Client Strategies In The Management Of The Audit Process

Jean Nollet
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CLIENT STRATEGIES IN THE
MANAGEMENT OF THE AUDIT PROCESS

by
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Submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy

Faculty of Graduate Studies
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An audit is the process used by independent professional accountants to gather evidence to express an opinion on the financial statements of an entity, usually a company. Even though audits are customarily done for shareholders, they are often conducted for third parties such as lenders and potential investors. Companies that require audited financial statements need annually to purchase audit services.

An audit may be seen from an operations management perspective as an input - transformation process - output system. It is a service which is purchased and as such this thesis has relevance for the management of services and the resolution of make-or-buy decisions.

A substantial amount of research has focused on the way auditors perform their tasks but this thesis focuses on the way clients manage the audit process. The audit process consists of work which is done by the auditors, the client and work that could be performed by either party. It is this last category which is identified in this thesis as the "tradeoff zone". Within this tradeoff zone the thesis identifies and labels three types of client strategies: "major buyers", "in-transit" and "major doers".

Data was gathered using a combination of in-depth interviews and questionnaires. One chartered accountancy firm and 15 of its clients were used as a sample. Clients were small and medium-sized, non-listed organizations which were privately owned and Canadian controlled.
The data indicates that in recent years, particularly, the desire to control audit fees has been a major determinant of the client's choice of strategy. It was found that clients in the same category tended to prepare the same type of schedules. Audit strategies were used more deliberately by major doers than by the other two categories. Major doers also tended to be companies of larger size. Other major factors which affected the strategy used by a client were the controller's knowledge in accounting and auditing, and the president's and the controller's attitude towards the audit process.

The data suggests that clients in each of the strategic categories can improve their management of the audit process. These improvements appear to be more significant for the in-transit category, because of the savings available. Hopefully, the information in this thesis will assist both clients and auditors to improve their effectiveness and productivity and lend new insight into the purchase and management of services in a broader operations management context.
ACKNOWLEDGEMENTS

One has to do a Ph.D., to know how important it is to have a tremendous wife and a very exceptional thesis supervisor. Words are simply not enough. Accordingly, I was about to stop here...

Professor Michiel R. Leenders, in addition to being the head of the Operations Management area group, giving outstanding courses, and performing the many other activities that such a position requires, acted as my supervisor. I still do not know how he managed to give me such rapid feedback. He guided me through all the stages of the thesis, particularly by asking questions and challenging what I was doing and writing. I learned a lot during this process, thanks to him. I will benefit from it all my life. I regret that I will probably not be able to give him back, one way or the other, what he has given me.

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Typing and editing help to convey the content of a thesis. Both my wife Louise and Kathy Slaughter worked within the same stringent schedule as I imposed on myself. Both did a very professional job.

My wife Louise collaborated fully with me during this Ph.D. program. I feel it was our Ph.D. rather than mine only. Not only do I not remember her complaining about the sacrifices that the program was imposing on her, but I also now realize how fantastic a listener she has been!
Many other persons have, at one point or another, made this Ph.D. possible. These include persons who placed all their confidence in me. Thanks to all of them. I owe a special and grateful "thank you" to my parents, Jean-Charles and Helene Nollet.

I never did regret my decision to do a Ph.D., and enjoyed these years very much. This says it all.
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CHAPTER I
OUTLINE OF THE RESEARCH

1. The operations management perspective

The perspective for this thesis is dominated by the operations management point of view. A process is under examination. There are certain inputs and a transformation takes place, resulting in a defined output. Issues of process capacity, capability, efficiency and effectiveness are, therefore, of great interest, although in auditing language different terms for these ideas might be used.

Also, since the parallel between a client's view of auditing and the purchase of professional services is striking, procurement literature and concepts are highly relevant for this thesis. In particular, make-or-buy and service acquisition are key purchasing topics of relevance.

The researcher intends to contribute to the operations management field in a number of areas. On the whole, the management of services suffers from a lack of research and the purchase of professional services is no exception. It should be noted that certain services such as banking, health, and food have received greater attention. All services can be seen as operating systems. As such it is likely that a close examination of any service and of its components from an operations perspective could reveal opportunities for improvement in the efficiency and effectiveness with which the service is carried out.
It appears that so far most processes in the service sector have been examined from the supplier's point of view, rather than from the buyer's. A process is often the responsibility of the supplier, although processes in the service sector usually directly involve the customer. The buyer of services often attributes a different importance to variables such as price, quality and service level from the buyer of manufactured goods.

Buyers' strategies for manufactured goods received a reasonable amount of attention in the procurement literature. Substantially less is known about the purchase of services. It is possible that common buyer strategies exist within certain types of services. Accordingly, if ways of classifying buyers could be found, then it would be possible to determine what the characteristics and strategies of each group would be and to predict their behaviour.

The topic of this thesis might at first glance appear to be totally concentrated in the accounting and auditing fields. It is not intended to be. The audit process represents an interesting and particular form of service performed by professionals assisted by others with appropriate skills. It is hoped that a closer examination of this process from an operations management perspective may reveal matters of interest not only to clients and auditors but also to those who are concerned with the management and procurement of services in general. The rapid growth of the service sector in our western society reinforces the need for this kind of examination across a wide spectrum of services.
2. Major reasons for this research

The major reasons for this research stem from the prevalence of audits as a business activity, the scarcity of prior research with an operations management and buyer's perspective, and the personal interests of the researcher.

Resources involved in audits

External audits of companies operating in Canada involve a substantial number of people. There are now over 30,000 chartered accountants (CAs) in Canada, half of them in public practice. Considering that a number of them are in taxation, insolvency, and consulting, it is conservative to assume that at least 12,000 CAs practice auditing. When a company is audited, most of the clients' accounting personnel are involved in the audit at one point or the other. Auditors' questions also imply that members of departments other than accounting, including top management, are also involved in an audit.

It is not exactly clear how much audits annually cost companies operating in Canada. Campbell (1) mentioned that, "the public accounting profession is not an industry which has a large economic data base", and little information is available on operating data that would allow us to determine whether or not auditors are efficient.

A study made in 1972 by Hopgood and Sciarrino (2) revealed that audit costs were 0.07% of sales for companies operating in Canada with about $50 million in sales, but only 0.02% for those with sales over $250
million. The same authors add:

"The smaller companies are paying six or seven times the fees paid by the larger companies." (3)

Based on his experience, this researcher believes that small and medium-size clients preparing fewer schedules often pay between 0.5% and 2.0% of their sales in audit fees.

Briston (4) studied audit costs for Britain's 500 largest companies. He reached the conclusion that audit fees as a percentage of sales were 0.05% for the largest companies, but up to 0.10% for the last half of the top 500. He extrapolated the total audit costs for 1977 to be at least $550 million for Britain.

Campbell (5) picked up from the Metcalf and the Moss reports that the nine largest American auditing firms generated between 62% and 74% of their national revenues for 1975 from auditing. The same author reports the total revenues of these firms for 1977 at approximately $1.500 million. When interviewing audit partners, Campbell (6) noted that:

"Interviewees assumed auditing to be the most profitable service offered by CPAs."

It is likely that in Canada at least $250 million is spent annually for audits. Thus, there are substantial resources involved in audits. The mere size of the resources involved, together with the audit partners' and the clients' interest for the topic make it worthwhile to look at the audit process.
Efficiency of the process

"The audit can be completed expeditiously if management considers the significance of this annual exercise and the best ways to cope with it and undertakes appropriate planning. With proper organization, the audit cost can often be reduced." (7)

A.G. Lurie indicated in this quote that clients can significantly improve their participation in the audit. Such improvements could benefit both clients and auditors because, as Jaenicke (8) states:

"The goal of any reexamination of the audit process must be the improvement of the total audit discipline".

This thesis examines the efficiency of the audit process by identifying the role clients play in it and determining what clients' strategies are. Clients could benefit from the research by gaining a better understanding of the audit process and of strategies they might choose.

Cowperthwaite (9), a former president of the Canadian Institute of Chartered Accountants (CICA), estimates that the Canadian CA is 20 percent less productive than his American counterpart. He attributes this lower productivity to the Canadian CA's less efficient use of time and available resources, including clients' personnel.

Interest in the research

Substantial executive interest exists in the topic of what clients might do better in audits. Hobgood and Sciarrino (10) indicated that they obtained a 41% response rate to their questionnaire about audits they sent to financial executives. The many unsolicited letters received by these two researchers and the completeness of the
questionnaires filled out by participants were also strong indicators of the interest of financial executives.

The excellent collaboration received both from the auditing firm and clients taking part in this study is a further indication that both sides believed that participation in this research could bring them interesting and useful information. Moreover, most of the interviewees - both clients and partners of the audit firm - asked many questions about the research and requested a report of the findings.

The reason for this research stems from the personal interest of the researcher, the lack of research on auditees, the productivity problems existing in the audit process, the costs of audits, and the perceived high probability of improvements. However, the interest might also stem from practical implications both auditors and auditees see in this research.

3. The topic

Companies in need of audited financial statements are annually faced with the purchase of audit services. Both auditors and client personnel are involved in the audit process. There is substantial interaction between both parties. During an audit, each audited company and its auditing firm pursue certain objectives and use a variety of means to meet these objectives; both sides have a strategy for the management of the audit.
Although substantial work has been done on auditors' strategies, much less research has been conducted on the clients' strategies. This thesis examines the strategies adopted by clients in the management of the audit process and the reasons for these strategies. It is believed that clients can improve their management of the audit. Although this thesis is largely descriptive, it includes suggestions for improvement of the audit both for clients and auditors.

Part of the intended contribution of this thesis is to describe the strategies of clients. Audits are not as straightforward as might appear at first glance; they involve important tradeoffs. Moreover, both clients' and auditors' strategies influence audits. As used in this thesis, audit strategies include objectives, attitude and the means used to meet audit objectives.

