. The qualitative researcher cannot be objective and cannot, therefore, produce a privileged overview or objective account because of their preexisting assumptions, attitudes and beliefs (**Glogowska, 2011**).

Qualitative research provides the story behind the statistics. In some senses, it picks up where quantitative research leaves off from observing and documenting the phenomenon to a nuanced understanding of it (**Trauth, 2011**). According to **Myers (1997),** qualitative research methods are designed to help researchers understand people, the social and cultural contexts within which they live.

4.3 Justification of Selecting the Quantitative Research for KM and TQM studies:

As the researcher mentions before that every approach either quantitative or qualitative has a particular involvement to make to the researcher understanding of topics. Next to the contract which has been explained between both approaches, this study refers to quantitative approach. There are three causes for adopting the quantitative approach as being suitable for this research:

(1) The positivist research belief showed to be argued upon the ontological conjecture that the researcher is independent of the research carried out and that the visible world in which the research is being conducted is a world that subsists independently of the research with external, solid structures. It is for this rationale that positivism be liable to favor the quantitative method

(2) The aim of the research is to build up a research basis that shed light on KM and TQM studies in. In order to do so, it is necessary at the beginning to observe the sub-variables of both fields, and that is possible through the quantitative approach components that addresses research objectives through empirical assessments involve numerical measurement and analysis. It provides explicit objective documentation of the research problem and enables wider reach and population Generalizations.

(3) To investigate the influence or relation of the studies for both KM and TQM fields, This needs a description of the characteristics of object, people, groups, organizations or environments. It tries to paint a picture of a given situation by addressing who, what, when, where, and how questions., the researcher may find that analysis of statistical tests such as correlation or impact in order to get a clearer view,the quantitative approach is selected. The next section will review the overall research strategy.

5. RESEARCH STRATEGY

Research design is simply a strategy to control and manipulate variables that provide an answer to the research question (**Kallet, 2004**). When researchers define the research problem, they already need to be thinking about the unit of analysis. Is it an entire organization, or specific departments, work groups, employees or decisions? The unit

of analysis derives from the research question though one research question often allows for more than one unit of analysis. So the researcher has to choose (**Blumberg, Cooper, and S.Schindler, 2008**). There are various decisions and problems that face researchers in deciding the sampling strategy to be used. Thus, judgments have to be made on four key factors in sampling. These are the sample size, representativeness and parameters of the sample, access to the sample and the sampling strategy to be used. This assumes that a sample is actually required, but there may be occasions on which the researcher can access the whole population rather than a sample (**Cohen, et al, 2007**). An important step in designing research is the decision on the unit of analysts which describes the level at which the research is performed and which objects are researched people or individuals are a common unit of analysis. The unit of analysis ,kind of respondent ,the researcher questions to obtain information are not the same thing (**Blumberg, et al., 2008**)

5.1 Sample Survey:

A survey is a measurement process used to collect information during a highly structured interview. Sometimes with human interviewer and other times without (**Cooper and S.Schindler, 2008**), and **Zikmond, et al, (2010)** define it as a method of collecting primary data based on communication with a reprehensive sample of individuals. Survey provides a snapshot at a given point in time. **Greenfield (2002)** defines the survey as "a procedure in which information is collected systematically about a set of cases, such as people, organizations and objects. Moreover, questions are carefully chosen or crafted, sequenced and precisely asked of each participant. The goal of the survey is to derive comparable data across subsets of the chosen sample, so that similarities and differences can be found (**Cooper and S.Schindler, 2008**). The goal of survey in regards with **Zikmond, et al ,(2013)** is to collect primary data. Data gathered and assembled specifically for the project at hand and often research entails asking people called respondents to provide answers to written or spoken questions. What is more, **Cohen, et al (2007)** ensure that if the purpose of the research is to map the field, or to make generalizable comments, then, a survey approach might be desirable, using some form of stratified sample.

5.2. Experiment:

Most researchers are familiar with scientific experiments from studying physical sciences like physics and chemistry. The term 'experiment' is typically used for much the same purpose for the social researchers to assess cause and affect relationships. It allows a researcher to control the research situation so that causal relationships among variables may be evaluated (**Zikmond, et al., 2010**). Under strategies, individual research methods such as experiments and grounded theory all focused on empirical research. No mention is made of symbolic argumentation, problem solution and technology design, or critical examination of values (**Venable, 2011**). **Cohen, et al (2007)** ensure that if the effects of a specific intervention are to be evaluated, then an experimental or action research model may be appropriate. An experimenter manipulates variables to determine their causal significance or the researcher who asks standardized questions of large, representative samples of individuals.

