MANAGEMENT ACCOUNTING RESEARCH: GUIDELINES FOR USING A HYBRID OF THE GROUNDED THEORY AND CASE STUDY APPROACHES

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Abstract: In an ever changing business environment it is necessary for management accounting scholars, researchers and practitioners to be able to comprehend and facilitate change. The ability to constantly change research approaches to be appropriate to the research project is important for success. Research indicates that grounded theory and case study are two approaches that can be used in management accounting research. However, rarely used in management accounting research, it has the potential to contribute at all levels of management accounting research. The paper provides an individual account of using this approach. The purpose of this study was to provide guidelines for using a hybrid of grounded theory and case study methodologies in management accounting research.

Key words: management accounting, research methods, qualitative research, case study, grounded theory

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Introduction

In an ever changing business environment it is necessary for management accounting scholars, researchers and practitioners to be able to comprehend and facilitate change. The ability to constantly change research approaches to be appropriate to the research project is important for success. Research projects are commissioned to explore, describe or comparing a phenomenon (Russell and Ryan, 2010) in an attempt to make sense of it in their normal environments (Denzin and Lincoln, 2008; Flick, 2011). This type of research projects is what the literature refers to as qualitative research. Qualitative research is an investigative method (Marshall and Rossman, 2014) using various data collection methods such as; interviews, questionnaires, document analysis and observations (Greener, 2008; Kumar, 2014). Over the past four decades, qualitative research has been successfully employed in management accounting research (Shank, 1989; Moon and Bates, 1993; Wouters et al., 1999; Mouritsen and Larsen, 2005; Figge and Hahn, 2013). Ahrens and Chapman (2006) argues that is not simply empirical but a profoundly theoretical activity shaped by the interests of the researcher. Williams (2007) agrees and identifies case study and grounded theory study as types of research that can be conducted.

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Grounded theory research has implications for both the understanding and the facilitation of change Kirk and Van Staden (2001). Glaser (1994) concludes that grounded theory goes “beyond conjecture and preconception to the underlying processes of ‘what’s going on’ in substantive areas”. Grounded theory methodology allows the researcher to start with an area of study and not with a theory; the theory can be developed while case study research develops theory (Rule and John, 2011). The literature review revealed a large quantity of studies using these methodologies with success.

The presentation of a hybrid of grounded theory and case study is deliberated retrospectively, in a bid to provide an insight to case study grounded theory study in general and using a hybrid of case study grounded theory in particular. However, case study and grounded theory are rarely used in management accounting research; although it has the potential to contribute at all levels of management accounting research. The paper provides an individual account of using this approach. The purpose of this study was to provide guidelines for using a hybrid of grounded theory and case study methodologies in management accounting research.

This paper is based on research project using a hybrid of grounded theory study and case study. It seeks to add to the insights, by reporting how the research project was undertaken and how the approach was applied in practice. The author reports his insights of choosing a hybrid of grounded theory study and case study approach, starting a project, data collection, analysis, the writing process, any related concepts, before finally coming to a close. The intention of the paper is to make researchers and those that aspire to be researchers more comfortable with a hybrid of grounded theory study and case study and to provide an insight into the practicalities of such research. The paper closes with a call for more hybrid research papers using grounded theory study and case study and for papers that, in addition to outlining the results of the research, discuss the details of the research undertaking.

An interpretive approach is being used in this study. In an attempt to compare different outcomes of decision-making models an interpretive approach would provide the answers. Interpretive studies support the status quo and believe in a reality of perceptions, based on the individual’s perspective. Harwell (2011) explains that interpretive studies want to understand phenomena rather to than to uncover phenomena through observations. Observations are based on theory and are influenced by the motives and preferences of the researcher leading to the development of an interpretive and critical perspective (Smith, 2011) beginning with specific observations that is done repeatedly and then drawing a general conclusion (Walliman, 2011). However, Smith (2011) argues that an interpretive perspective is the result of external influences on the human actions, while Repko (2012) predicts that the reality is influenced by individuals’ interpretation and can never be fully known. In searching to understand the phenomena the researcher needs to determine what the individuals’ perceptions within a certain situation are.
Grounded Theory Study

Global Crossing and WorldCom accounting scandals and why did Steinhoff International Holdings share price fell 97% during the 52-week period ending December 2017? These are examples of trying to understand phenomena; inductive research, De Villiers (2015) and Smith (2011) consider grounded theory studies as appropriate for doing accounting research.