The audit process may be viewed as comprising work to be done by the auditors, by the client and work that could be performed by either party. It is this latter category which has been identified in this thesis as the "tradeoff zone". Three types of client strategies with respect to this tradeoff zone have been labelled as "major buyers", "in-transit" and "major doers". Work to be done by the auditors has been called the "auditors' zone". The tradeoff zone, the auditors' zone and the three strategic categories constitute the main framework used in this thesis. There is no zone labelled "clients' zone" because, at the limit, auditors could perform all audit-related activities that clients perform.
A large part of this thesis is descriptive because prior research in this area did not provide a sufficient base. In addition, a number of new ideas were tested using the following propositions:

PROPOSITION I: Clients can be identified as belonging to one of three strategic categories according to the steps of the audit process that they perform.

PROPOSITION II: The desire to control audit fees is the main determinant of clients' choice of strategy for the audit process.

PROPOSITION III: Clients in the same category perform/do the same steps/schedules of the audit process.

PROPOSITION IV: Clients gradually perform each year more steps of the audit process.

PROPOSITION V: The larger the company size, the more audit activities a company is likely to perform.

4. The context

Most of the articles related to the audit process have been written by accountants who concentrated their writings on the auditors' part of the process. Most articles were in accounting journals identified mostly with a clientele of professional accountants, often auditors.
The auditing literature recognizes the paucity of information on what clients do and why they do it (11). Therefore, this thesis attempts to supply a better insight as to what audit clients do and why they do it.

Much research has been done on the topic of strategy in the business policy literature. However, as Datta (12) notes in a review of the literature on the topic, "very little empirical knowledge... has been developed... in the field of business strategy". Mintzberg (13) recognizes this fact and insists that research should first describe the situation involving the selection of a strategy. This descriptive approach was adopted for this thesis.

It is only recently that the operations management literature has given more attention to strategic issues. For instance, Skinner (14) was among the first to emphasize the importance to companies of a proper manufacturing strategy. Similarly, strategic issues in service operations have been studied only recently. Sasser, Olsen and Wyckoff (15) developed concepts such as service level and delivery system. Interest in service operations is growing, both from an academic and a business standpoint. Buffa (16) mentions that "virtually everything needs to be done" in this sector of operations management.

Chase (17) argues that it is necessary for companies in the service sector "to become cost efficient in their production processes". Services now represent between 60% and 70% of the workforce in the most developed Western nations. Labor productivity thus becomes a key success factor for service organizations.
It is possible to analyze a service process from an operations management point of view. This type of approach focuses on the efficiency and effectiveness with which a process is performed. For an audit, this approach implies that all variables in the process will have to be studied and related coherently so that an integrative business strategy is adopted by clients and their auditors. However, not much is known about operating strategies used by clients for operations like the purchase of audit services and the management of the audit process.

5. Auditing as part of the service sector

Service firms do not normally transform as a major part of their operations, raw materials into finished goods. On the other hand, very few service businesses deal with intangibles only; that is, no goods are transformed by the process applicable to these businesses. Individual companies can be seen as fitting somewhere along a continuum ranging from 100% goods (applicable to certain manufacturing companies) to 100% services (no tangible transformation of physical goods involved).

Services can be divided between non-professional services and professional services. The first group is usually more subject to involving automation and the presence of goods than the second group. For example, a restaurant serves meals as well as atmosphere, an airline provides transportation and requires extensive equipment investment.
Each type of service has its own characteristics. This observation does not imply however that all services differ from each other on all dimensions. It is expected that generalizations from this thesis are applicable to other areas of the service sector and even to the manufacturing sector. However, the characteristics of each type of service and manufacturing activity have to be compared with auditing to determine which of the findings stemming from this research are also applicable to the other areas.

For example, law and auditing both have the following characteristics in common: use of professional people, fees theoretically billed on an hourly basis, power of clients to fire the professionals on short notice and the importance of the customer's perceived service level in the decision to continue the relationship. On the other hand, an audit is usually repeated annually, auditors' work is often done on a client's premises and auditors are appointed by shareholders.

In audits, the nature of the tradeoff zone can be reasonably well defined and this zone forms a significant part of the total audit process. On the legal side, the option to hire internal lawyers instead of external ones is a reasonable make-or-buy alternative. That option does not exist for external auditors. It is obvious that some but not all of the findings stemming from this thesis are applicable to law.

As part of the service sector, the auditing profession is close to 100% services and 0% goods. In fact, only paper and pencils are input goods
transformed in the process. Professional services as a whole require highly-instructed people, as opposed to trades and most other services. These people require a long initial training period and the use of judgement is of prime importance. Labor costs are usually the major expense for professional firms. For instance, payroll costs represent over 70% of the total cost for auditing firms (18).

An audit has several notable characteristics which might influence clients' strategies:

1) There are a large number of interactions between clients' personnel and auditors. These interactions are an important characteristic of the service sector, but are often seen as reducing the efficiency of the process.

2) Certain procedures can only be performed by auditors, while others can be executed by clients or auditors. Clients will have to choose which procedures in the tradeoff zone they would prefer to do themselves.

3) Clients' strategies and behavior have a substantial impact on the final cost of the audit. Although difficult to determine accurately, the effect of adopting one strategy rather than another one can often be estimated.

4) After clients' personnel have been involved in the process, much time elapses before personnel are involved again in the process. In fact, audits are usually performed once a year, i.e. for one set of financial statements per year. This situation restricts the learning curve effect.
6. Operational definitions

"Clients" refers to companies being audited. This word is used interchangeably with "auditees" and "companies". "Controllers" and "presidents" work for clients and, normally, make all decisions about audit strategies for the type of firms included in the sample.

"Auditors" are members of an "auditing firm". They are the individuals performing certain procedures in order to allow an "audit partner" to express (in the name of the auditing firm) an "opinion" on the financial statements of a company. "Opinion" refers to a one-page report in which a partner states whether or not the financial statements of a company present fairly the financial situation of that company in accordance with generally accepted accounting principles. Audit partners are also auditors, but much less involved in the field work on the clients' premises than "junior auditors" and "senior auditors". "Managers" and "supervisors" are the two hierarchical levels immediately below the partners.

"Schedules" refer to working papers prepared for auditors and "steps", to planning, execution (including the preparation of schedules) and control activities performed by clients.

An "audit", the process used by independent professional accountants (auditors) to gather evidence to express an opinion on the financial statements of an entity, usually a company, is usually conducted at the request of lenders or because of legal requirements. Although auditors
deal mostly with client managers during the audit, the auditors' report (opinion) is addressed to, and the audit is conducted for, the shareholders of a company. Although in this context the words "audit process" and "audit" are usually used interchangeably, this interchange is not technically correct. Indeed, auditors, not clients, are the ones performing an audit. However, in the few instances where the word "audit" is used as the procedures used by auditors, the researcher makes it clear. Audit is often used instead of audit process because it is shorter.

"Strategy" includes both objectives and the means to attain them. The objective of a client may be to minimize audit fees and the preparation of more schedules in the tradeoff zone may be the means to accomplish this goal.

7. Methodology

With the collaboration of six partners of a major chartered accountancy firm, five clients were identified for each of the three strategic categories, major buyers, in-transit and major doers.

Two questionnaires were developed for this research. The first one comprised a list of activities that pertain to the tradeoff zone. The second one included a list of steps that clients could perform for the planning, execution and control of the audit. All questions in both questionnaires could be answered by "yes", "no" or "not applicable".
Each partner answered the schedules questionnaire for each of his clients taking part in the research and was personally interviewed. Each client answered both questionnaires and was also personally interviewed. The interview guide for clients comprised questions on most aspects of their management of the audit process. Most of the questions asked during the personal interviews were open-ended. Overall, about three hours were required from each person participating in the research.

Typical cases were written and analyzed for each category of clients to assist in the description of the status quo.

Non-parametric tests were used on quantitative data. These tests were used to determine if differences existed between answers from companies in different categories. Qualitative data gathered during the personal interviews were used to discuss each of the five propositions.

8. Chapter outline

Chapter II reviews the literature and provides an audit framework. The current climate in and the problems faced by the auditing profession are described. This chapter also describes the audit process to identify which strategic variables are available to clients. A simplified example of an audit and a detailed chronological order of events are also developed in this chapter. Finally, there is a discussion on the strategies available to clients.
Chapter III explains the five propositions used for this study. It also discusses the methodology used, including the characteristics of the sample, the instruments and procedures used for data collection and the data analysis performed.

Chapter IV discusses the findings on each of the five propositions. It deals with the analysis of qualitative and quantitative data.

Each of the next three chapters deals with one of the strategic categories. In Chapter V, the case of Harvey & Fils is presented. This company is a major buyer and the sections following the case comprise the case analysis and generalizations about characteristics of major buyers.

Similarly, Chapter VI starts with a typical case for a company in the in-transit group, G. Gaspard Inc., and is followed by a discussion of organizations in this category.

Chapter VII deals with the case of Technart Inc., a company which switched from the major buyers to the major doers category, as a result of the hiring of a knowledgeable controller. After the comments on the case, generalizations are made about the major doers category.

Chapter VIII summarizes the findings stemming from this thesis and provides the implications of these findings for clients and auditors and for the field of operations management. This chapter also acknowledges the limitations inherent in this research and identifies
the potential for further research.

9. Conclusion

The intended contribution of this thesis is to determine which client strategies exist for the management of the audit process and the efficiency with which the process is carried out. Moreover, this study addresses a topic on which relatively little has been written and takes the client's point of view using an operations management approach.

It is expected that the findings stemming from this thesis will also be useful to other services and the manufacturing sector. The tradeoff zone, the flexibility existing in the make-or-buy decision, the similar characteristics of each strategic category, and the impact on the process and on the suppliers of the strategies used by clients are all believed to be important contributions of this thesis to the area of procurement of services. The determination of important factors influencing the make-or-buy decision for services and the study of the strategies of a number of companies represent other contributions to the field.
FOOTNOTES


(3) Hobgood and Sciarrino, op.cit., p. 28.


