

CHAPTER 1 BACKGROUND AND THE RESEARCH PROBLEM

1.1 Introduction

This thesis is about the development of a classification framework for accounting information to provide users of financial statements, especially financial managers, with useful information of indisputable quality, enabling them to make informed decisions. The financial statements ought to comply with the four qualitative characteristics: 1) understandability, 2) relevance, 3) reliability and 4) comparability, as prescribed by the IASC board (IASB 2004) in order to supply useful information to users. Users of accounting information come from a vast range of diverse backgrounds, each with their own set of requirements. To develop a classification framework for accounting information culminating in a single set of financial statements (e.g. one balance sheet and one income statement) to satisfy the needs of all users of financial information may be a complex task because requirements may conflict from one user to the next.

1.1.1 Goal of this chapter

This chapter introduces the background to the problem researched in this thesis and provides a problem statement as well as the motivation for undertaking this research. Previous attempts at solving the classification problem in accounting are presented. The research methodology followed in this work is outlined. This includes a literature survey and an empirical component consisting of the analyses of financial statements and the use of a questionnaire.

1.1.2 Layout of this chapter

Following this introduction, the background of the research problem is discussed in Section 1.2. The question of accountability versus decision-making is addressed in Section 1.3, followed by a statement of the problem to be researched in Section 1.4. A motivation for researching the problem stated is presented in Section 1.5. The importance of the proposed work, previous and present attempts at solving the stated problem and possible beneficiaries of the outcome of this research are also given in Section 1.5. The hypothesis is presented in Section 1.6, while the research aims and objectives are the topic of Section 1.7. In Section 1.8 the research methodology

followed in this work is presented. The nature and form of the results are presented in Section 1.9, and a chapter layout of the rest of this thesis is presented in Section 1.10.

The above layout is represented in Figure 1.1.

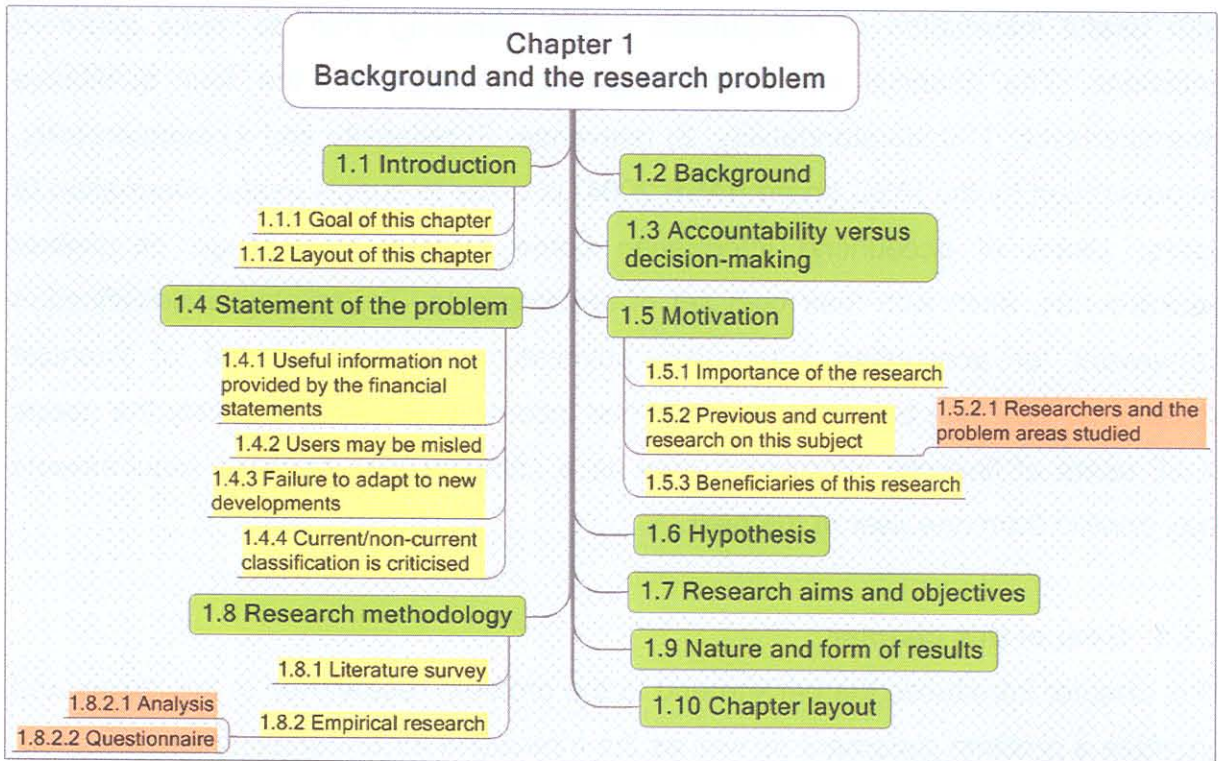


Figure 1.1 A visual representation of the layout of Chapter 1

1.2 Background

Classification plays a fundamental role in accounting science, so much so that the Committee on Terminology of the American Institute of Accountants (now AICPA) explicitly mentions it in the definition they adopt for accounting (*italics added by the author*):

Accounting is the art of recording, *classifying* and summarizing, in a significant manner and in terms of money, transactions and events which are, in part at least, of a financial character, and interpreting the results thereof.