5.3 Case Study:

The case study is a qualitative methodology that is frequently employed in business research (**Zivkovic, 2012**). **Cohen et al (2007)** identifies it as an investigation into a specific instance or phenomenon in its real-life context and that the case study writer should make clear the data that give rise to the report. Case study strategy is most often used in explanatory and exploratory research. The data collection techniques employed includes interviews, observation, documentary analysis and questionnaires. Consequently, if the researcher is using a case study strategy, there will be needed to use and triangulate multiple sources of data (**Saunders, et al., 2009**). An in-depth case study involving qualitative methods may be productively succeeded by a survey to explore its applicability in other contexts (**Glogowska, 2011). Cohen et al (2007)** identify that if an in-depth study of a particular situation or group is important, then an ethnographic model might be suitable. But it is often without the methodological thoroughness that other research methods receive because of a lack of formal protocol and the perceived obviousness of the results. With some researchers, lamenting the restriction of case studies and other qualitative methods to sociological and phenomenological research, business research is increasingly looking to combine qualitative and quantitative methods for a more holistic approach to the organization (**Zivkovic, 2012**). The researcher has a means of checking back for reliability and validity and inferences through several features. It is concerned with a rich and vivid description of events relevant to the case which provides a chronological narrative of events relevant to the case. Also, it blends a description of events with the analysis of them and focuses on individual actors or groups of actors and seeks to understand their perceptions of events. It highlights specific events that are relevant to the case. The researcher is integrally involved in the case and an attempt is made to portray the richness of the case in writing up the report. (**Cohen et al., 2007**).

5.4 Archival History:

An archival research strategy allows research questions to focus upon the past and changes over time to be answered, be they exploratory, descriptive or explanatory. Though, the researcher ability to answer such questions will inevitably be constrained by the nature of the administrative records and documents **Saunders, et al., (2009)**. Also, **Najar, et al, (2009)** identify it as a strategy describes and analysis the facts and events in the past trends to the problem of a particular social or phenomenon occurred in the past. Reflection and analysis criticism and aims of historical research are to understand the present study in historical background and try to find the relationship between the events of the past and the facts of the present which goes back to the origin and identify changes that suffered by phenomena and granted Current image.

Even where these records exist, they may not contain the precise information needed to answer your research question(s) or meet your objectives. Alternatively, data may be missing or you may be refused access or your data censored for confidentiality reasons. Using an archival research strategy, therefore, necessitates you establishing what data are available and designing your research to make the most of it (**Saunders, et al, 2009**).

5.5 Justification for Choosing a Survey Strategy:

the researcher's point of view is to utilize from suitable and fit strategy, following to carrying out a contrast between four research strategies. This research refers to survey as a research strategy of collecting information from the respondents for three reasons:

firstly, surveys can be very effective in gathering data about KM and TQM, because it enables the researcher to obtain data about practices, individual preferences, expectations, past events and private behaviors. The flexibility of this method is its greatest strength. It is the only practical way to gather many types of information and the most economical way in many other situations (**Emory, 1995**).

secondly, the use of surveys permits a researcher to study more variables at one time (**Ranjit, K, 2005**). KM includes a variety of variables such as : knowledge verification, knowledge allocating, knowledge distribution and knowledge executive, and TQM includes also a variety of variables such as : TQM strategic practices, TQM tactical practices, TQM operational practices and TQM individual practices, survey as a strategy choice in research method, contributes towards a better understanding of both fields.

Finally, related to the field, the research study of KM, TQM contains different discipline:. The preceding motivation approved by the last literature review to encourage the researcher to utilize from survey strategy such as the study of **Guo and Sheffield, (2008)** which indicates that analysis of all articles in their study (empirical and non-empirical) by business research method shows that sample survey occurs most frequently. In addition, **Zikmond, et al (2010)** appoint that implementing a TQM program required considerable survey research, conducted routinely to ask customers to rate a company against its competitors. It also measures an employee's attitude and monitors a company performance against benchmark standards. What discussed above are the reasons for selecting the survey research. The research design is explained in the next section to recognize ways to carry out the data collection, sample selection and sample size.

6. RESEARCH DESIGN

The research design is the general plan of how the researcher will go aboard. Answering the research question which contains clear objectives derived from the research question specifies the sources from which you intend to collect data, and consider the constraints that you will inevitably have as access to data, time, location and money in addition to discussing ethical issues (**Saunders, et al , 2009**). Furthermore, **Cohen et al (2007)** explains that the research design is governed by the notion of fitness for purpose, and then the purposes of the research determine the methodology and design of the research (**Saunders et al , 2009**). The attempt of this research is to suggest a suitable design for KM and TQM studies though data for such suggestion can be obtained from primary or secondary sources.

Primary data refers to information obtained firsthand by the researcher on the variables of interest for the specific purpose of the study. Some examples of sources of primary data are individuals, focus groups, panels of respondents specifically set up by the researcher and from whom opinions may be sought on specific issues from time to time. Secondary sources are second-hand data that the researcher obtains from previously conducted research work. Examples of secondary data include company records or archives, government publications, industry analysis offered by the media (**Sekaran, 1992).** In addition, **Holmberg (2012)** predicts that the use of administrative data and registers will increase in the near future; there are many reasons for this. First and foremost, the accessibility of these data has recently improved and will continue to do so as public sector bodies enhance the reuse of their Information

sources. Specifically, **Sunders et al., (2009)** emphasize the importance of integrating primary and secondary data if that will answer the research question.