(5) Campbell, op.cit. The Metcalf and the Moss' reports are studies made by the American federal government on the concentration and behaviour of the accounting profession.

(6) Campbell, op.cit., p. 94.

(7) Lurie, Adolph G., Minimizing Audit Costs (Part I), The CPA Journal, December 1976, pp. 31-34. Quote is from p. 31.


(10) Hobgood and Sciarrino, op.cit.

(11) Frederick A. Drexler (A Client Looks at the CPA Auditors, The CPA Journal, January 1975, pp. 29-30, 35) and Gilles Chevalier (Auditing Research - A Cooperative Venture, CA Magazine, September 1981; pp. 50-53) are two authors mentioning the lack of research in this area.


(14) Through his widely acclaimed book Manufacturing in the Corporate Strategy, (John Wiley & Sons, Inc., New York, 1978) Wickham Skinner has put together many of his previous articles dealing with manufacturing strategy and has added useful frameworks to the area covered.


CHAPTER II

STRATEGIES AND THE AUDIT PROCESS

1. Introduction

This chapter reviews the literature pertinent to the research topic. It provides background information on the strategy area of business policy, the auditing profession, the audit process, make-or-buy, service operations and clients' strategies. This chapter also relates the literature to the research topic, and describes the framework used for this thesis: the tradeoff zone and the auditors' zone.

Most of the literature related to the thesis topic, and particularly to the auditing literature, consists of opinions based in many instances on the authors' experience or theoretical models rather than on hard data obtained from surveys, interviews or experiments. Accordingly, most references should be considered as enlightening the area under study rather than as hard evidence.

2. The concept of strategy

Business policy literature contains a variety of definitions of the word strategy. However, according to Hofer and Schendel (1), all definitions can be grouped into two categories: strategy can include goals, objectives and means (Andrew's view) or means only (Ansoff's...
view). Since it is useful to stick with one interpretation throughout this thesis, Andrew's view, goals, objectives and means, has been chosen. It is broader and fits well with the client categories in this thesis.

There are also hierarchies of strategies. Hofer and Schendel (2) note that there are "three major levels of organizational strategy: (1) corporate strategy, (2) business strategy, and (3) functional area strategy". Corporate strategy considers the firm's entire environment and competitors' reaction. Business strategy deals mostly with integrating the activities of different functional areas (3). Hofer and Schendel (4) mention that "at the functional area level, the principal focus of strategy is on the maximization of resource productivity". This research deals mostly with the functional area strategy concept.

Strategies are not tangible concepts (5). However, "all organizations can be said to have a strategy"(6). According to Ansoff (7), managers do not necessarily perceive or make explicit their strategies; the same author adds:

"Strategy is a concept which is useful for perceiving the underlying patterns of managerial activity... Strategy is a type of solution to a problem, but not the problem itself."(8)

Beach and Mitchell (9) note that... "probably the greatest influence on strategy selection is the decision-maker's knowledge, or lack of it, about the available strategies and their relative promise of success".
It is proposed in this thesis that in an audit the client's objectives and managerial moves can be deemed an audit strategy. Since managers may not always perceive or make explicit their strategies, identification might present difficulties.

Although the mix of variables involved in the selection of an audit strategy could be complex in the case of large organizations, there is no reason to believe the same is true for small and medium-size organizations. In smaller organizations only one or two persons are usually involved in the selection of an audit strategy and the audit is usually a relatively straightforward process. This simplicity should aid in the understanding of the audit process and client strategies.

3. The auditing profession

The auditing profession is dominated by the Big Eight, the eight largest auditing firms in the world operating in most countries, including Canada. The profession is criticized for this high concentration (10), and for the pressures of very large auditing firms on fees and standards which is resulting in the disappearance (often through mergers) of medium-size firms in the US (11) and Canada (12).

Another important aspect of the auditing profession affecting auditees is the market structure. As evidenced by Bernstein (13), growth in the audit market is much lower than in other professional accountants' services. This lower growth rate might indicate that the industry as a whole is reaching maturity (14). Accordingly, competition for new
clients is likely to increase.

An accounting firm sells the technical skills and expertise of its people. As any professional firm, it is highly labour intensive. Thus, any improvement to the productivity of labour... "should have a high payoff in improved overall performance" (15).

One major tradeoff faced by auditors is the one among quality of an audit, auditors' risk and audit fees. These three elements involve a series of judgements made by managers and partners of auditing firms. This major tradeoff illustrated in Figure I, assumes that the quality of an audit is measured by the completeness of evidence gathered. This measure is a theoretical one as it assumes it is possible for auditors to determine whether they have gathered the appropriate quality and quantity of evidence to justify their issuance of an opinion on the financial statements of a company. Although methods such as statistical sampling can be used, it is difficult, in practice, to determine the extent of completeness of evidence gathered.

Accordingly, there are differing opinions among practitioners as to the extent of audit testing, the confidence level for conclusions reached and the perceived auditors' risk (16). Such a diversity is not surprising when one considers the complexity of these concepts. The answer to the question "What constitutes a good audit?" varies substantially among firms and even within the same firm (17). As evidenced by Boookholdt and Finley (18), these differences among auditors naturally have implications as to the extent of audit testing.
Figure I - A major tradeoff of the audit process: audit fees vs. auditors' risk vs. quality.

<table>
<thead>
<tr>
<th>Amount of audit work done</th>
<th>Impact on tradeoff</th>
<th>Possible causes</th>
<th>Main consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>OVER-AUDITING</td>
<td>&gt;audit fees</td>
<td>Auditors' perception of risk still involved</td>
<td>Conflicts over fees or excessive fees</td>
</tr>
<tr>
<td></td>
<td>&lt;auditors' risk</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt;quality</td>
<td>Sub-optimal auditing methods used</td>
<td></td>
</tr>
<tr>
<td>OPTIMAL ZONE*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNDER-AUDITING</td>
<td>&lt;audit fees</td>
<td>Incorrect estimation by auditors of quality of evidence gathered</td>
<td>More auditors' exposure to lawsuits</td>
</tr>
<tr>
<td></td>
<td>&gt;auditors' risk</td>
<td></td>
<td>Third party users placing greater confidence than they should on the audited financial statements</td>
</tr>
<tr>
<td></td>
<td>&lt;quality</td>
<td>Client's pressures on audit fees</td>
<td></td>
</tr>
</tbody>
</table>

*: Assumes the best choice of evidence over cost for all sections of the audit, considering the risk that auditors are ready to assume.
Hobgood and Sciarrino (19) found that there were important differences in audit fees among clients having sales within the same range. In their study, the two authors divided companies into six categories based on sales, and found that the audit fees ratio from highest over lowest in a category ranged from 11 to more than 50. Although there may be a variety of reasons for this finding, the three most probable ones are a combination of differences in the type of business, client strategies and auditors' productivity.

Audit fees appear to be more important for some auditing firms than auditors' risk and audit quality. According to the Cohen Report and to the Metcalf Report (20), budgeted audit fees are an important factor in the determination of the extent of audit work that is performed. The two reports have been criticized, however, for their lack of sound evidence. Bernstein (21) mentions that the excessive importance of budgeted audit fees is acknowledged by some audit firms. In an experiment he conducted, Whittington (22) observed that auditors were reluctant to exceed audit budgets by large amounts but nearly always used up most of the time budgeted to do the work.

What is the situation in Canada, regarding time pressures and their effect on audit quality? The Adams Report (23) mentions that:

"Although we have no knowledge of the extent to which these problems exist in Canada, we have no reason to believe that time pressures and arbitrary deadlines are any less prevalent than in the United States..."

It should be mentioned however that the committee who wrote the Adams Report was specifically asked by the CICA not to gather conclusive
evidence for its findings (24).

Interviews originally conducted by Abraham (25) for his thesis revealed that many audit partners, industry CPAs and accounting professors noted the tendency for business aspects of the public practice to take precedence over professional aspects. Evidence gathered by Abraham gives some support to the Cohen, Metcalf and Adams reports.

Auditors' strategies reflect both business and professional factors. The business aspects could be summarized by any or all of the following:

1) Minimizing risk.
2) Billing clients at the highest rate possible.
3) Keeping the present clients.
4) Gaining new clients.

The professional aspects imply that auditors should adhere to a set of professional rules and to accounting and auditing standards. For instance, the choice of an audit strategy at the planning stage is part of a US professional audit standard (26); thus, auditors' strategies are deliberately chosen.

On one hand, auditors are professional people and want to adhere to the auditing standards and other recommendations and rules of their profession. On the other hand, business aspects are as important for the survival of a profession as they are for any other type of business.
This section reviewed some background information on a few of the important issues faced by the auditing profession. Although a number of articles in the auditing literature consider the negative aspects of the auditing profession, there are also positive aspects. Some of these positive aspects are efforts of self-regulation, development of audit techniques such as statistical sampling, and increased research on audit-related not accounting-related topics.

It is beyond the scope of this thesis to predict whether the positive or negative forces currently affecting the audit profession will prevail. It is useful to recognize, however, that the profession is beleaguered and far from tranquil. Since the ultimate aim of this thesis is to lay the framework for improved audit performance, it is believed to be an appropriate time for this research.

4. The audit process: inputs, transformation process, outputs

The audit process can be described as having inputs, a transformation process and outputs. Krajewski (27) says:

"Operations management refers to the management of any process which transforms some input into a useful output and covers a broad range of... problem areas, both in manufacturing and service organizations."

It is appropriate and desirable to analyze audits from an operations management standpoint, since this analysis may reveal opportunities not immediately observable from a traditional audit perspective. The audit process in an operations perspective represented in Figure II seems straightforward but it is not as well defined as it looks. The
Figure II - The audit process.