(Kam 1990:33)

Chapter 1 – Background and the research problem

Accounting classification is an ongoing process performed by accountants in the observation of transactions, events and occurrences, the recording thereof and the reporting to a diverse group of users for their financial decision-making objectives (Goldberg 1964). Classification of accounting data can determine and enhance the data's usefulness and transform such data into useful information, thereby creating new knowledge. Classification is a mechanism used by living beings to make sense of a variety of objects in their world by classifying such objects into groups.

Classification starts as soon as an event (e.g. a transaction) takes place. In accounting a transaction is first classified when it is recorded as a debit or a credit, whereafter it needs to be classified as an asset, a liability, equity, revenue or cost/expense, guided by the attributes of the transaction that are known at the time of recording the transaction. The last five accounting classes are used uniformly by companies, as prescribed by GAAP (General Accepted Accounting Practices) and/or IFRS (International Financial Reporting Standards). All economic inputs and outputs are recorded according to these classifications (Lev 1974). Throughout this thesis an attribute is the technical name used for a property of an object.

A classification may change over time as a result of environmental effects and managerial decisions. Attributes may change from the time of recording in the past to the time of reporting in the present. Classification is performed for the sake of a moment at year-end, and the final classification is the disclosure of all the economic events in the financial statements of a company. For example, raw materials, work-in-progress and finished goods are classified together as inventory in the subclass of *current assets* at year-end and again as separate accounts after year-end. Therefore, a proposed classification framework for accounting information ought to embed a temporal component, i.e. time has to be taken into account during the classification of a transaction from the time of recording in the past to the time of reporting in the present, including items with future consequences.

The resultant classification depends on how the event under consideration is measured; amongst other things it requires one to determine all relevant attributes of the event prior to classification in the financial statements. Financial statements are mere summaries of financial data and are susceptible to the biases and defects often

present in summaries. By creating summaries, important information for other users may be left out based on the subjectivity of the person making the summary, even though the compiler of the financial statements tries to be objective (Goldberg 1964). Classification has a degree of personal preference that may lead to different outcomes by different accountants.

The practice of accounting performs the function of measuring economic activities of a company and conveying the results to the managers, investors, creditors and other interested parties to facilitate decision-making. Information communicated by accounting is arguably the most sensible way to measure the performance and financial well-being of a company, particularly for those stakeholders other than the managers of the company (Someya 1996). Lev (1974) divides users and their goals into the following categories:

Table 1.1 Users of financial statements

Type of users	Reason for using financial statements
Investors	Portfolio decisions
Management	Evaluation of operational and financial efficiency
Lenders	Determining credit worthiness
Labour unions	Collective bargaining
Regulatory agencies	Controlling of the activities of a company
Researchers	Studying company and individual behaviour

Adapted from Lev (1974)

The diversity of stakeholders in a company is described by Mitroff (1983: xv) as that “each stakeholder has a will of its own and pursues its own goals as well as those of the system as a whole”. From Table 1.1 it is evident that, with a diverse group of users and their needs, it becomes a complex task to develop a classification framework for accounting information to satisfy the needs of all users and the requirements of different users may also conflict with one another.

According to the Ernst & Young Foundation (1994:1) there is “a deep concern that financial accounting and reporting is losing relevance in a world characterized by increasingly complex financial transactions and management practices”. This sentiment is shared by AICPA (1994). The Ernst & Young Foundation (1994)

Chapter 1 – Background and the research problem

furthermore claims that accounting research fails to address the problems that standard setters and practitioners deal with. It is argued that only a small portion of accounting research published in the last twenty years addresses the problems that business and standard setters encounter. It follows, therefore, that research is needed to address the problems encountered by standard setters and practitioners. One possible way to address this problem is to structure information currently presented in statements differently, so as to make it more accessible to stakeholders.

Currently, the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) are working on a project called the *Joint Conceptual Framework Project* (FASB 2007). This project will be conducted in 8 phases of which two phases may have an impact on the classification of accounting information: Phase B – Elements of financial statements and recognition; and Phase E – Presentation and disclosure, including reporting boundaries. The framework proposed in this thesis is independent of, but part of the realm of developments of the Joint Conceptual Framework Project (FASB 2007). Since classification plays an important role in accounting, this joint project further motivates this thesis.