6.1 Data Collection:

Data can be collected in a variety of ways, in different settings and from different sources. Data collection methods include face to face interviews, telephone in interviews, computer-assisted interviews, questionnaires that are either personally administrated, sent through the mail, or electronically administrated, observation of individuals and events with or without videotaping or audio recording, and a variety of other motivational techniques such as projective tests (**Sekaran, 1992).**

The researcher gives a brief about the most common data collection methods, questionnaires, interviews and observation as follows:

Firstly: Questionnaire design:

The questionnaire is widely used as a useful instrument for collecting survey information. Providing structured, often numerical data, being able to be administered without the presence of the researcher (**Cohen et al, 2007**). The design of a questionnaire differs according to how it is administered and, in particular, the amount of contact you have with the respondents (**Saunders et al, 2009**). In addition, (**Saunders et al , 2009**) find that questionnaires are usually not particularly good for exploratory or other research that requires large numbers of open-ended questions. Questionnaires, therefore, tend to be used for descriptive or explanatory research. Descriptive research, such as that undertaken using attitude and opinion questionnaires of organizational practices will enable the researcher to identify and describe the variability in different phenomena. In contrast, explanatory or analytical research will enable you to examine and explain relationships between variables, in particular, cause and-effect relationships.

Questionnaires may be structured, with limited choices of responses, or unstructured, to allow open-ended responses, disguised questions disguise the real purpose and may be used to probe sensitive topics (**Zikmond et al , 2010**). Whereas (**Saunders et al , 2009**) classify the types of questionnaire into: (1) self-administered questionnaires, such as Internet or intranet-mediated questionnaires, postal questionnaires, or delivery and collection questionnaires; (2) interviewer-administered questionnaires, telephone questionnaires and structured interviews. No survey is capable to attain success without a fit-designed questionnaire. But, questionnaire design has no unified theoretical support to guide the researcher in developing a perfect questionnaire. The researcher has to direct since it is a list born out of the experience of other researchers long-ago and current status. Thus, questionnaire design is further of a skill than a science.

Cohen et al , (2007) set out a staged sequence for planning a questionnaire. Thus, decide the purposes of the questionnaire decide the population, generate the issues to be addressed and data required in order to meet the objectives of the research. This can be done from literature or a pre-pilot, focus groups and semi-structured interviews, decide the kinds of measures, scales, questions and responses required. For example, writing the questionnaire items, checking that each issue has been addressed, using several items for each issue, piloting the questionnaire and refining items as a consequence and administering the final questionnaire. Significance and precision are the two basic criteria to be met. If the questionnaires achieve the researcher's purposes, a researcher who is systematically planning to design a questionnaire, will be required to make several decisions, typically but not necessarily, in the following order: What should be asked? How should each question be phrased? In what sequence should the questions be arranged? What questionnaire layout will best serve the research objectives? How should the questionnaire be protested? Does the questionnaire need to be revised? (**Zikmond, 1988).**

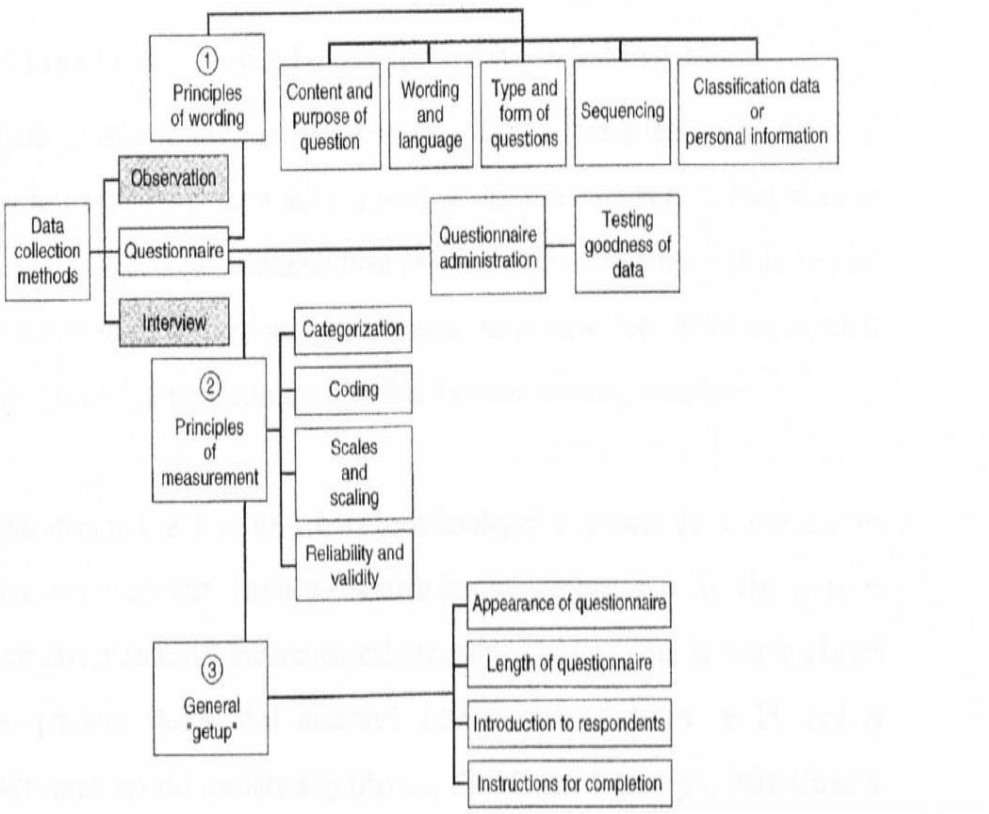

Figure 2: Principles of Questionnaire Design. Sekaran (2002) p 238.