**INPUTS**
- Clients' accounting data
- Audit schedules
- Supplies

**TRANSFORMATION PROCESS COMPONENTS**
- Auditors
- Computers
- Client's personnel

**OUTPUTS**
(DIRECT)
- Auditors' report on financial statements

(BY-PRODUCTS)
- Letter of recommendations
- Finalized financial statements
- Auditors' finalized working papers

**MANAGEMENT SYSTEM**
- Auditors' management system
- Clients' management system
presence and impact of intangibles such as professional knowledge, judgement and collaboration partially explain why an audit process is more complex than it seems. Further complicating factors include the quality of the inputs and outputs and the mixture of the transformation process components including client and auditor personnel and management systems.

The inputs to an audit are limited. Auditors use a variety of audit techniques - including confirmations, comparisons for reasonableness and sampling procedures - to gather evidence to support the auditors' opinion on clients' financial statements. These techniques are used on clients' accounting data. Initially, audit schedules contain information about clients' accounting data such as a list of accounts receivable, but do not include any evidence gathered by auditors. Once auditors have performed their tests, they note the extent of their audit testing, the exceptions found and the conclusions reached on audit schedules.

The transformation process is complex. Auditors perform tests, ask questions, et cetera in order to allow audit partners to make a judgement on the fairness of clients' financial statements. Computers can be used to help auditors obtain more information about clients' data or, for instance, to select a random sample to be tested. To gather and evaluate clients' data, auditors use not only their judgement and expertise, but also external validity measures - mainly generally accepted auditing standards and accounting principles.
As with other professions, auditing has a transformation process oriented on intangibles and qualitative aspects. For instance, there are audits which bring no auditors' adjusting entries. However, it can be argued that clients' accounting data has been transformed qualitatively; that is, the accounting data is more valuable after the audit than it was before the audit, because the data is more trustworthy. This qualitative transformation is true whenever services rendered by auditors are important for third parties, even when the audit is performed only to satisfy legal requirements. Indeed, as Gunning (28) says:

"The real value of an audit is the assurance gained by outside parties...that the financial information they need on corporate affairs is reliable and free from conscious or unconscious bias in its measurement and presentation."

The only necessary output of an audit is the auditors' report on the client's financial statements. This report is the expression of an opinion by partners of an auditing firm as to whether or not the financial statements of an entity are in accordance with generally accepted accounting principles and present fairly the financial position of the entity. The letter of recommendations on improvements to clients' control and accounting systems, is often considered as a valuable service given by auditors to their clients. However, the perceived value of this service varies among clients. The letter can also be perceived as a threat to management, as a protection for auditors and/or as a way to justify future fee increases. "There are instances in which no letter of recommendations is issued after an audit, when clients do not want to pay the extra fees involved."
Company financial statements are the property of the client, while the audit evidence gathered on audit working papers is the auditors'. Neither the financial statements nor the working papers are direct outputs of the transformation process, although they are important by-products. For instance, audit working papers are important for auditors as evidence to support the work they have performed and the opinion expressed on a client's financial statements, but they are not the reason an audit is performed in the first place.

The model developed in this section puts the audit in an operations management perspective. As such, this perspective does not modify what an audit is, or how it is performed but it allows the reader to understand the main components of the audit process. The next two sections illustrate how an audit actually works.

5. A simplified example of an audit

Background information

Canadian Furniture & Lighting Inc. (CFL) was a medium-size company with assets of $1.3 million and sales of just over $3.5 million. CFL was established in 1972 by Sam R. French, the president, who in 1982 still owned 60% of the common voting shares.

For the first three years the company had a bookkeeper who was responsible for all internal accounting services. Once a year, a chartered accountant with a nearby office, made some adjusting entries in the accounting books and prepared the unaudited financial statements
and the tax returns.

In 1975, CFL was in need of $100,000 to improve its cash flow. The banker agreed to lend the money to CFL, subject to receiving audited financial statements signed by a major accounting firm. Following a discussion between the banker and Mr. French, it was agreed that a local audit firm, known to both parties, would be acceptable. Mr. French met with a partner of the firm and got along well with him. Following the first audit, one of the first suggestions made by the audit partner was to hire a competent controller who could deal with financial matters.

Alex Jones had been the audit partner responsible for CFL since the company was first audited. His audit firm, Jones, Collins & Partners, in 1982 had four partners, a professional staff of 18 and a clerical staff of six. Audit revenues from CFL had increased by 15% on average for the last five years and by 1982 had reached $18,000. CFL represented 7% of the total audit fees paid by companies for which Mr. Jones was the partner responsible.

Jones, Collins & Partners, like most other audit firms, had four categories of professional people: partners, managers, seniors and juniors. In theory, clients were billed an hourly rate based on the category and experience of the auditor and the actual hours worked on the assignment. In practice, however, the partner could decide to change the audit fees that a client was charged based on the quoted hours, rather than the actual time incurred.
The 1981 audit

Paul White was promoted to a senior on June 1, 1981, when he completed his two-year articling period required by the Provincial Institute to become a chartered accountant. He had previously written exams administered by the Canadian Institute of Chartered Accountants (CICA). Paul had been on the CFL assignment in 1980, as an experienced junior auditor. In 1981, when the former senior was required on another assignment, Alex Jones designated Paul as the senior-on-the-job and assigned Mary Smith and Joe Green, two junior auditors who had not worked on CFL before, as Paul's assistants.

On November 4, 1981, Alex asked Paul to prepare a detailed audit budget and a list of schedules to be prepared by the CFL staff. Alex Jones remembered the long discussion he had with Sam French and the CFL controller, Jack Barnes, about the 1980 audit fees. On November 8, Alex phoned Jack and both agreed on a meeting date to plan the audit and discuss budgeted audit fees:

- "This budget makes no sense to me", said Sam French, who was also attending the meeting with Barnes, Jones and White. "This is an 18% increase over last year and our sales have gone up only by 12%!
- "Last year, our staff completed many of the schedules that CFL personnel were supposed to have ready and that were not. Moreover, we encountered problems in our tie-ins of inventory counts with your permanent inventory record. Following our April discussion on 1980 audit fees, I agreed to absorb most of the amount in excess of our initial budget, because of our long-lasting relationship. I cannot
do the same twice."
The silence following this answer by Alex Jones lasted at least 20 seconds. An hour later, an agreement was reached. The audit budget then called for a 10.5% increase in fees, but CFL had agreed to collaborate fully with the auditors, and to have all the required schedules listed by Paul ready for the year-end auditors' visit.

On December 5, the accounts receivable and the accounts payable listings were both ready. Paul asked Mary Smith, an experienced junior, to send the appropriate confirmations to selected CFL suppliers and customers. This was an auditing technique fully endorsed by the CICA. It was Mary's first visit at CFL, but she had previously handled confirmations. Accordingly, Mary had no problems other than locating the listings and getting acquainted with CFL personnel.

The following Monday, Paul was in CFL with Mary Smith and Joe Green, to start the procedural audit. This part of the audit consisted of identifying what modifications had been made on the accounting system and controls since 1980, choosing a representative sample and testing the transactions included in the sample to determine whether or not the accounting system was working as described to the auditors. The sample as selected by Paul White included at least 30 transactions each for sales, purchases and payroll, and 20 for the costing system. Performing both the confirmations and the procedures in December rather than performing confirmations in January and procedural tests in February had a double advantage: client's personnel were less pressured at financial year-end, and the auditors could perform
year-end audits for other companies in January. Like most accounting firms, the audit firm of Jones, Collins & Partners had many audit clients with December 31 year-ends.

As had been the case in the previous years, only minor mistakes were found through the procedural tests. However, some known internal control weaknesses had not been corrected. For instance, when the president had to leave for a few days, he signed blank cheques before amounts or supplier names were written on the cheques.

Jack Barnes, the controller, was upset, at first, to see two new auditors walking in. He knew he would have to give them a lot of explanations that would not otherwise have been required. He did not feel that junior auditors were fast enough to justify the hourly rates CFL was billed. Jack would have preferred to see only Paul and the former senior. He felt that the two-man team would have been more efficient and less costly overall. Jack complained to Alex Jones, but with no success.

On December 31, the store was closed so that CFL personnel could take inventory. The inventory stocktaking allowed CFL personnel to adjust the permanent inventory record to the actual count. Mary Smith and Joe Green took test counts in the afternoon and made sure that the controller's instructions for the count were being followed. They found a few discrepancies for lighting fixtures, but none for furniture. They were satisfied with the count when they left for their last day of holiday until February 1982.
"Alex, this is Jack Barnes. We have been very busy recently, and I do not want my personnel to do overtime. Accordingly, in spite of all our efforts, we will not be ready for the next Monday, February 15. I am sure that we can complete the preparation of all required audit schedules for the 22nd though.

"The planning of my staff time has been made on the assumption that CFL would be ready on the 15th, at all costs. This was part of the agreement reached during our November discussion. If we cannot start our year-end audit on the 15th, I am faced with having Mr. Green sitting idle in the office for one week. That's not all. Mary Smith and Paul White both start on a new assignment on February 24. You know what this means..."

It was finally agreed that the year-end audit could start on the 17th, and that CFL would make all possible efforts to have all audit schedules ready.

February 17, 1982 was not as bad as it could have been. Most audit schedules were ready; although some had not been prepared using the proper format. Joe was assigned to complete the few procedural tests steps that were missing. When finished, he would work on tying in confirmations with their corresponding balances in CFL's accounts receivable and accounts payable ledgers. Mary was working on prepaids and fixed assets. Paul worked on all inventory-related work, as this part of the audit was the most complex section, apart from deferred and current income taxes computations.

The field work was completed on February 23. Only a few overtime hours
were required from each member of the audit team. Paul was particularly happy that only eight adjusting entries were required this year, as opposed to 19 in 1980. Less adjusting entries was a sign of the improvements made in the accounting controls at CFL.