1.3 Accountability versus decision-making

A general perception is that the purpose of financial reports is to report on the company's activities and management's achievements to shareholders, the latter objective often being pursued to demonstrate sound accountability. Although this accountability element of financial reporting does exist, there is a more noteworthy social purpose, namely, supplying quality financial information to make realistic investment and credit decisions (Miller and Bahnson 2002:32). AICPA (1994) states that the decisions of users are greatly influenced by the necessary information obtained from financial statements. The social purposes and decision-making purposes are becoming increasingly relevant and may need to be taken into account when developing a classification framework for accounting information.

Classification of accounting information may be divided into classification for *accountability* and classification for *decision usefulness*. Table 1.2 presents the different steps and principles followed in the classification of accounting information.

Table 1.2 Classification for accountability and decision usefulness

Steps in the classification process	Principles	Classification types
Observation	Historical classification principles	Accountability
Recording	Double entry principles	
Reporting	GAAP principles/practices	
Decision-making	User requirements	Decision usefulness

Next each of the two classification types and their steps portrayed in Table 1.2 are discussed.

1. Accountability

- Observation:** An observation made by an individual is often a subjective activity, and, because of this phenomenon, Quantum theory works towards an “observer-influenced reality” rather than an “observer-created reality”. By implication, what was not already potentially present could never be brought into being (Polkinghorne 2002). This means that an observer actually influences reality but cannot create reality. An observer interprets what he or she sees and, thereafter, assigns some semantics to the observation. Classification of economic data takes place as a result of observation, which may be a subjective action. This could lead to information in the financial statements that is not useful, since it may be based on the intentions of the observer, as discussed above.
- Recording:** Duality, or the double-entry system, is a “logical consequence of the more basic aspect of classification methodology” (Littleton and Zimmerman 1962:26). Duality brings forth a balance or equilibrium in the financial statements, since in the trial balance, for example, the sum of the debits equals the sum of the credits. Also, the balance sheet may be seen as a statement of balances, a result of the cause and the effect of transactions initially recorded.
- Reporting:** South-African accounting is governed by a set of *practices*, called General Accepted Accounting Practices (GAAP), while in the USA the corresponding body of knowledge is referred to as principles. According to GAAP, the main objective of financial statements, as set out in AC000 (one of the statements in GAAP), is to provide useful information to a diverse range of users for their own specific goals (Sowden-Service 2004). According to

Chapter 1 – Background and the research problem

Sowden-Service (2004:1), such information should display the following regarding a company: 1) the financial position of the company (found in the balance sheet), 2) the financial performance (found in the income statement), and 3) the cash flow (found in the cash flow statement). However, as far as the author is aware, no prescribed framework currently exists to classify accounting information; such information is classified into different financial statements following GAAP and the Company Act 1973, and these are rather prescriptive with regards to the disclosure of information in the financial statements.

- 2. Decision usefulness:** For financial statements to be useful to users, they need to conform to the needs of the different users. From the list of diverse users in Table 1.1 it certainly appears as if different classifications may be needed for different users of financial statements. This is part of a larger problem based on the observation of reality (refer to the discussion in 'Observation' above). As envisaged by Mattessich (1995), reality can be compared to an onion: a hierarchy with many layers in which reality can be physical or social. Mattessich (1995:203) answers the assertion that "accountants do not represent reality but create it" as follows: accountants do both because reality changes with every event and with every human thought and action. A single generic classification framework of accounting information may, therefore, be inadequate if all the needs of all the users are to be incorporated. A possible solution to this problem is to pool all the requirements and then remove those that conflict with any other requirement, i.e. take a *distributed union* (Potter, Sinclair and Till 1996; Enderton 1977) of all the requirements of all the users and then remove all conflicting requirements from the union. A classification framework for the resulting requirements is then established. Any additional requirements could be catered for in supplements to the financial statements. An example of a distributed union, minus some conflicting requirements, is given in Example 1.1 below.

Example 1.1

Suppose there are three users, say S1, S2 and S3 of a particular financial statement. Each user has a different set of requirements of what information they need from the financial statement in question. Suppose further that the set

of all requirements is given by $\{R1, R2, R3, R4, R5\}$, and each user's unique set of requirements is given by:

$$S1 = \{R1, R3, R4\}; \quad S2 = \{R1, R4, R5\}; \quad S3 = \{R1, R2, R4, R5\}.$$

Suppose further that requirements R3 and R5 are conflicting in nature, as are R2 and R3, but in a different way. These three requirements can, therefore, not all be catered for simultaneously in a classification structure. However, as proposed above, a first step is to take a distributed union (denoted by " below) to cater for all requirements:

$$\begin{aligned} \text{Distributed union} &= \cup\{ \{R1, R3, R4\}, \{R1, R4, R5\}, \{R1, R2, R4, R5\} \} \\ &= \{R1, R3, R4\} \cup \{R1, R4, R5\} \cup \{R1, R2, R4, R5\} \\ &= \{R1, R2, R3, R4, R5\} \end{aligned}$$

Next, all conflicting requirements (i.e. R2, R3 and R5) are removed to arrive at: $\{R1, R2, R3, R4, R5\} - \{R2, R3, R5\} = \{R1, R4\}$

Therefore, in this example, requirements R1 and R4 will be incorporated.