Grounded theory aim to inductively build a theoretical framework regarding a particular concept (Von Alberti-Alhataybat and Al-Htaybat, 2010). Grounded theory attempts to formulate a collective theory that is formulated by opinions that are based on two principles namely; constant comparison and theoretical sampling (Maree, 2012). In an attempt to deepening the understanding, management accounting studies used grounded theory study as a qualitative approach.

It must be mentioned that two distinctly developed alternative grounded theory approaches exists namely; Glaserian and the Straussian approach. The approaches originate from differences between Glaser and Strauss on theoretical and philological assumptions. The Glaserian approach, emphasising an individual and personal approach while the Straussian approach is more structured and prescriptive approach. Understanding the epistemological and ontological foundations of the Glaserian and Straussian are important in order to select a method best suited to the researcher’s philosophical perspective (Kuhlmann, 2013). The basic features of Straussian grounded theory includes; analytical processes, linking issues with phenomenon that allow the generation of subjective theory that provides a meaningful guide, that provides a contribution to the body of knowledge applying comparative, systematic and concurrent data collection.

The study makes use of the Straussian grounded theory approach. McGhee et al. (2007) argue that Straussian grounded theory researchers use historical evidence, experience and existing theoretical knowledge to analyse and interpret data to generate novel theory. Novel theory is produced with the help of the case study approach (Eisenhardt, 1989; Ellram, 1996).

Case Study

Case study as a familiar approach in social science to investigate phenomena through data collection. As with grounded theory studies two different case study approaches exists, namely; deductive and inductive. Deductive case study will describe, analyse and interpret a specific phenomenon. The literature refers to this as theory testing, will theory building originate form inductive case study. In order to build theory, the researcher needs empirical findings, which are grounded in the literature to identify the gap and formulate the research question (Eisenhardt and Graebner, 2001). In order to motivate the research question, the researcher needs to develop the conceptual argument to explain the importance of the phenomenon. Siggelkow (2007) proposes that if inadequate notional information about
a phenomenon exists, inductive research provides the data that is the starting point of the emerging theory. Various authors over the past three decades which includes; Srinidhi (1992), De Haas and Kleingeld (1999), McNair et al. (2001), De Haas and Algera (2002), Rouse et al. (2002), Ratnatunga et al. (2004); have successfully used case studies to study various management accounting issues. Eisenhardt et al. (2016) illustrates that blending grounded theory and case study research is plausible in the emergence of theory from data.

**Rationale for Using a Hybrid of Grounded Theory Study and Case**

From the previous sub sections, it is evident that both grounded theory and case study has been successfully used in management accounting research. Grounded theory is ideal because the research can be performed in a natural setting and constant comparisons and additional interrogations can be conducted if necessary (Charmaz, 2001). While Yin (2003) proposes developing theory from a priori using case study. Knipper (2010) argues that both these methods are excellent methods to use when not much is known about the antecedents. Eisenhardt et al. (2016) proves that these two methodologies can be combined successfully. In a research project about financial decision-making models, international financial reporting, integrated reports and lean accounting the literature study revealed that although much research has been done separately none of the previous studies integrated all these elements. Therefore, making use of grounded theory combined with case study methods affords the opportunity to begin research within a study field rather than with a theory. As the literature did not identify any theories that integrate financial decision-making models with lean accounting principles using grounded theory study enable the researcher to create theory as it emerged. Using case study reconciliation of evidence and collecting data across cases proved useful as demonstrated by (Eisenhardt, 1989).

The study objective is to provide a greater insight into using a hybrid of grounded theory and case study approach, through illustrating the authors’ personal experiences with its application. It seeks to highlight the advantages and difficulties, including any attempts to overcome these, as these are perceived from a subjective viewpoint. The paper provides an individual account of how a hybrid study using grounded theory and case study approach was undertaken and the subjectivity of such undertaking has to be taken into consideration.