During the following two weeks, and apart from the work and supervision Paul White had to do for another assignment, he prepared a draft of the financial statements and the final version of the letter of recommendations. Alex Jones was fully satisfied with the audit working papers completed by his team. Paul could rapidly answer the partner's written queries. Both the letter of recommendations—bearing mostly on suggestions for improving the accounting and control systems of CFL—and the draft of the financial statements were discussed by Alex Jones with Jack Barnes and Sam French on Friday, March 12. During the same discussion, Alex gave the two men an estimate of the actual audit fees. There was a short discussion on this topic too, but Alex knew his personnel were not responsible for the $500 budget overrun.

During the shareholders' meeting of CFL, held in early April, Jones, Collins & Partners were reappointed auditors for the 1982 fiscal year.

6. Chronological order of events

This simplified theoretical example of an audit is reasonably representative. Although numerous variations from the above example are possible, there are key steps that take place in most audits. The same situation applies to a number of medium-size companies. The
following chronological list of events summarizes these key steps, using the CFL example (a December 31 fiscal year-end):

**Early November:** the audit senior prepares a detailed audit budget and a list of audit schedules to be prepared by the client's personnel.

**Mid-November:** discussion occurs between key audit members and client's key personnel on the audit budget and planning.

**Early December:** auditors mail to selected suppliers and customers, confirmations of account balances appearing in client's books.

**December:** auditors perform procedural tests.

**End of December:** members of the audit team attend the inventory count taken by client's personnel. This procedure includes taking test counts.

**Mid-February:** auditors perform beginning of year-end audit (mostly on balance sheet accounts). This part usually includes completing the few missing procedural steps.

**End of February:** auditors complete year-end audit as far as their presence on the client's premises is concerned.

**Early March:** the audit senior prepares the letter of recommendations and a draft of the financial statements. The audit partner reviews the audit files (including all audit working papers).
Mid-March: discussion occurs between the audit partner, the president of the company and his controller, about the letter of recommendations, the draft of the financial statements, the audit process and expected audit fees. The audit senior adjusts the financial statements if required, and prepares income tax returns.

End of March: a tax partner or a tax manager reviews the audit files and the tax returns prepared by the audit senior.

April: the auditing firm mails invoice to the client. Shareholders meet and usually appoint auditors.

7. Procurement strategies

A significant parallel exists between a client's acquisition of an audit and the procurement field: auditing may be seen as the purchase of professional services.

Professional services and audits have common characteristics: the use of highly-educated people; the importance of the clients' perceived service level; the difficulty for clients to measure the quality of inputs and of outputs, the frequent contacts between the buyer and the supplier; and the buyer's ability to use, on short notice, the services of other professionals within the same profession.
Some other characteristics of auditing are not generalizable for all professional or other services. In auditing, external cost is usually higher than internal cost, there is a fundamental lack of incentive for auditors to get clients to do as many of the activities in the tradeoff zone as possible and the cost is usually not known before the audit is completed. Although law and even eating out in great restaurants meet these characteristics, the buying of security services has opposite points.

The contrast just mentioned illustrates that the characteristics of one service are not necessarily close to the ones of any other service. It was mentioned in Chapter I that activities could be seen on a continuum ranging from 100% goods to 100% services. The position of a supplier on this continuum could influence the procurement strategy used by a buyer (particularly the make-or-buy decision) because this position is the consequence of a number of the supplier's characteristics that the buyer should consider acquiring. The extent to which equipment is used in the transformation process also limits the flexibility in the modifications of the procurement strategy used by managers.

Figure III represents some processes as they fit on the continuums of "intangible/tangible" and "no equipment/equipment". This figure might help determine the implications that a buyer faces should he decide to make rather than buy. Three types of acquisition, consulting engineering, maintenance and printing, will be examined to determine the implications of the nature of the good/service acquired on the procurement strategy used by a buyer.
Figure III - Processes as part of the continuums of "intangible/tangible" and "no equipment/equipment".

Intangible

<table>
<thead>
<tr>
<th>Auditing</th>
<th>Consulting engineering</th>
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<tbody>
<tr>
<td>Maintenance</td>
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<table>
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<tr>
<th>Security</th>
<th>Airlines</th>
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<th>Pizzeria</th>
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<tr>
<th>Meat processing</th>
<th>Printing</th>
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<tbody>
<tr>
<td>Mining</td>
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</table>

Tangible

NOTE: In the above diagram, the direction of the arrows indicates where an activity appears to be heading, while the arrow's length stands for the relative speed with which it appears to be going in that direction.
Example of the procurement of consulting engineering services

Consulting engineering involves little equipment. The equipment required is usually typical of the type of activity carried out by the category of engineers concerned (industrial, mechanical, etc.). It is likely that a large-size buyer already has most, if not all, of the required equipment. The consultants are called in because there are no persons inside the organization who can solve the problem, because the managers buying the services want to get outside advice, or because the in-house personnel do not have the time to carry out the assignment.

The consultants are hired by the head of the engineering department, with the approval of the president and the Board of Directors (for major products). The consulting engineers spend most of their time on the client's site, working with other engineers and often with the foreman and some employees of the department concerned. Although data is collected on the site, the report is usually written in the consultant's office.

If they charge by the hour, consulting engineers are usually more expensive than engineers already within the buyer's organization. The cost tradeoff finally depends, however, on the productivity of both the consulting and in-house engineers. While consultants are assigned to a specific job, inside engineers might be interrupted in their daily activities. Even if the buyer obtains a quotation from the consulting firm, it is difficult to compare the external cost with the internal cost because full internal costs can only be estimated.
The consultant's job is usually clearly specified in terms of either the objectives to be met or the questions to be answered. The method used to get the answers to the manager's questions is determined by the consultants as they are experts in the problem area. The problem to be studied may be only a missing link in solving a situation: the client's personnel might have solved the first part of the problem and need only one important piece of information in order to solve the last part of the problem. On the other hand, the consultants might be given a large portion or all of the problem to solve.

Consulting engineers are most frequently evaluated on their ability to meet the objectives and to answer the questions which gave rise to their hiring in the first place. Although some criteria such as the ability to work within the time and cost constraints may be easily determined, there may be no way to evaluate the extent to which the satisfactory solution found was near the optimal one. The buyer's satisfaction is a major determinant of the rehiring - if required - of the consultants. The penalty cost of switching to a different consulting firm for another project does not appear to be high, unless the consultants developed costly-to-acquire expertise with the company's operations. Similarly, if the client's personnel have the competence to handle the type of problems tackled by the consultants, the company may decide not to hire a consultant next time.

A buyer may select from a number of suppliers but faces the problem of how to determine beforehand the quality of the services to be rendered. Once an assignment is started, it is difficult for the buyer to change
the consulting firm and, for the supplier, to change the engineers assigned to the project. One of the main advantages faced by a buyer in dealing with professionals such as consulting engineers is the flexibility existing in the make-or-buy decision.

Example of the procurement of maintenance services

Companies often tend to buy outside building maintenance services rather than have employees on the payroll do the job. Such maintenance is seen as different from the other activities of a company; it lacks prestige and may involve a high turnover of personnel. The problem of turnover is transferred to the supplier when the decision is made to buy outside maintenance services.

Cleanliness can not be measured precisely, but it is possible to define the tasks that need to be done. Subsequently, whether the tasks have been performed satisfactorily or not can be checked. For example, a client might accept that a piece of paper is left in a waste basket, but is not satisfied if the basket has not been emptied at all. Once the yardsticks to measure the quality of the job are defined, most people could evaluate the quality of the job done.

Cleaning requires, at the minimum, cleaning liquids, mops, a large garbage can on a cart and rags. However, the equipment may be quite sophisticated and include machines to wash and polish floors and carpet cleaners but even these machines are not very expensive. If maintenance were switched from in-house to outside services, the machines could be resold quite easily or even written off without major
financial consequences for the organization. Once the buyer of maintenance services has awarded a contract, both the buying and selling parties are bound for the duration of the agreement, unless a clause specifies that any party might end the contract by sending written advice to the other party 30, 60 or even 90 days before terminating the agreement.

A buyer may choose among a large number of suppliers of maintenance services. The supply is large because of the relatively low investment necessary to start a business and the low level of skill required from the maintenance people. The key job is that of the person who estimates the time required to clean the premises and places a bid accordingly. Because maintenance services include a subjective assessment by the buyer of the service level expected from different suppliers, the amount bid is normally not the only variable considered. Large-size buyers may have a definite advantage over small-size clients. Many suppliers need to get a few large-size clients before being considered as bidders by large-size organizations. Bids might be low to get large-size clients.

The purchasing department is likely to be involved in the selection of the supplier. Depending on the internal organization of the buying company, the purchasing department might be involved in most of the process. The final decision might be the responsibility of the manager of the buying company responsible for the premises. This procedure differs substantially from the one described previously for the acquisition of the services of consulting engineers.
Example of the procurement of printing services

Printing leaves a buyer much less flexibility for future purchases than maintenance, once the decision has been made to "make" part of the desired product. Some pieces of equipment cost over $500,000; for example, the price of a 4-colour press ranges from $275,000 to over $500,000. The printing industry is largely automated and the cost of machinery forces printers to use the machinery as extensively as possible.

Printing often includes art work to prepare pictures and text for printing. Although art work requires skilled workers, little machinery is necessary in the process. This part of the work is the one most likely to be chosen by buyers wanting to perform part of the operation. Even smaller printing companies often farm out such art work because they have difficulty justifying a full-time artist on the regular payroll. Once the managers of a company select to print in-house, it is unlikely that they are going to reverse their decision, mostly because of the equipment investment involved. Another factor affecting the decision to print in-house is the confidentiality of data.

Printing in-house may be seen as an important strategic decision as opposed to doing maintenance in-house versus contracting it. Current practice indicates that most managers prefer to contract outside for printing services. As the costs associated with outside printing increase, managers are more inclined to consider acquiring the machinery and hiring the tradesmen necessary to perform in-house
printing. If cost is the major decision factor, careful computations of the inside costs associated with the expected inside demand are normally made. The decision is affected by much uncertainty including the technological improvements likely to happen.