End of example 1.1

Example 1.1 can be visualised as follows:

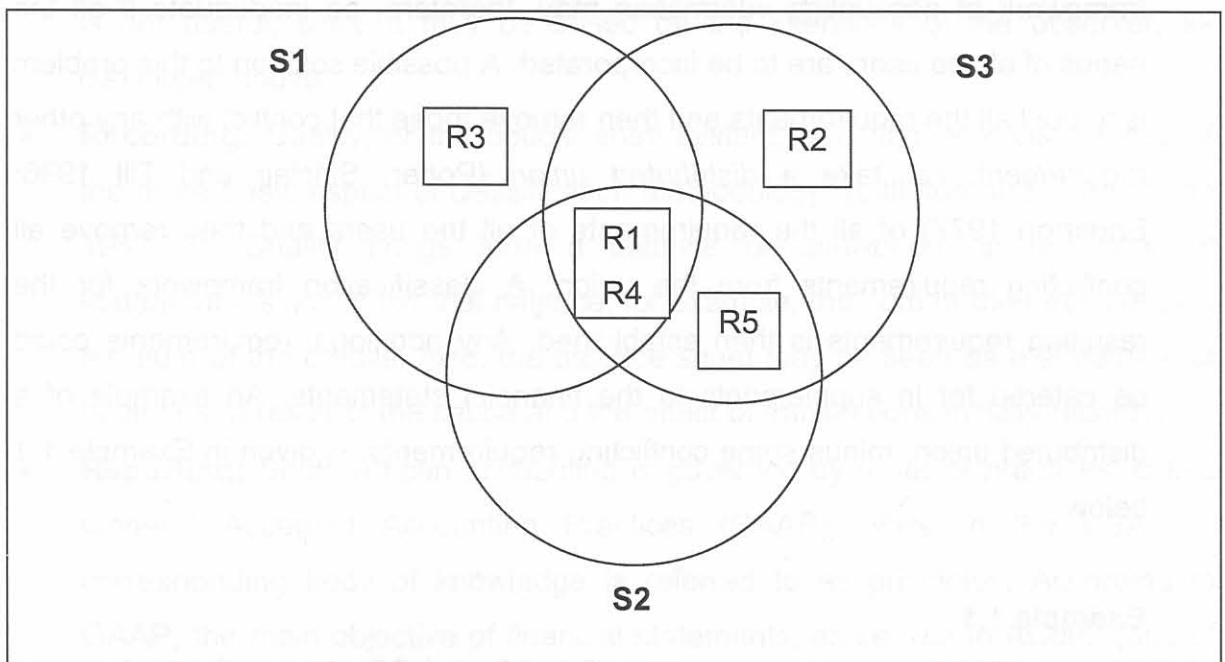


Figure 1.2 A visual representation of user requirements

Chapter 1 – Background and the research problem

In the following section the problem presented in this thesis is discussed.

1.4 Statement of the problem

In the current section problems identified in the classification of accounting information are discussed under a number of subheadings.

1.4.1 Useful information not provided by the financial statements

One of the goals of users is to make decisions based on accounting information classified in the financial statements. Goldberg (1964) makes a claim to the effect that the purpose of assisting users of financial reports to make decisions is often not accomplished and this problem evidently does not seem to be acknowledged. The Trueblood Committee (Trueblood 2004:172) state that the “basic objective of financial statements is to provide information useful for making economic decisions”. An accountant is, therefore, faced with the task of supplying such users with accounting information that will suit their needs. Naturally the information portrayed in these statements has to be classified in some or other way to satisfy these users, and the problem is to develop a classification framework that will best answer to this need. Incorporating the needs of all the users when developing a classification framework for accounting information may prove to be a very complex activity, and when these needs conflict as in Example 1.1, a distributed union followed by the removal of conflicting requirements (i.e. requirements R2, R3 and R5) is a possible solution.

Accounting is also criticised by economists and analysts for not displaying useful information. According to Lev (1974), economists view the reported financial information in financial statements as irrelevant to decision-makers because there are inconsistencies of a serious nature between accounting and economic evaluation concepts. Lev (2003:520) further states that “it is widely recognized that the current accounting system does not convey relevant and timely information about the value chain (business model)”. This may be a call to increase the relevance of the reported information to users, and such endeavour may be addressed through the development of a classification framework for accounting information. Naturally, information that is more relevant to users may better assist them in making more informed decisions.