In the current research, the researcher uses Likert scale questions (named after its divisor, Rensis Likert 1932) which provide a range of responses to a given question or statement, 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree (neutral), 4 = agree, 5 = strongly agree (**Cohen, et al , 2007**)

Stages of Questionnaire Design:

There is a determined stages for Questionnaire design reviewed as followes:

1. pre-pilot phase: it is the preliminary stage of design which approaches the planning of a questionnaire. It can sometimes be helpful to use a flow chart technique to plan the sequencing of questions, then operationalzing the questionnaire to take a general purpose and turn these into concrete, researchable fields, furthermore, determine the type of questionnaire: structured, semi-structured and unstructured questionnaires. There is a simple rule of: the larger the size of the sample, the more structured. Closed and numerical the questionnaire may have to be, and the smaller the size of the sample, the less structured, more open and word-based the questionnaire may be, then determining the types of questionnaire items if it is closed and open questions. Moreover, emplacing the fit sequencing of the questions and take into consideration that questionnaires contain few verbal items. Finally, laying out of the questionnaire, covering letters or sheets and follow-up letters (**Cohen, et al., 2007**).
2. pre-test: pretesting involves a trial run with a group of respondents to iron out fundamental problems in the instructions or design of questionnaire. The researcher looks for such obstacles as the point at which respondents fatigue sets in, whether there are any particular places in the questionnaire where respondents tend to terminate or if some specific questions are skipped (**Zikmond, et al., 2010**). Three basic ways to pretest exist: the first two involve screening the questionnaire with other research professionals, and the third is a trial run with a group of respondents. When screening the questionnaire with other research

professionals, the investigator asks them to look for such problems as difficulties with question wording, leading questions, and bias due to question order (**Zikmond, et al., 2010**).

3. pilot test: the previous stage protesting process is essential to the success of the survey (**Cohen, et al , 2007**). Moreover, the purpose of the final stage, pilot test is to refine the questionnaire so that respondents will have no problems in answering the questions and there will be no problems in recording the data. In addition, it will enable you to obtain some assessment of the questions' validity and the likely reliability of the data that will be collected. The preliminary analysis using the pilot test data can be undertaken to ensure that the data collected will enable your investigative questions to be answered (**Saunders, et al , 2009**). A pilot test has several functions: check the clarity of the questionnaire items, instructions and layout to gain feedback on the validity, response categories for different types of questionnaire, to identify omissions, redundant and irrelevant items, and to gain feedback on leading questions on the attractiveness and appearance of the layout and sectionalizing of the questionnaire (**Cohen, et al., 2007**).

Secondly: Interview Design:

Interviews enable researcher to discuss their interpretations of the phenomena, and to express how they regard situations from their own point of view. In these senses, the interview is not simply concerned with collecting data about phenomena; it is part of the phenomena itself since its human embeddedness is inescapable (**Cohen et al, 2007**) Interviews can be differentiated according to the level of structure and standardization adopted (**Saunders, et al., 2009**). The purposes of the interview in the wider context of life are many and varied. For example, to evaluate or assess a person in some respect, to select or promote an employee, to effect therapeutic change, as in the Psychiatric interview, to test or develop hypotheses, to gather data, as in surveys or experimental situations, or to sample respondents opinions as in doorstep interviews (**Cohen, et al., 2007**). Different types of interviews are useful for different research purposes. Non-standardized (qualitative) research interviews include two broad types that are generally referred to as in-depth or unstructured interviews and semi-structured interviews. You can use non-standardized interviews to explore topics and explain other findings (**Saunders, et al, 2009**).

Finally: Observation Design

Observation methods are powerful tools for gaining insight into situations (**Cohen, et al, 2007**). The distinctive feature of observation as a research process is that it offers an investigator the opportunity to gather 'live' data from naturally occurring social situations. In this way, the researcher can look directly at what is taking place *in situ* rather than relying on second-hand accounts (**Cohen, et al , 2007**). Observation's unique strength is the use of immediate awareness, or direct cognition, as a principal mode of research thus has the potential to yield more valid data than would otherwise be the case with mediated or inferential methods (**Cohen, et al , 2007**). Observation involves the systematic recording, description, analysis and interpretation of people's behavior (**Saunders, et al., 2009**). In planning observations, one has to consider the following: when, where, how and what to observe, how much degree of structure is necessary in the observation, the duration of the observation period, which must be suitable for the behavior to occur and be observed, the timing of the observation period; for example, morning, afternoon, evening, the context of the observation (a meeting, a lesson, a development workshop, a senior management briefing etc.), the nature of the observation (structured, semi-structured, open, molar, molecular etc.) (**Cohen, et al , 2007**).