Once printing is done inside, the departments will likely be required to have material printed inside. This policy limits the flexibility managers have to make the best decision for their department and reduces the incentive the manager and employees of the in-house printing department have to maintain efficient operations.

The printing process becomes machine-paced once the machine set-ups are made. Making inside does not improve the speed of this type of operation. The estimated pace of an in-house employee as opposed to the speed of an employee of the maintenance company is much more important to determine before making the decision to hire or to contract.

The buyer of printing services normally has three to five contacts with the supplier. Most of these contacts are necessary for controlling the quality of the work during the process. It is likely that at least the same number of contacts would be necessary if the printing were done in-house. A customer has specific standards against which to evaluate the work done. A subjective component still exists for the evaluation, but the output is a tangible product meeting predetermined specifications.
Generalizations about procurement strategies

Although it appears possible to generalize each one of the findings of this thesis to some areas of the service sector - and even to manufacturing - and some of the findings to nearly all areas, the exact impact of each finding must be evaluated on an individual basis before any assessment of the generalizability of a finding is made. Procurement strategies include a variety of attitudes and means used to meet certain objectives. Even in manufacturing, different sectors of activity have different characteristics and buyers are likely to use different procurement strategies.

Corey (29) mentions that both buyers and sellers have strategies and that it is possible to group these strategies even though each situation is unique. This research recognizes these strategies by grouping clients into three strategic categories. Spekman and Hill (30) report that Corey's definition of strategic purchasing "involves plans of action for obtaining supplies and for dealing with suppliers". This definition of strategic purchasing parallels the functional area strategy concept used in this research.

Spekman and Hill (31) emphasize that strategies rather than tactics are necessary to improve purchasing effectiveness; tactics imply more of a short-run focus and can result only in improving purchasing efficiency as opposed to purchasing effectiveness. Thus, audit clients should use strategies and/or tactics. According to Farmer (32), effectiveness improvements often result from a novel approach to a given purchasing
situation. It could be expected, therefore, that radical changes in audit strategies might increase purchasing effectiveness more than small gradual changes.

Corey (33) divides procurement strategies into four elements:

1. The product scope of the procurement.
2. The number and type of suppliers selected.
3. The pricing mode.
4. The negotiating strategy.

The fourth element "is a powerful, final determinant of the prices and terms of procurement" (34). In fact, the relative power of each party greatly influences each side's negotiating strategy.

Purchasing managers play many roles other than the one of decision-maker. Some of the other roles mentioned by Kiser (35) are: negotiator, generator of alternative solutions, purchasing costs minimizer and mechanic of the procurement process.

Make-or-buy

Since an audit may be seen by a client as involving make-or-buy decisions, make-or-buy literature is relevant for this thesis. The make-or-buy decision involves both strategic and tactical decisions. According to Corey (36), procurement strategies are interrelated, while tactics are usually not. Leenders et al (37) say that "the strategic dimensions of the make or buy question are far reaching".

What are the variables to consider in a make-or-buy decision? Westing et al (38) mention that:
"In broad terms, the relevant considerations in make-or-buy decisions are the same as those involved in all purchasing decisions: quality, quantity, cost, and service."

For these authors, service does not include only delivery, but also "a wide variety of intangible factors that lead to greater satisfaction on the part of the buyer" (39). Overall, there are important tradeoffs involved in the make-or-buy decision.

Some of the reasons mentioned by Leenders et al (40) for making instead of purchasing are: securing the desired quality, gaining a greater assurance of supply, saving on costs, using idle equipment and for emotional reasons; some of the disadvantages of making are: lack of experience of the producer, lack of competitive pressure to keep costs of producing down and a lack of flexibility in the possible selection of substitute items. In make-or-buy literature, it appears that buying is generally favoured over making.

Certain objective characteristics of companies can help an observer to determine whether a company will tend to buy rather than make; for instance, mature companies tend to make rather than buy (41). As a consequence, mature companies have less flexibility in the make-or-buy decision process than younger companies. Moreover, the costs of making, although estimated, are unknown while the purchase costs are known (42). Periodic reviews of previous make-or-buy decisions that are still applicable should be made (43) at the level at which other strategies are decided (44).
How then should managers decide whether to buy or to make? Leenders et al (45) state:

"Consequently, in most cases the solution will be a compromise based on judgment as to the course of action most conducive to the company's best interest. In a real sense, therefore, the correct answer to the question: "What is preferable, make or buy?" is that "it all depends upon circumstances."

Since client strategies in services like audits involve varying degrees of "make", this thesis attempts to assess the factors bearing on this make-or-buy decision.

Purchase of professional services

Purchasing managers develop their purchasing abilities over time. These abilities are particularly useful in the case of complex or difficult situations such as the buying of professional services. Auditor selection is a purchase of professional services. As per Schonberger (46):

"Measuring quality of intangibles purchased is the central problem that makes purchasing intangibles a special challenge... But lack of tangible ways to measure the quality of intangibles forces the use of surrogate measures of quality, i.e. input and procedural measures."

Measuring the quality of intangibles is not the only challenge faced by purchasing managers buying professional services. The purchase of services is different from the purchase of goods. A purchaser may not feel as qualified to negotiate with professionals as with other suppliers. Lebell (47) mentions that flexibility is essential in the purchase of professional services but that "it is also desirable to know what legal, professional, moral, and economic tools of persuasion
are available'.

Once the job is awarded, Jay (48) suggests staying in firm control of the professional, but without interfering with the professional's approach. Jay also believes it is wise for a client to consider performing part of the job that the professional is doing, provided the client has the capability to do so.

Companies in need of audit financial statements are annually faced with the decision of whether to continue with the existing supplier of audit services or to change. This decision might not be as simple as it appears at first glance. It is clear from the purchasing literature that client strategies in audits might be expected and that careful consideration of the options available might lead to "better" strategies.

It was mentioned earlier that Corey divides procurement strategies into four elements. The product scope of the procurement, the number and type of suppliers selected and the pricing mode are quite straightforward for audits; usually one auditing firm is appointed for an audit to be performed on a company's year-end financial statements, and it is understood that auditors, theoretically, charge by the hours worked. In theory, all auditors at a given level in audit firms have similar judgement and the same knowledge and use equivalent audit techniques. In practice, the situation is different and one major consequence is the bidding practice used by audit firms. Based on Corey's division of procurement strategies and although there are
some variations in this scenario, it is really the fourth element mentioned by Corey, the negotiating strategy, as used by clients and auditors, that makes the difference between one audit and another.

Normally, the president, the controller of a company, or both develop the negotiating strategy for the audit. Usually, controllers do not engage in purchasing activities other than for audit services. Considering that the buying of professional services is difficult, one might question a controller's capability to negotiate effectively. Although this reservation applies to negotiations, it does not cover the ability of the controller to decide on the number of schedules to prepare.

Controllers are indeed faced annually with a decision similar to a make-or-buy decision: to what extent should they or their personnel prepare audit schedules for auditors? Cost is often an important factor in the decision. It is difficult to determine to what extent internal costs of clients are lower than the fees charged by auditors. Indeed, personnel costs are often fixed costs for clients, but opportunity costs on the use of the time of personnel and soft costs such as fatigue, are more difficult to evaluate.

Clients can prepare — as most clients do — only part of the audit schedules required by auditors; there is thus a continuum between preparing none of and all of the schedules. Clients might prefer to prepare most of the audit schedules for some of the reasons mentioned in the make-or-buy literature: lower cost, use of idle personnel or
even for emotional reasons. However, should clients run into difficulties in the preparation of audit schedules or should they prefer to prepare fewer schedules in a given year than what they did before, they can always decide to do as they want. Indeed, auditors can and have to always prepare the schedules not prepared by clients, even on very short notice. In manufacturing, such flexibility is uncommon in the make-or-buy decision process.

Measuring the quality of intangibles is difficult and the same is true for measuring the quality of an audit. The reasons for this difficulty are complex.

8. The concepts of service level and service delivery system

Sasser et al (49) mention that in a service context "buyers are usually unable to judge quality and value prior to a purchase". "Buyers make their purchase on expectations, using criteria such as the reputation of the professional firm selected.

Service level is a subjective concept and greatly influences the delivery of the service. An adequate service level is defined by Sasser et al (50) as:

"...a level of performance that will satisfy customers' needs or expectations of the service."

Thus, the notion of service level is a mixture of variables that may well be difficult to measure.
The service delivery system often involves the customer actively and implies substantial interaction between the producer and the customer (51). According to Lovelock and Young (52), the customer's behaviour thus becomes a critical element in the success of the process. The customer is a potential source for productivity improvements. In auditing, auditees are partially responsible for audit cost and efficiency.

Auditees are also responsible for the management of their section of the audit process. As noted by Demski and Swieringa (53), the behaviour of one party - auditees or auditors - influences the activities of the other. Behavioural aspects influence the process and have to be considered. At times, it might be difficult to determine to what extent the efficiency of the audit process could be improved without checking the impact on the behaviour of both auditees and auditors.

During and after an audit, clients usually make a judgement on auditors' efficiency and effectiveness. This judgement is not necessarily based on precise criteria, but rather on perceptions. Clients also attribute an importance to other factors in their judging of auditors; the relative importance of these factors is difficult to determine. Accordingly, in this thesis the term "perceived service level" is normally used.

This perceived service level influences the client's reaction to the fees an auditing firm charges. As discussed before, audit fees are not
necessarily determined by a multiplication of rates by hours. Accordingly, a client whose objective is solely to minimize audit fees has a perceived service level that is easily measurable. When other important objectives are present, it becomes difficult to measure the impact of each factor affecting the perceived service level.

Intangible aspects affect not only the audit fees, but also the hiring and firing of auditors. According to a survey conducted by Reichman Research Inc. (54) price is not as important a factor in the selection of an auditing firm as reputation, aggressiveness, et cetera. The same survey reveals that price is second to deterioration of service as the major cause for changing auditors. The conclusions reached by the survey may not be as valid for smaller companies (55).