**Research Methodology**

In order to provide a first-hand account to undertake a hybrid grounded theory and case study project, for inductive management accounting research. One motivation for this paper was that the accounting profession over the past three decades has implemented many changes due to several accounting scandals, but it seems that the phenomenon is always reappearing. In order to understand the phenomena,
a study project was undertaken to develop and build theory in the establishment of an integrated financial decision-making model using lean accounting principles using both the grounded theory and case study methods. As the intention grounded theory is to generate essential theory grounded in data to provide a stimulating view on existing knowledge to investigate phenomena (Boadu and Sorour, 2015). Case study is also design to investigate phenomena. The development of an integrated financial decision-making model using lean accounting principles is a complex process Locke (2001) deduces that grounded theory is a suitable research approach as it captures the complexity of the process. Therefore, it is important that the sample and the unit of analysis were purposefully and conveniently sampled (Knipper, 2010). A literature review, to gain theoretical sensitivity and examining the degree to which the emergent theory fits reality was conducted. Then using secondary data such as; annual financial reports and integrated reports of target companies; was applied to the developed an integrated financial decision-making model using lean accounting principles. In order to explain phenomena through what was previously discovered as suggested by (Leedy and Ormrod, 2010; Mouton, 2013). In order to determine whether different accounting standards will influence the developed integrated financial decision-making model using lean accounting principles listed companies on three stock exchanges was considered. The target population consisted of all listed companies on three stock exchanges namely; Johannesburg Stock Exchange (JSE), New York Stock Exchange (NYSE) and London Stock Exchange (LSE). Companies listed on these three stock exchanges annual financial reports and integrated reports use different accounting standards. Due to accessibility, reliability and public availability of information of these companies, limited resources and possibility of unit destruction one company of each stock exchange was chosen. Emmel (2013) argues in order to eliminate the possibility of unit destruction the selected sample should have similar characteristics. BP p.l.c. (LSE), Chevron Corporation (NYSE) and Sasol Limited (JSE) were chosen as the sample due to the similarity of the industry in which they operate, although the accounting policy differs. In identifying the participating companies, consideration was given to the notable increase in international trade and the adaption of the accounting profession to providing useful information to global stakeholders in their decision-making endeavours. Data collection relies on the document analysis of the three companies that were coded and analysed. Bowen (2009) argues that the selected documents should consider; 1) the contribution towards the objectives of the study; 2) be authentic, credible accurate, and representative; 3) original and purposeful; and 4) the source of the document. The document analysed included the annual financial reports (BP, 2014; BP, 2015; BP; 2016; Chevron, 2014; Chevront, 2015; Chevron, 2016; Sasol, 2014; Sasol, 2015; Sasol, 2016) and the integrated reports (BP, 2014; BP, 2015; BP; 2016; Chevron, 2014; Chevron, 2015; Chevron, 2016; Sasol, 2014;
Sasol, 2015; Sasol, 2016). Profuse notes were made of each of the companies’ annual financial and integrated reports. The notes were used to supplement the coding of the annual financial and integrated reports in order to triangulate data to support the findings, propositions and conclusions of the study.

The selected three sample companies used different financial reporting standards namely; 1) IFRS, 2) UK GAAP, and 3) US GAAP, it is not possible to develop one complete integrated financial decision-making model using external and internal reports to examine the influence of external reporting standards on internal reporting requirements. This is due to the fact that companies will not disclose or discuss internal reports. Knipper (2010) suggest a piecemeal approach, which was applied to the study in the identification of financial decision-making requirements.

The data set was edited to best fit the emerging themes identified from the literature study with the information discovered from the three independent case studies. This meant that the study was limited to the comparative data that were obtained from the three case studies. Prior to the case study, financial decision-making models was identified and classified as: 1) financial performance indicators, 2) risk indicators, 3) growth indicators, and 4) non-financial indicators. Based on the information discovered during the literature study of lean accounting principles the financial decision-making model was reclassified to include; 1) operational indicators, 2) capacity indicators, 3) financial indicators, and 4) non-financial indicators. Once the data were edited the data was coded.