The two types of observation examined in this research are very different. Participant observation is qualitative and derives from the work of social anthropology early in the twentieth century. Its emphasis is on discovering the meanings that people attach to their actions. By contrast, structured observation is quantitative and is more concerned with the frequency of those actions. A common theme in this book is our effort to discourage you from thinking of the various research methods as the sole means you should employ in your study. This is also true of observation methods. It may meet the demands of your research question(s) and objectives to use both participant and structured observation in your study either as the main methods of data collection or to supplement other methods (**Saunders, et al., 2009**).

6.2 Reasons for Selection the Questionnaire:

The selection of the best tool for gathering information depends on the research objective of the study. In current study, the research purpose is to search for the best data collection method for KM and TQM this study select a questionnaire for the following reasons:

Firstly, questionnaires are a key to obtaining a good survey results through the traits of relevance and accuracy and the basic criteria for judging questionnaires result. That means no unnecessary information is collected for the

research purpose and that the information selected is necessary to solve the research problem. In addition to the characteristics of validity and reliability of information that depend largely on the design of questions, the structure of questionnaire, and the rigor of pilot testing also pretesting helps expose errors while they can still be easily corrected.

Secondly, an attractive questionnaire and carefully phrased items encourage a response. Logical order and flow of questions to the respondent by filtering questions and linking phrases and carefully introduction to the respondent, the researcher often used questionnaire as part of a survey strategy to collect descriptive and explanatory data about Opinions, behaviors and attributes.

Thirdly: a questionnaire more representative of the post-study because it can embody all variable aspects. Also, it is economical in time, efforts and cost when compared with other techniques that reviewed in the previous section; interviews and observation.

Finally: a questionnaire withers self-administered questionnaires, such as: Internet or intranet-mediated questionnaires, postal questionnaires, or delivery and collection questionnaires, or interviewer-administered questionnaires, such as telephone questionnaires and structured interviews which give responder opportunity to think without psychological pressure and helps researcher to obtain sensitive data or embarrassing participant that cannot get it in the interview.
Related to the above causes, a questionnaire is selected in the present study to collect data, the next section will put forward description and constraints on sample selection.

6.3 Sample Selection:
Every element of the research should not be random but planned and purposeful. The selection of a sampling strategy must be governed by the criterion of suitability. The choice of which strategy to adopt must be mindful of the purposes of the research, the time scales and limitation of the research, the methods of data collection, and the methodology of the research. The sampling chosen must be appropriate for all of these variables if validity is to be served (**Cohen, et al., 2007**). Moreover, sampling techniques provide a range of methods that enable the researcher to reduce the amount of data needed to collect by considering only data from a sub-group rather than all possible cases or elements. Some research questions will require sample data to generalize about all the cases from which research sample has been selected. The full set of cases from which a sample is taken is called the population (**Saunders, et al., 2009**). Indeed, **Cohen et al (2007**) appoint to the decisions and problems that face researchers in deciding the sampling strategy to be used. Judgments have to be made about four key factors in sampling: the sample size, representativeness and parameters of the sample, access to the sample, and the sampling strategy to be used. This assumes that a sample is actually required. There may be occasions on which the researcher can access the whole population rather than a sample. In addition, **Saunders et al (2009)** assign to the sampling benefit that it would be practicable for the survey with budget constraints such as being cheaper and saving time. This will be equally important whether you are planning to use interviews, questionnaires, observation or some other data collection technique. Also, **Saunders et al (2009)** clarify the sampling techniques to be divided into two types: probability or representative sampling and non-probability or judgmental sampling. The former is most commonly associated with survey-based research strategies where have needed to make inferences from the sample about a population to answer the research question or to meet objectives; whereas the latter provides a range of alternative techniques to select samples based on the researcher's subjective judgment in the exploratory stages of some research projects, such as a pilot survey.

Firstly: Probability Sample:
A probability sample is a sampling technique in which every member of the population has a known, nonzero probability of selection (**Zikmond, et al., 2013**). It draws randomly from the wider population. So, it enables the researcher make generalizations because it seeks representativeness of the wider population (**Cohen, et al., 2007**). It is most commonly associated with survey-based research strategies where a need to make inferences from the sample about a population to answer the research question or to meet research objectives. The process of probability sampling can be divided into four stages: identify a suitable sampling frame based on research question or objectives, decide on a suitable sample size, select the most appropriate sampling technique and select the sample, and check that the sample is representative of the population. (**Saunders, et al., 2009**). There are several types of probability samples: simple random samples, systematic samples, stratified samples, cluster samples, stage samples, and multi-phase samples. They all have a measure of randomness built into them and, therefore, have a degree of generalizability (**Cohen, et al , 2007**).

Secondly: Non-probability:
Non-probability is a sampling technique in which units of the sample are selected on the basis of personal judgments or convenience. The probability of any particular member of the population being chosen is unknown (**Zikmond, et al , 2013**). The choice which is put up into a non probability sample obtains from the researcher intention a particular group, in the complete awareness that it does not represent the whole population. It simply represents itself where no attempt to generalize is preferred. This is frequently the selection for some ethnographic research, action research or case study research (**Cohen, et al , 2007**). There are several types of non-probability sample: convenience sampling, quota sampling, dimensional sampling, purposive sampling and Snowball sampling. Each of which seeks only to represent itself or instances of itself in a similar population, rather than attempting to represent the whole, undifferentiated population (**Cohen, et al., 2007**).