A further problem regarding the utility of information is that company managers view the capital market (e.g. analysts) as an enemy. Miller and Bahnson (2002:99) state that financial analysts, in a survey, indicated that: "... management will experience great benefits if it changes its approach and begins to see the capital markets as potential partners instead of necessary evils or adversaries". Financial reporting may, therefore, need to be as transparent as possible. The classification of information in such a way that it assists analysts in their task may benefit the company as well as other stakeholders. In this regard the use of the attributes of a transaction may be used to aid the classification process.

1.4.2 Users may be misled

Users may be misled by the information contained in financial statements. For example, users may believe that accountants classify *assets* and *liabilities* based on a particular set of characteristics (attributes) and classification rules, while in practice accountants may be using a totally different set of attributes and rules (Heath 1978). Users ought to be informed which rules accountants are using when classifying financial data, and also need to be assured of the reliability and relevance of financial reports. Establishing reliability and relevance of accounting statements may call for the development of a classification framework. Again the use of a well-defined set of attributes relevant to a transaction could help in the classification of such a transaction.

1.4.3 Failure to adapt to new developments

Accounting is still developing as new transactions emerge. Henderson and Peirson (1994) state that the accounting that was developed during the 13th and 14th centuries currently faces the challenge of new developments in business practices, the law and social attitudes. Accountants are compelled to find new ways to measure new types of transactions and to compile reports within an accounting system that was developed in a different environment from today. New types of transactions include leases, company tax, inter-corporate investments and new financial instruments. According to Henderson and Peirson (1994), opinions on how to handle these new types of transactions have differed in many cases. A proposed classification framework may need to be sensitive to possible future developments. In this sense the use of attributes of a transaction makes the classification thereof more

dynamic and could, therefore, allow the accountant to adapt to changes and new developments.

1.4.4 Current/non-current classification is criticised

The classification of items as *current* and *non-current* is also an area of critique (Gilman 1944, Herrick 1944, Kempner 1960, Moonitz and Jordan 1963, Huizingh 1967, Heath 1978, Kam 1990, Hendriksen and van Breda 1992, Wolk, Dodd and Tearney 2004). The items currently classified together do not originate from the same type of operations. For example, interest receivable and accounts receivable are grouped together as *current assets*. Hendriksen and van Breda (1992:473) state that “because of the difficulties regarding the interpretation of the operating cycle and because of the lack of evidence regarding the relevance of the *current asset* classification to any specific user's needs, many believe that other methods of classifying assets should be investigated”. A proposed framework may need to address the classification problem of *current* and *non-current* items. Paying attention to the attributes of a transaction could be a way to address the problem of the classification of *current* and *non-current* items. Furthermore, including time into a proposed classification framework may in a natural way address the problem of *current* and *non-current* items.

As is evident from the discussion in this section, present classification practices in accounting do not supply useful information to the users of such statements, mainly because these structures may distort the information and even mislead the users. Present classifications may also fail to adapt to new developments, resulting in accounting hybrids, i.e. items that do not fit into only one class. Finally, the *current/non-current* classification is also criticised. Since the present classification of accounting information has been criticised from a number of sources, it follows that a classification framework for accounting information is needed.

1.5 Motivation

The motivation for this research is presented in terms of support of the problem statement in Section 1.4 above, and may be divided into three categories: importance; previous and present research; and beneficiaries.

1.5.1 Importance of the research

The motivation for the research in this thesis stems from the fact that many researchers (refer to Table 1.3 below) are of the opinion that the financial statements of a company should supply stakeholders with information that is useful, reliable and relevant to their needs. Currently this is not the case. Goldberg (1964:55) makes the remark that financial statements are sometimes more of an “intellectual puzzle” than a tool to disclose information to the users. Since classification is at the beginning of the accounting chain, culminating in financial statements, it is plausible that a correct classification of accounting information may help to unravel such intellectual puzzles. Users need to be informed in a way that will aid them in their decisions, not in a way that will hinder them in making decisions. Therefore, a classification framework for accounting information which takes the needs of users into account may be required in order to create knowledge and to facilitate the making of decisions based on this knowledge.

1.5.2 Previous and current research on this subject

Currently, there are many researchers (refer to Table 1.3) looking into the problems that surround the classification of accounting information, from the event triggering a transaction (recording) up to the financial statements (reporting). The erroneous classification of information in the well-known case of Enron (Miller and Bahnson 2002) further motivated this line of research.