The process of construing vigilantly through the transcribed data and separating all the data into meaningful themes is known as coding. The data was coded to coding was used to analyse and examine themes, patterns, and categories which emerged within and across the three companies. Using the Straussian grounded theory approach meant that coding was done based on the data collected and was not done prior to the analysis. In using a hybrid of data collected through the literature review and document analysis the codes where determined. Boadu and Sorour (2015) propose the coding procedures should include three steps namely; open coding, axial coding, and selective coding.

Open coding is the process whereby data are separated to support the researcher in examining, comparing and conceptualising the similarities and differences of data to exposes emerging categories (Strauss and Corbin, 1998; Knipper, 2010, Boadu and Sorour, 2015). During the open coding analysis, the literature review of the development of accounting standards, decision usefulness of accounting information, decision-making and lean accounting principles exposes emerging categories and provided the key concepts. The key concepts were limited to those that would most likely be used by stakeholders in financial decision-making models when analysing annual financial statements and integrated reports. The key concepts only include those which would make a valuable contribution towards the axial coding step.

In an attempt to develop an integrated financial decision-making model using lean accounting principles the open coding data need to be axial coded in order
to determine the relationship between these key concepts. In determining the relationship between the key concepts the data that was separated during open coding must now be reassembling. The process of reassembling the data involves the development of a paradigm model which establishes the phenomenon, conditions, framework, effects and action interface stratagem (Delport et al., 2013; Heath and Cowley, 2004). The reassembling of the data led to the development of four financial decision-making indicators that should be included in the integrated financial decision-making model which use lean accounting principles. Selective coding is the final step in the coding process. Selective coding is defined by Boadu and Sorour (2015) as: the integration, interpretation, and refinement of the major categories and sub-categories to form a story line that describe what happened in the phenomenon. The selective coding step the relationship between the key concepts and the conceptual developed model are being authenticated or nullified in accordance with the data. Delport et al. (2013) and McKerchar (2008) argue that in order to authenticate the key concepts and the conceptual developed model it may be necessary to alternate between the three steps. However, in this study most of the validation was conducted during the axial coding step. The building of the integrated financial decision-making model using lean accounting principles and its impact was the outcome of selective coding which was performed simultaneously with the case study analysis.

Validity, Trustworthiness and Authenticity of the Study

In developing the integrated financial decision-making model using lean accounting principles it is necessary to consider credibility. Scapens and Theobold (2002) argue that any model’s credibility lies in its ability to commensurate with known empirical facts. Determining the credibility of qualitative research require evidence on; validity, trustworthiness and authenticity. Knipper (2010) explains that validity of acceptable results between case studies defines the quality, overall trustworthiness and the authenticity of the study. The evidence pertinent to development of an integrated financial decision-making model using lean accounting principles was obtained through a hybrid of grounded theory and multiple case study methods. Evaluating if the model generated the envisioned results (Babbie, 2010) the captured data were analysed using Microsoft Excel 2010. Babbie (2010) and Mouton (2013) conclude that the envisioned results can be evaluated with reference to an analysis of existing published documents such as annual financial and integrated reports. This was done by applying the financial and non-financial information of three selected companies to the developed integrated financial decision-making model using lean accounting principles.

Results of the Study

The results of the study provide evidence that the developed integrated financial decision-making model using lean accounting principles influence the financial
decisions of the stakeholders. Using grouping and collapsing to conceptualise categories as proposed by Strauss (1987) seven main decision-making categories were identified. These seven categories where then grouped them into 38 subcategories. Each of the seven (n=7) decision-making categories and the 38 (n=38) subcategories were assigned a code. These codes were assigned to the most used measure as identified by the literature review. By allocating a unique code to each of the measures during the open coding step was coded and grouped as concluded Glaser and Strauss (1998).

As the objective was to develop an integrated financial decision-making model using lean accounting principles, the categorisation of lean accounting principles needed to be included as the final part of the open coding. Which provided the researcher with valuable information on which lean accounting principles must be included in and integrated financial decision-making model.