9. Clients' strategies

Clients use strategies in order to reach a satisfactory - or better - service level for the annual audit. This service level is a complex notion corresponding to the client's perceived level of satisfaction. According to Goldman and Barlev (56), the main source of an auditing firm's power is the importance attributed by clients to the services rendered.

Clients have to determine where to allocate their resources in order to meet the objectives they have set for the audit. It is worthwhile for clients to decide upon the allocation of their resources only if audit fees are perceived to be flexible; that is, clients perceive that
their efforts impact on the level of audit fees. Clients' alternatives could be improving the accounting and internal control systems and/or the training of personnel.

According to Lurie (57), some of the objectives clients may have for an audit are: to reduce audit fees, to reduce to a minimum the disturbance of the daily routine and to add to the knowledge of the personnel in the accounting department.

Some clients, for two reasons, might have a definite advantage over others in the selection of a strategy. First, their controllers might be knowledgeable about the audit process and the strategies available to them. Second, controllers or other key personnel might be expert in the use of a proper strategy. It should be expected that knowledgeable personnel give power to an auditee. Clients who understand audit procedures fully can, at the limit, argue over the time required to perform some of the audit steps.

Audit fees represent one concrete measure that can be used in an audit. There are a variety of short-term and long-term ways in which clients may choose to pursue the lowering of audit fees. These ways can be considered as part of clients' strategies.

One way for clients to reduce audit fees is to change their year-end so that the year-end of their company corresponds both to a period of low business activity for the company and for the auditing firm. Indeed, the cost structure of accounting firms favours clients with year-ends
at off-season periods for auditors. Auditing firms are faced with high fixed costs even at times other than peak periods; moreover, their variable costs are low. Thus, any increase in the number of clients results in a high contributive margin for audit firms if these clients require work to be performed at times other than present peak periods.

According to Campbell (58) clients perceiving an homogeneity in the product may be more inclined to switch auditors for fee differentials between audit firms. Even though interviews and surveys show that changing auditors is more often done than before (59) and more frequently by smaller companies (60), it is often done as a last resort. In fact, as Campbell (61) puts it:

"The ethereal nature of professional accounting services, the normal resistance to change, and the trauma of starting a new auditor combine to link the auditor and client semi-permanently."

An established relationship with an auditing firm might be worth more than the reduction in audit fees obtained by changing auditors. However, 49% of large companies annually review the possibility of changing auditors (62). When in need of information about other auditing firms, financial officers obtain it from business acquaintances (33%) and by directly talking to the other firms (24%) (63).

Clients can also use short-term means bearing mostly on a specific audit, to attempt to reduce audit fees. For instance, Hobgood and Sciarrino (64) found in a survey that key officers of some companies
(usually of the larger ones) review the competence of their auditors and their ability to perform an audit in an economical manner; this procedure is complemented by a thorough examination of the detailed audit fees charged and a comparison with the budgeted audit fees.

According to Fee (65) clients can also review the reasonableness of audit fees with other companies in the same industry and the problems (due to the client) encountered by auditors to find ways to solve them for the following year's audit. Burkhardt (66) suggests pressing auditors.

Clients could also consider performing more of the activities in the tradeoff zone. Company managers often prefer because of the high hourly rate billed by auditors, to have their staff do as much work as possible for the auditors. This approach is advocated by many authors (67). As Robinson (68) suggests:

"Agree to a date for the accountant or his staff to start work, and stick to it... Be prepared when the work starts. Nothing costs more than idle time of public accountants while they wait for you to do the things that should have been ready and waiting for them..."

Auditors justify their fees by the amount of work they have to do to perform the audit. For many small and medium-size companies in particular, a good part of the auditors' work was the preparation of schedules in the tradeoff zone. Based on discussions that this researcher had with audit partners, it appears that clients are currently performing more work than before in the tradeoff zone. It thus becomes difficult for auditors to justify fee increases caused by
work required for activities not in the auditors' zone.

The external auditors' fees are only one part of the audit cost; other costs include staff and management salaries for those collaborating with the auditors, cost of disruption, and expenses. Clients will have to consider these costs and the quality of working papers they are able to prepare when deciding what working papers to prepare for auditors and what attitude to adopt.

For clients, there is only one way to get an audit — by paying independent professional accountants authorized by the appropriate laws to audit company data. In exchange for fees, an audit partner expresses an opinion on the financial statements of the audited entity. However, it is likely that strategies used by clients will not impact in the same way or with the same weight on auditing firms. Strategies used by auditors and those used by clients, together with the persons involved on each side, determine the relative power of each party.

From the perspective of this thesis, it is useful to recognize that a power relationship exists and that neither the auditor nor the client always has the upper hand. Each audit involves a power relationship that can be quite different depending on the circumstances and on the auditors and clients involved. Since power relationships are perceived by managers, it is their perception of how a situation affects their power that is important.
10. The tradeoff zone and the auditors' zone

It was mentioned in the previous section that one of the strategies available to clients who have the decrease of audit fees as a main objective is to prepare more audit schedules. This strategy has a short-term focus.

The CFL case showed that clients were not always ready for the audit. It cost CFL $500 more than the budgeted audit fees because auditors had to prepare audit schedules that CFL personnel were supposed to have ready by February 15. CFL's controller had the option of asking accounting personnel to do overtime in order to have the required schedules ready, but he chose not to do so; he had the auditors perform part of the work required.

Clients presumably have the choice between preparing no audit schedules at all, part of the schedules or all of them. These audit schedules were considered an input to the audit process on Figure II. The schedules are a gathering of accounting data which the auditors want to analyze in order to express an opinion on the financial statements of a company.

The preparation by clients of audit schedules reduces the number of hours worked by auditors. However, this preparation naturally increases the hours worked by a client's personnel. Clients are thus making a choice between buying more outside professional hours and preparing more schedules themselves. This choice explains why this
part of the audit process is called the "tradeoff zone" in this thesis.

The graphic tradeoff zone in Figure IV divides the audit process into two zones. Both the tradeoff and the auditors' zone exist in all instances in which an audit is performed. There are always certain procedures that auditors must carry out to express an opinion. All audit schedules could, however, theoretically, be prepared by clients or auditors, assuming that clients have the competence to prepare the schedules.

In this thesis, the tradeoff zone consists of all working papers auditors need before they start the actual audit work. This zone can be considered a post facto zone, since the audit schedules a client needs to prepare are known exactly only after the procedural audit (testing a client's accounting system and internal control procedures). A client's systems and procedures are considered as given for the framework used in this thesis. Should these clients' systems and/or procedures change from one year to the next, it is likely that the tradeoff zone will also be modified as a result.

The broken line at the end of the tradeoff zone implies that there is flexibility in what auditors would allow clients to do. For example, a client with knowledgeable accounting personnel might have the internal auditors (employees of the company) attend the inventory count in some locations, and the external auditors might accept and use the internal auditors' work.
Figure IV - A major tradeoff of the audit process: the "make-or-buy" decision.
The auditors' zone corresponds to the steps that only auditors perform. These steps include examination of important evidence, mailing of confirmations, et cetera. This zone is not fixed; therefore, it also has a broken line in it. Auditors might choose to carry out more audit procedures than they would normally do for reasons such as poor internal control, the client being a new client, auditors' exposure and perceived risk. Clients' accounting and internal control systems differ from one client to the next, and the auditors have to adjust the audit steps they perform accordingly. For example, auditors faced by a client's weak internal control system will tend to perform more audit procedures and do most of the work at year-end rather than at an interim date. In these circumstances, it is likely that auditors will not let clients carry any or many of the activities corresponding to the broken line of the tradeoff zone. Auditors insisting on performing a significant number of activities which could be seen as within the flexible part of the auditors' zone would indicate a lack of confidence in the client's data and/or internal control system. It is unlikely that in such a case the auditors would permit the client to perform activities within the flexible part of the tradeoff zone.

It is a major premise of this thesis that all clients have audit strategies. Client strategies can impact on the tradeoff zone and on the flexible part of the auditors' zone (represented by the broken line).

This discussion on both the tradeoff zone and the auditors' zone illustrates that the audit process is far from static. The strategies
used by auditors and by clients make audits appear to be different processes, although the basics of an audit do remain the same.

11. Conclusion

An audit is a complex process. It involves intangibles such as the client's perceived service level and auditors' perceived risk and quality. There are also at this time pressures on the auditing profession to improve its efficiency and effectiveness so that clients receive a better service for lower fees.

Auditors have audit strategies that are decided upon right at the planning stage, on an individual basis for each audit. Clients also have audit strategies, but these are not necessarily explicit. Both auditors' and clients' strategies are affected by the power relationship existing between the two parties at the time of the audit.

It could be argued that clients who do not meet their objectives for the audit do not use the appropriate strategy or do not understand the audit process well enough. It could also be said that there are important objectives for auditees other than control of fees, such as reduction of the disturbance of personnel, personnel development, and timing of the audit.

Clients might be grouped into categories based on the strategy they use. Do clients with similar strategies have the same characteristics? Thus, can clients be classified in a category in which companies use a
similar strategy, according to the steps of the audit process they perform? How important are audit fees in the choice of a strategy? What are in fact the objectives when pursuing a given strategy? Do clients gradually move from one strategy to another? What are the tradeoffs involved in the choice of each strategy? The contribution of this thesis is to shed further light on the clients' side of the audit process and to provide answers to these questions using the model of tradeoff zone and auditors' zone developed in this chapter.