6.4 **Justification of Probability Sampling**:
The data collection method has been preferred in the point of view of the researcher in the KM and TQM studies is a probability random sample for the following reason: random numbers allow the researcher to select the sample without bias. The sample selected, thus, can be said to be representative of the whole population through identifying a suitable sampling frame and the implications for generalisability

6.5 **Sample Size**:
A question that often faces the researchers is: how large their samples for the research should be? The correct sample size depends on the purpose of the study and the nature of the population under examination. The larger the sample the better as this gives greater reliability and enables more sophisticated statistics to be used. Thus, if the sample small number researchers needs to think out in advance of any data collection, the sorts of relationships that they wish to explore can be within subgroups of their ultimate sample (**Cohen, et al , 2007**). The choice of sample size is governed by the confidence you need to have in your data, the level of certainty that the characteristics of the data collected will represent the characteristics of the total population, the margin of error that you can tolerate, the accuracy you require for any estimates and, the types of analyses you are going to undertake, and by the number of categories into which you wish to subdivide your data (**Saunders, et al., 2009**). The number of variables researchers sets out to control in their analysis and the types of statistical tests that they wish to make must inform their decisions about sample size prior to the actual research undertaken (**Cohen, et al., 2007**).

7. RESEARCH QUALITY STANDARDS
The quality concept of statistics includes all aspects that are relevant to the users. There are many descriptive models have to be used in the KM and TQM studies that contain various quality components, and proposals for indicators to measure them. Often the indicators refer to types of errors that occur in the production of statistics (Holmberg, 2012). The three major criteria for evaluating measurements are reliability, validity, and sensitivity (Zikmond, et al., 2013).

7.1 Validity:
Validity is concerned with whether the findings are really about what they appear to be about through checking the relationship between two variables (**Saunders, et al., 2009**). Also, validity refers to the credibility of experimental results and the degree to which the results can be applied to the general population of interest or the accuracy of a measure and the extent to which a score truthfully represents a concept (**Kallet, 2004**). The four basic approaches to establishing validity are face validity, content validity, criterion validity, and construct validity. Face validity includes scales content which logically appears to reflect what was intended to be measured. Content validity includes the degree that a measure covers the breadth of the domain of interest. Criterion validity is the ability of a measure to correlate with other standard measures of similar constructs or established criteria. Construct validity exists when a measure reliably measures and truthfully represents a unique concept which consists of several components including face validity, content validity, and criterion validity convergent validity and discriminate validity (**Zikmond, et al , 2010**).
In addition to the previous, approaches of validity concept, **Kallet, (2004)** appoints that validity is divided into two parts: internal validity which refers to the credibility of a study and is determined by the degree to which conclusions drawn from a survey correctly describe what actually transpired during the study, and external validity which refers to whether the results of a study can be generalized to a larger population.

7.2 Reliability:

Reliability refers to the extent to which the data collection techniques or analysis procedures will yield consistent findings (**Saunders, et al, 2009).** Also, reliability defined is as an indicator for measuring internal consistency which is the key to understanding reliability. It is a measurement reliable when different attempts at measuring something converge on the same result (**Zikmond, et al.,2010**). In addition, **Saunders et al (2009)** appoint that the threats facing validity are (a) timing: if the research is conducted shortly after a major policy applied in the targeting population, it may well have misleading, effect on the findings; (b) testing: if the respondents believe that the results of the research may disadvantage them in some way, then this is likely to affect the results; (c) mortality: this refers to researcher dropping out of studies; and (d) maturation: the existence of other events happening during the research have an effect on the findings.

Related to **Zikmond, et al., (2010)** the two basic approaches to establishing reliability are the internal consistency which represents measures homogeneity or the extent to which each indicator of a concept converges on some common meaning, and the test-retest reliability which administrates the same scale of measure to the same respondents at two separate points in time to test for stability. A suitable measure of reliability as internal consistency is the Cronbach alpha which provides a coefficient of inter-item correlations, that is, the correlation of each item with the sum of all the other relevant items. It is useful for multi-item scales. SPSS calculates Cronbach's alpha at the click of a button. The formula for alpha is: $alpha = nrii / (1 + (n - 1) rii)$ where n = the number of items in the test or survey (e.g. Questionnaire) and re = the average of all the inter-item correlations. Since the split-half coefficient and the alpha coefficient the following guidelines can be used, more than 0.90 very highly reliable between 0.80 and 0.90, highly reliable between 0.70 and 0.79, highly reliable between 0.60 and 0.69, marginally/minimally reliable less than 0.60 is unacceptably low (**Cohen, et al , 2007**).see table (4.4)

7.3 Sensitivity:

Sensitivity refers to an instrument's ability to accurately measure variability in a concept. The sensitivity of a scale based on a single question or single item can also be increased by adding questions or items. Since composite measures allow for a greater range of possible scores, they are more sensitive than single- item scales. Thus, sensitivity is generally increased by adding more response points or adding scale items (**Zikmond, et al, 2010**).