1.5.2.1 Researchers and the problem areas studied

Various researchers have spent time seeking solutions to some of the classification problems plaguing accounting. To this end Table 1.3 gives an indication of the year, the researcher and the problem studied.

Chapter 1 – Background and the research problem

Table 1.3 Previous and current research

Year	Researcher	Problem area studied
1897	Dicksee	Discussed goodwill and its classification.
1929 (Reprinted 1978)	Canning	Discussed the attributes and classification of assets, liabilities and equity.
1932	Herrick	An article on which items should be classified as <i>current assets</i> .
1397	Wolf (In Goldberg 2001)	Wolf discussed classification and pointed out that classification is a point of departure for each science.
1944	Herrick	A discussion on the classification of <i>current assets</i> and <i>current liabilities</i> .
1944	Gilman	A discussion on accounting principles and the current classification.
1948	Blough	An article on the classification of prepaid expenses as <i>current assets</i> .
1962	Fitzgerald and Schumer	A study of the general principles governing classification of information with special emphasis on accounting.
1967	Huizingh	Working capital classification is discussed. Suggestions for reclassification are formulated in this work.
1974	Vatter	Called for the fund theory because it “seeks to employ the most flexible and most inclusive bases for compiling and reporting all financial data that are recorded or can be measured in some reasonably objective way” (Vatter 1974:123). He suggested a way of classifying items according to the fund theory.
1978	Heath	<i>Current/non-current</i> classification. In his book, Heath discussed the critique of other authors on the <i>current/non-current</i> classification.
1994	AICPA	A special committee was formed to assess which information is needed by users of financial statements and to what extent auditors should be involved. This committee suggested reclassification of items into core and non-core.
1994	Henderson and Peirson	Developed a conceptual framework for financial reporting. This framework consists of two parts: part one deals with standards setting and part two with standards regulation. The framework was developed to cater for the development in business practices since Italian accounting was established in the thirteenth and fourteenth centuries. This framework does not have an impact on the classification of accounting information.
2002	Miller and Bahnson	These authors advocate quality financial reporting. They devoted a whole book to the discrepancies in and shortcomings of information in financial statements and how this affects users in their decision-making processes. Information in the financial statements is based on certain classification practices and may, therefore, not supply users with useful information.
2004	Gröjer	Intangible assets and accounting classifications. Gröjer investigated the classification of intangible assets and what “classification theory can teach us about ‘good classification’”.

Next, consideration is given to who may benefit from the research undertaken in this thesis.

1.5.3 Beneficiaries of this research

The following users of financial reports may benefit from this research:

- *The accounting profession:* As far as the author is aware, there is currently no prescribed classification model for accounting information in general use. Instead a “model” based on past practices is applied, almost traditionally. As shown in Table 1.3 various authors identified problems in current classification structures and in some cases suggested solutions. However, many of these solutions have either been implemented only partially or have not been implemented at all.
- *All the users of financial statements:*
 - *Managers of companies:* More accurate decisions regarding future policy decisions may be made since more relevant information may be supplied when the proposed classification framework is introduced.
 - *Stakeholders of companies:* Additional information may be revealed to users enabling subsequent classification of information by the users themselves.
 - *Present and new investors:* Information may be more readily available for decision-making purposes regarding future investments with the company when the classification framework for accounting information takes all relevant and known attributes of a transaction, event, or happening into consideration at the time of recording (past) and at the time of reporting (present and future).
 - *Economists:* Differences in definitions and classifications between economists and accountants may be reduced.
 - *Investment analysts:* Better guidance may be given to analysts to perform a reclassification. (Expert users of financial information, e.g. analysts, often reclassify accounting information.)

Chapter 1 – Background and the research problem

- *Auditors:* Auditors will be able to rely more on the fair presentation of the financial statements and the quality of information supplied when a classification framework for accounting information is developed.

1.6 Hypothesis

The hypothesis of this research is:

The current classification of accounting information, from the recording phase to the reclassification in the reporting phase, does not supply users of such information with the necessary information for decision-making purposes. In this regard a comprehensive classification framework for accounting information is proposed, with the following properties:

- A well-defined set of attributes will be used, ultimately to classify a transaction into a static framework to aid decision-making.
- Time will be used to classify a transaction at the time of recording, and later to reclassify it at the time of reporting.
- The proposed framework will guide the classifier as to how an item finds its way into a static structure.

1.7 Research aims and objectives

The research aims are:

1. To analyse present accounting classification habits and rituals.
2. To establish the problems users face with regard to the classification of accounting information.
3. To investigate the validity of present criticisms on the classification of accounting information.
4. To investigate the problems experienced by compilers of financial statements.
5. To minimise or even eliminate classification for window dressing (creative accounting).
6. To investigate whether the classification for accountability and classification for decision usefulness should be the same or not. The question of whether each

user would classify accounting data and information according to his or her own knowledge structures and objectives will also be explored.