Applying this procedure allows the researcher to determine the relationships between the categories and the uniqueness of the different cases. Using Microsoft Excel spread sheets each coding category could be analysed and the results be printed out and analysed. This was mainly a manual effort, whereby key differences, characteristics and dimensions were identified. In order to develop an integrated financial decision-making model using lean accounting principles these open coding data need to be axial coded.

During the axial coding step, the seven emerging categories and their 38 subcategories which were identified during the open-coding step was examined and manipulated. This led to grouping the coded measures into four (n=4) financial decision-making indicator. Each of these indicators has subcategories that originate from open coding, and have a causal relationship with one other.

These indicators were visually determined by considering decision-making motives, non-financial indicators and lean accounting principles and their ability to influence financial decisions. The four (n=4) financial decision-making indicators signify the emergent categories, portraying the grounded theory of financial decision-making models. The researcher selectively coded data to develop an integrated financial decision-making model using lean accounting principles.

The outcome of the selective coding step was the development of the integrated financial decision-making model using lean accounting principles and the testing of its influence on the financial decisions of stakeholders. The selective coding step was performed concurrently with the case study analysis and included the identification of the characteristics of the three companies. This step represents the fusion of grounded theory and case study relating to the conditions and differences encountered in the core categories, forming the basis for theory building and generating research propositions.

The results from the selective coding step indicate the codes, elements and performance areas. During the testing of the model it was realised, that the quantifying the results of the non-financial indicators (NF) are difficult as it’s subjective. Therefore, NF was excluded from the final integrated financial
decision-making model using lean accounting principles. It was deduced that the development of an integrated financial decision-making model using lean accounting will influence the stakeholders’ decision-making using a hybrid of grounded theory and case study methodologies.

The results from the coding process where included in the development of the integrated financial decision-making model using lean accounting principles. The principles of the model developed in this study were applied to a case study. Which incorporate the findings from the grounded theory methodology, on available financial information. The practical implementation of this has led to the establishment of a framework for developing an integrated financial decision-making model using lean accounting principles.

By combining grounded theory methodology and then testing the developed integrated financial decision-making model using lean accounting principles by applying it to the information obtained from case study validity, trustworthiness and authenticity was established. The developed model was independently tested using case study which demonstrated that the integrated financial decision-making model using lean accounting principles supports and influence stakeholders’ financial decision-making requirements.

**Conclusion**

The paper seeks to provide a greater insight into using a hybrid of grounded theory and case study approach, through illustrating the authors’ personal experiences with its application. The study provides an individual account of how a hybrid study using grounded theory and case study approach was undertaken. However, the subjectivity of such undertaking has to be taken into consideration as a limitation of the study. Exploring an alternative research methodology for management accounting using a hybrid of grounded theory and case study methodologies provided uniquely results. This study could form the guideline for future global management accounting research in trying to provide an understanding to phenomena in an ever changing business environment. Consequently, this study is relevant to every management accounting student, academic, practitioner and manager interested in doing national and international management accounting research.

**References**


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MANAGEMENT ACCOUNTING RESEARCH: GUIDELINES FOR USING A HYBRID OF THE GROUNDED THEORY AND CASE STUDY APPROACHES

BADANIA RACHUNKOWOŚCI ZARZĄDCzej: WYTYCZNE DOTYCZĄCE KORZYSTANIA Z MIESZANKI UGRUNTOWANEJ TEORII I PODEJŚCIA STUDIUM PRZYPADKU


Słowa kluczowe: studium przypadku, ugruntowana teoria, rachunkowość zarządcza, badania rachunkowości zarządczej, badania jakościowe, metody badawcze.

管理会计研究：使用和混合基础理论和案例研究方法的指导原则

摘要：在一个不断变化的商业环境是必要的管理会计学者，研究人员和从业者能够理解它，并促进变革。不断改变研究的能力对成功至关重要。会计管理领域的研究指标。然而，很少在管理会计研究使用，它具有贡献是管理会计研究的各级潜力。本文提供了使用这种方法的个人帐户。这项研究的目的是提供您的指导方针在管理会计研究使用扎根理论和案例研究方法论的混合体。

关键词：案例研究，扎根理论，管理会计，管理会计研究，定性研究，研究方法。