8. Conclusion

The researcher clarified the assumptions and justifications for the KM and TQM studies by the following model:

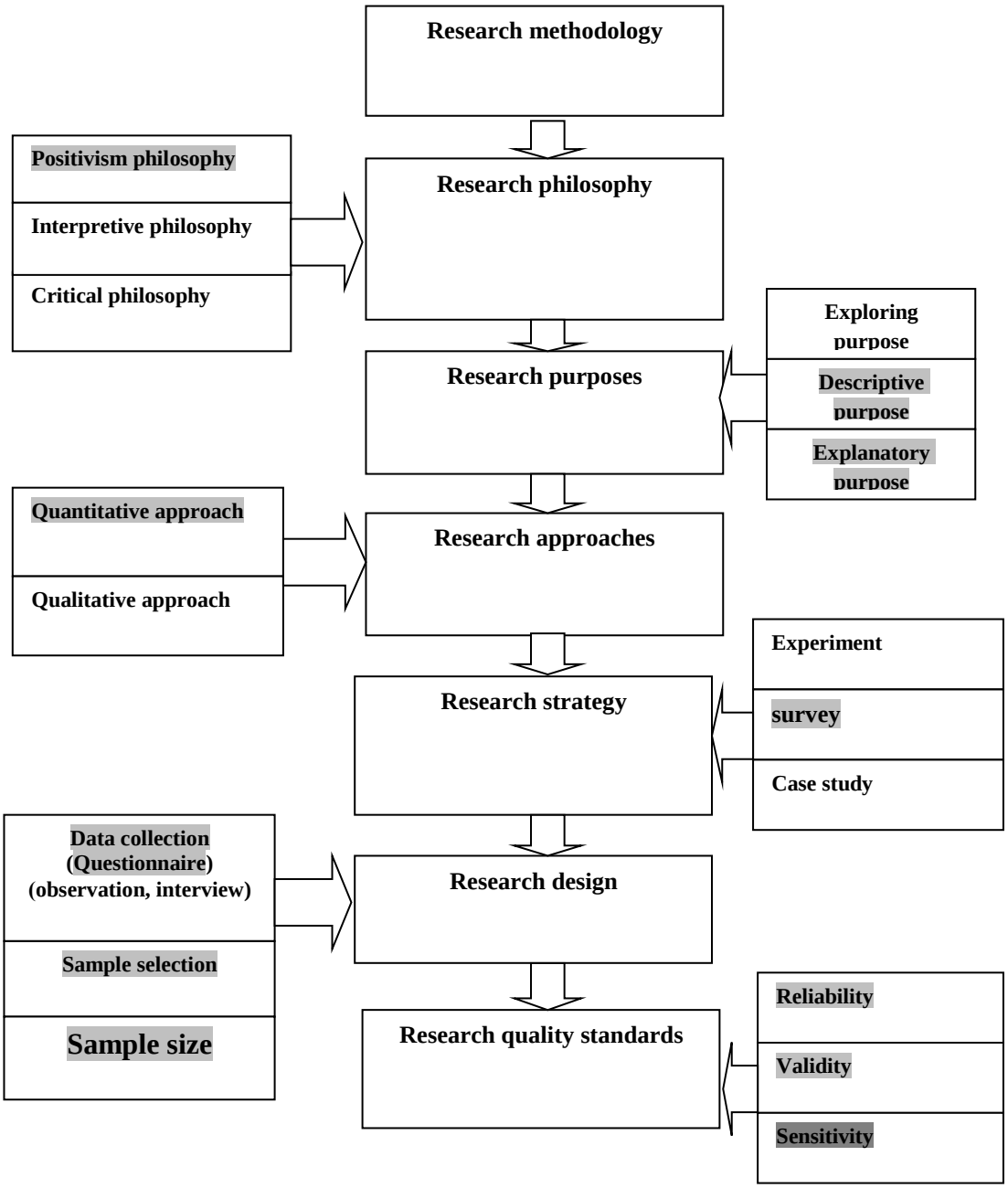

Figure 1 : proposed KM and TQM Research methods

9. RECOMANDATION FOR FUTURE RESEARCH

Researchers may have different motives in inspiring the research methods of KM and TQM studies methodologies to enhance findings and results of their researchs. Whatever the case, when doing so, they must consider that the expected results will not be the same in all environments. Obtaining a detailed research model for KM and TQM is critical to perform when the organization operates in a knowledgeable management and quality environment. Future studies can build up on this study and proceed to focus on practical study with a large group and large sample to have more generalized results, and use interviews and observations, which will provide a clearer and more comprehensive picture of the study field.

10. REFERENCE

[1]. Ackerman, F., bannon, l., & barrett, m. (1998). Exemplifying interpretive research in information systems: an overview. *journal of information technology, 13*, 233-234.

[2]. ALnajar, F., ALnajar, N., & ALzuabi, M. (2009). *Scientific Research Methods:Applied Perspective.* Amman: Daralhamed.

[3]. Blumberg, B., Cooper, D. R., & S.Schindler, P. (2008). *Business Research Methods* (2nd Europeans Edition ed.). London: McGraw-Hill Higher Education.