7. To aid auditors in the following three (3) areas as stated by AICPA (1994):
 - i) to report on historical financial statements, ii) to be involved with special purpose reports associated with particular amounts included in the accounting records, and iii) to report on forecasted (projected) financial statements.
8. To propose a classification framework for accounting information in which the use of attributes of a transaction as well as the use of time plays a more prominent role.

The following types of classification are excluded from this research:

- Classification of accounting procedures world-wide.
- Classification and coding of accounting data for information systems.
- Statistical classification.

1.8 Research methodology

A research methodology consists of a set of methods for acquiring, defining, classifying and verifying knowledge (Belkaoui 1987). Two research methods were used in this study:

1. *Literature survey*: A critical analysis of the literature was conducted. Some of the findings are reported on in Section 1.2. The rest of the findings are reported on throughout this thesis.
2. *Empirical research* made up of two components:
 - i. *Analysis*: An analysis of present accounting standards and practices was conducted. Chapter 6 covers this activity.
 - ii. *Questionnaire*: A questionnaire was sent out to a number of companies, analysts and academics. The outcomes of the questionnaire are also reported on in Chapter 6.

1.8.1 Literature survey

A critical analysis of the relevant literature was conducted. The literature survey started with a history of accounting and classification. Books, articles and the Internet all played a part in this literature survey. The literature survey also included multi-disciplinary literature with regard to classification. Literature from auditing, philosophy, psychology, human information processing (HIP) and quantum physics was consulted.

1.8.2 Empirical research

Empirical research was conducted using two methods. Firstly, financial statements (income statements and balance sheets) of a group of companies were analysed to determine how they classify accounting information as well as how they ought to classify such information. The cash flow statement is prepared from the classification that takes place in the balance sheet and the income statement and is, therefore, not included in the analysis in this thesis. Secondly, a comprehensive questionnaire was prepared and sent out. The results of the analysis and questionnaire are presented in Chapter 6 of this thesis.

1.8.2.1 Analysis

An analysis of how companies currently classify accounting information was conducted. The analysis was performed using the information provided on the McGregor BFA database, which stores all the financial statements of all the JSE-listed companies.

There are currently 379 companies listed on the JSE. In order to select a well represented population of companies, the following procedure, derived from the method proposed by van der Linde (2004) was applied:

An alphabetical list of all the sectors on the stock exchange was obtained and 50% of the companies listed were chosen randomly, using the systematic random sampling method. This resulted in 190 companies being selected. The selection turned out to be too comprehensive and a second population was chosen randomly when 50% of the 190 companies were chosen, hence it left the author with 95 companies. From these, the banking sector (2 companies) was

left out because their reporting rules differ from other companies. In the end the analysis entailed a comparison over a period of 3 years of the classification used in the balance sheets and the income statements of the final 93 companies.

1.8.2.2 Questionnaire

A questionnaire was compiled following a thorough and critical analysis of the literature. The aim of the questionnaire was to validate the changes proposed by the author of this thesis. The questionnaire was sent to all the companies listed on the JSE who have email addresses, as well as academics and analysts.

1.9 Nature and form of results

The aim of this thesis is to develop a classification framework for accounting information. The model for problem solving designed by Mitroff, Betz, Pondy and Sagasti (1974) was used to obtain a solution to the problem of establishing the framework. The Mitroff model was also used by Koornhof (1998) for the development of a framework for the identification and measurement of accounting information on flexibility. The Mitroff model is represented in Figure 1.2.