[4]. Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6th ed.). New York: Routledge.

[5]. Cooper, D. R., & S.Schindler, P. (2008). *Business Research Methods* (10th ed.). Boston: Mcgraw.Hill International Edition.

[6]. Cooper, L. P. (2003). A research agenda to reduce risk in new product development through knowledge management:a practitioner perspective . *J. Eng. Technol. Manage*, 117–140.

[7]. Emory, W. C. (1995). *Business Research Methods, Irwin, USA.* (5th ed ed.). Chicago: Homewood,Irwin.

[8]. Erick, J., & Chung, C. A. (2006). A Methodology for Measuring Engineering Knowledge Worker Productivity. *Engineering Management Journal , 18*(1), 32-38.

[9]. Gaur, A., & Gaur, S. (2006). *Statistical Methods for Practice and Research: A Guide to Data Analysis using SPSS.* California: 1 ed, Thousand Oaks, : Sage Publications.

[10]. Glogowska, M. (2011). Paradigms, pragmatism and possibilities: mixed-methods research in speechand language therapy. *INT J Lang Commun Disord , 46*(3), 251–260.

[11]. Greenfield, T. (2002). *Research methods guidance for postgraduates* (2nd Ed ed.). metchigin: Hodder Education.

[12]. Guo, Z., & Sheffield, J. (2008). A paradigmatic and methodological examination of knowledge managementresearch: 2000 to 2004. *Decision Support Systems (3), 44*, 673-688.

[13]. Hirschberg, J., Lu, L., & Lye, J. (2005). Descriptive Methods for Cross-Section Data. *The Australian Economic Review , 38*(3), 333–350.

[14]. Holmberg, A. (2012). Discussion on assessing quality of administrative data. *Statistica Neerlandica (1), 66*, 34–40.

[15]. Kallet, R. (2004). How to Write the Methods Section of a Research Paper. *RESPIRATORY CARE , 49*(10), 1229-1232.

[16]. Kumar, R. (2005). *Research Methodology-A Step-by-Step Guide forBeginners* (2nd ed.). Singapore: Pearson Education.

[17]. Lee, A., & Baskerville, R. (2003). Generalizing generalizability in information systems research. *Information Systems Research, 14*(3), 221-243.

[18]. Lee, M. R., & Chen, T. T. (2012). Revealing research themes and trends in knowledge management:From 1995 to 2010. *Knowledge-Based Systems 28*, 47–58.

[19]. Mohanta, G. C. (2010). Perception of Top Level Knowledge Workerson Productivity Improvement through Toolsand Techniques. *Journal of Management Research (1), 2*, 1-18.

[20]. Myers, M. D. (1997). Qualitative Research in Information Systems. *MIS Quarterly, 21*(2), 241-242.

[21]. Nevo, D., & Chan, Y. E. (2007). A Delphi study of knowledge management systems:Scope and requirements. *Information & Management 44*, 583–597.

[22]. Orlikowski, W., & Baroudi, J. (1991). Studying Information Technology in Organizations: Research Approaches and Assumptions. *Information Systems Research , 2*(1), 1-28.

[23]. Ruth, W. (2008). *Descriptive Statistics Essay.* EBSCO Research Starters Publishing Inc.

[24]. Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students* (5 th ed.). Edinburgh Gate: Pearson Education Limited.

[25]. Sekaran, U., & Bougie, R. (2010). *Research Methods For Business: A Skill-Building Approach* (2nd ed ed.). canada: JOHN WILEY & SONS,INC 5th ed.

[26]. Trauth, E. (2011). What can we Learn From Gender Research? Seven Lessons for Business Research Methods. *Electronic Journal of Business Research Methods , 9*(1), 1-9.

[27]. Venable, J. (2011). Incorporating Design Science Research and Critical Research Into an Introductory Business Research Methods Course. *The Electronic Journal of Business Research Methods , 9*(2), 119-129.

[28]. Wallace, D. P., Fleet, C. V., & Downs, L. J. (2011). The Use of Research Methodologies in the KnowledgeManagement Literature. *ASIST 47 (1)*, 22–27.

[29]. Wallacea, D. P., Fleet, C. V., & Downs, L. J. (2011). The research core of the knowledge management literature. *International Journal of Information Management 31* , 14–20.

[30]. Warnes, G. (2007). Quality management systems in ART:are they really needed? An Australian clinic's experience. *Best Practice & Research Clinical Obstetrics and Gynaecology 21 (1)*, 41-55.

[31]. Wilkinson, G., & Dale, B. (1999). modelsof management system standerds:areviewof the integration issues. *International Journal of Management 1(3)*, 279-298.

[32]. Zikmond, W. (1988). *Business Research Methods* (2nd ed.). Chicago: The Dryden Press.

[33]. Zikmond, W., BarryJ.Babin, C.Carr, J., & Griffin, M. (2010). *Business Research Methods* (9th ed.). canada: South-Western Cengage learning.

[34]. Zivkovic, J. (2012). Strength and Weakeness of Business Research Methodologies:two diseprate case studies. *Business Studies Journal , 4*(2), 91-99.