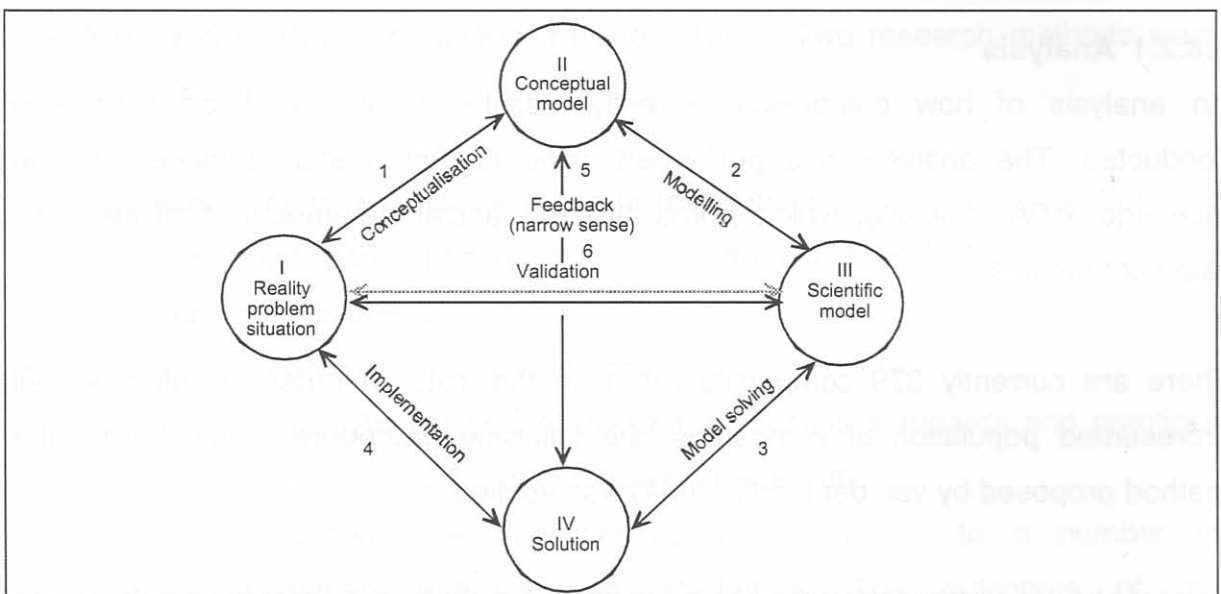


Figure 1.3 A systems view of problem solving

The Mitroff model depicted in Figure 1.2 is circular in nature, since there is no definite starting point. It could start at circle I with the Reality problem situation, indicating the actual problem to be solved. Activity 1 may then be performed to formulate a

Chapter 1 – Background and the research problem

Conceptual model in circle II. Following from this, activity 2 may be viewed as the formulation of a scientific model in circle III. The following activity could be activity 6, namely, the validation of the model, or it could be activity 3 which is the construction of a solution corresponding to the model. In activity 6 the correspondence between reality (the problem) and the scientific model may be evaluated. Having constructed a solution, activity 5 or feedback may be applied to find an improved scientific solution to the problem. Lastly activity 4 is the implementation of the solution, thereby completing the cycle.

The different phases of the Mitroff model are discussed next.

Phase I stipulates the identification of a reality problem situation. The problem was identified in the literature and the questionnaire, namely that current classifications of accounting information suffer from a number of shortcomings, e.g. not living up to the expectations of users.

Phase II is the development of a conceptual model of the problem. This defines the problem to be solved in broad terms and specifies any field variables that will be used to define the nature of the problem (Mitroff *et al.* 1974).

Phase III prescribes the building of a scientific model of the problem. In this thesis, amongst other things, it involves defining an abstract model of a new framework for the balance sheet and income statement.

Phase IV gives an implemented solution, i.e. the proposed framework of the scientific model abstracted in **Phase III** above in natural language. For example, in the case of the balance sheet a *normative subframework*, a *decision subframework* and a *static subframework* are proposed in this thesis.

In the following section the chapter layout of the rest of this thesis is described.

1.10 Chapter layout

- Chapter 2: *General classification perspectives.* This chapter includes a discussion of the following: classification as a process of the mind; the historical origin of classification; some definitions of classification; basic concepts of classification, in particular, the purpose and properties of classification; the building blocks of classification, namely, relationships, concepts and change; a multi-disciplinary discussion of classification; and the effect of measurement, risk and uncertainty on classification.
- Chapter 3: *Accounting classification perspectives.* In Chapter 3 the author considers moral obligations of accounting and the history of accounting classification and practices currently in use. The issues of uncertainty, accounting definitions of classification, properties of accounting classification and the building blocks of classification, namely, relationships as well as the role of change, are addressed. The process of classification, the role of measurement in classification, the information intersection (among the regulators, financial managers and capital markets) and the diverse needs of users are discussed. The chapter concludes with a discussion of the subject of multiple frameworks versus one generic framework.
- Chapter 4: *Specific classification problems in financial statements.* This chapter addresses a vast number of general classification problems in financial statements. This is followed by a discussion of various classification problems specific to the balance sheet and the income statement. The view of analysts on accounting information and classification for window dressing are presented.
- Chapter 5: *Research methodology.* In Chapter 5 the research methods used in this thesis are discussed, namely, a literature review and empirical research which includes an analysis and the use of a questionnaire.

Chapter 1 – Background and the research problem

Chapter 6: *Results of the research*: In this chapter the author reports on the literature review, the results of the questionnaire and the analysis of the financial statements (balance sheets and income statements) of the companies used in this research.

Chapter 7: *Towards a classification framework for accounting information*: Chapter 7 presents the main contribution of this thesis, namely, the development of a classification framework for accounting information.

Chapter 8: *Conclusions and future work*: This chapter analyses what was done in the previous chapters and gives some directions for future work in this area.

The rest of the thesis after Chapter 8 consists of various appendices, a bibliography, and finally an index.