The findings stemming from this thesis are expected to have applications to other areas of services and, in certain instances, to areas of manufacturing. By comparison and contrast with known processes and characteristics, key similarities and differences may be noted. Additional research will undoubtedly be required to confirm or disprove phenomena like the trade-off zone, progression through the zone, and varying strategies by clients.
FOOTNOTES


(10) Different studies made in the US, Canada, UK and Australia indicate the concentration of the profession. See to this effect *CA Magazine* (Metcalf Supports Private Sector Reform, News Section, January 1978, pp.12-16), Allen Schiff and H. Dov Fried (Large Companies and the Big Eight: An Overview, Abacus, December 1976, pp.116-124) and D.M. Gilling and P.J. Stanton (Changes in the Structure of the Auditing Profession in Australia, Abacus, June 1978, pp.66-80). The studies made focused on large companies.


(13) Bernstein, Peter W., Competition Comes to Accounting, *Fortune*, July 17, 1978.


(17) See Morris, William and Hershel Anderson, Audit Scope Adjustments for Internal Control?, The CPA Journal, July 1976, pp.15-20. The study they performed showed clearly the existence of large differences between firms as to their assessment of risk and confidence interval.

(18) See Boockholdt, James L. and D.R. Finley, A Minimum-Cost Audit Sampling Methodology under Conditions of Predetermined Beta Risk, Decision Sciences, October 1980, pp.702-713. Both risks are presented here as a tradeoff.

(19) Hobgood, George and Joseph A. Sciarrino, Management Looks at Audit Services, The Financial Executive, April 1972, pp.26-32. The authors also mention a few elements of strategy that, according to them, could be used by all companies.

(20) Kenneth S. Gunning (A Profession at the Crossroads, CA Magazine, June 1977, pp.28-32) discusses some of the conclusions reached by the Cohen Commission. CA Magazine (Metcalf Supports Private Sector Reform) quotes the Metcalf report as saying: "...pressures to obtain and keep audit clients have impaired the quality of audit work done for particular clients"(p.14).


(49) Sasser, W. Earl, R. Paul Olsen and D. Daryl Wyckoff (Management of Service Operations, Allyn & Bacon, Inc., Boston, Massachusetts, 1978) insist on this characteristic of the service sector. Quote is from p.16.


reader to believe that criteria used by smaller clients might differ from the ones of larger clients.


(60) Campbell, Terry Lee (*Op.cit.*) has statistics showing that changing auditors more frequently is true even for the top 500 US companies when considered by groups of 50 or 100.


(64) Hobgood, George and Joseph A. Sciarrino, *Op.cit.*

(65) Fee, Thomas, Controlling the Audit Fee, *Management Accounting*, February 1975, pp.49-51. The author also mentions other ways to control audit fees.


(67) For example, Lurie (Working with the Public Accountants, McGraw-Hill, Inc., New York, 1977) suggests to clients to do as much as possible, while Lovelock and Young (*Op.cit.*) present the situation more as a tradeoff.

CHAPTER III
THE RESEARCH QUESTIONS AND METHODOLOGY

1. Introduction

The research questions posed in this thesis and the methodology used to obtain answers are discussed in this chapter. Since the research was largely descriptive and exploratory, the relatively simple design uses cases, propositions and a small sample of participating clients.

The contribution of the research is intended, therefore, to be two fold. The description of current practice is intended to fill a void in the literature on client strategies. The propositions are intended to explore possible trends and relationships which, although difficult to prove as statistically valid at this point, might, nevertheless, lay a valuable base for further detailed inquiry in the future.

Little in-depth research has been done that directly addresses the topic under consideration. Thus, it was necessary to document basic information as part of the contribution of this research. Accordingly, this research is of an exploratory and descriptive nature and uses propositions instead of hypotheses to explore possible relationships and conditions.
2. Propositions

The development of propositions centered on the following research statement: "Clients can be divided into three strategic categories and tend to prepare more schedules every year in order to reduce audit fees". The following five propositions were designed to explore the validity of this position and provided the focus for data gathering. It is postulated that it is possible to identify clients as belonging to one of three major categories depending on their position with respect to the tradeoff zone.

PROPOSITION I: Clients can be identified as belonging to one of three strategic categories according to the steps of the audit process that they perform.

One of the major tradeoffs involved in an audit is the clients' choice to perform a given number of activities in the tradeoff zone. Some clients prefer to let auditors carry out most of these activities while others choose to do most of these themselves. Accordingly, these groups were called "major buyers" (C1 category) and "major doers" (C3 category). The third category chosen was the "in-transit group" (C2 category).

The division of clients into three strategic categories left some flexibility to the model. It also corresponded to a logical division of clients as expected by the researcher and the partners interviewed. This research attempted to determine if any "natural" border (i.e.
step) existed that could help to divide clients into three clusters more easily. Figure V shows how this division into categories affects the diagram in Figure IV. It was expected that clients in the same category would exhibit a similar behaviour while the behaviour would differ between categories.

There was no a priori evidence as to whether or not companies with similar characteristics used the same audit strategy. The researcher thus determined, based on his prior work experience and on a few key interviews, a main measurable characteristic (ratio level) that allowed all companies to be identified easily with one category or another. This characteristic was the percentage of schedules prepared by a client as compared with the total that could be done.

The number of schedules, the number of steps and the percentage of steps performed by a client as compared with the ones that could be done were used as alternate reasonable measures, to determine to what extent the results were consistent using one method as opposed to another. This research also attempted to identify why clients act the way they do. Even though it is normal to expect that most clients want to control audit fees, it was not clear in the literature to what extent fees affected the choice of a strategy by companies. This researcher, based on discussions with partners of chartered accountancy firms and controllers, thought that the control of audit fees reinforced by the prevailing economic conditions was an important element in the choice of a strategy. Thus:
Figure V - The three strategic categories as they relate to the audit process.

- C1 includes clients that are "major buyers".
- C3 includes clients that are "major doers".
- C2 corresponds to clients between C1 and C3. These clients are the "in-transit" group.
PROPOSITION II: The desire to control audit fees is the main determinant of clients' choice of strategy for the audit process.

PROPOSITION I suggested that clients could be divided according to the steps of the audit process they performed. Accordingly, two clients could be performing the same number of, but quite different, steps and still be classified in the same category. It was important to determine whether or not companies in the same category tended to perform the same steps. It was expected that, should the answer be positive, it would then be possible to predict what steps a company would perform next. A positive answer would also indicate a greater similarity within a category and a "normal" similar progression of companies from one category to the next.

Based on these factors, it was reasonable to expect that:

PROPOSITION III: Clients in the same category perform/do the same steps/schedules of the audit process.

Once clients are in a given strategic category, what do they do next? It might appear difficult for C3 clients to prepare many more schedules. The C1s might be doing little for a variety of reasons, but could be considering doing more. Two factors holding C1s back could be their lack of personnel and the limited auditing knowledge of their accounting staff. Clients in the C2 category could be the ones with both the capacity and the opportunity to do significantly more than
they are currently doing.

When clients elect to perform some schedules for the auditors, they have to determine which schedules to prepare. They might already be doing some schedules for internal purposes that could easily be formatted the way auditors need them. It was likely that these schedules would be prepared. Similarly, if a client had the choice between preparing a schedule that could also be useful for managerial/internal purposes and one which was not, the client would likely choose the first one, thereby getting two rewards rather than one. The main schedules identified in pre-test interviews as useful for managerial purposes were: bank reconciliations, list of accounts receivable, list of inventories and list of accounts payable.

Wherever the companies stood on the continuum of the number of steps they could perform, it was normal to expect that once they experienced a given level of preparation (number of steps and schedules), they would try to reach at least the same level in following years. Clients would take advantage of the learning curve effect to free some personnel time that could be used to perform more activities in the coming years and, for financial reasons, they might be reluctant to ask auditors to prepare more schedules.

This process of "creep" through the tradeoff zone would probably continue until a client reached a point where it is impossible to go much further with the resources available or where it is perceived to be marginally more useful to devote freed-up resources to activities
other than the audit. Otherwise, it could be expected that:

PROPOSITION IV: Clients gradually perform each year more steps of the audit process.

Size of company and quality of personnel are likely to be related to the number of steps performed. For example, a larger company can reasonably be expected to have a greater number of competent personnel and a better internal control than a smaller company. Similarly, it can reasonably be expected that when a client has prepared many schedules in a given year, the same will occur the following year. Because company size appears to be related to many other characteristics, the next proposition reads:

PROPOSITION V: The larger the company size, the more activities of the audit process a company is likely to perform.

This proposition should also hold true for the same company as it grows over time, thereby reinforcing the "creep" phenomenon discussed earlier.

These five propositions formed the focus of the inquiry into what conditions client strategies. Should all five appear to be true or false, this fact might have major implications for client planning of the audit. Should some hold and others not, the individual implications would have to be examined before an assessment of impact could be made.
3. Instruments for data collection

The instruments used for collecting data were:

1) A questionnaire, subsequently called the "schedules questionnaire" (Appendix I), listing schedules that could be prepared by either the auditor or the client.

2) A questionnaire, subsequently called the "steps" questionnaire (Appendix II), listing steps clients could use to plan, execute and control the part of the audit they could perform.

3) The interview guide for partners appears in Appendix III.

4) The interview guide for clients (Appendix IV) was a more extensive list of questions because the research focus was on clients.

The French version of the questionnaires and interview guides appear in Appendix V to Appendix VIII.

The list of schedules on the schedules questionnaire was not intended to be complete, even though it was detailed. Its purpose was to permit the researcher to divide clients into three categories, based on representative schedules that extend along the whole range of difficulty of preparation and of knowledge required were clients to prepare these. The researcher prepared this list based on his own experience and on the auditing literature.

The list of steps used mainly the auditing literature, but the researcher needed to add a significant number of steps based on his own experience. This list of steps was more extensive than anything found
in the literature, even though the list was still not complete. This
equipment was used mainly to determine if the number of steps (or the
percentage of steps) could account for differences in strategies; it
was also used to check if any step or type of step could help in
further refining the classification of clients into three categories.

The researcher translated the questionnaires and interview guides into
French. All interviews were conducted in this language. The use of
direct interviews necessitated more time per answer than the use of a
questionnaire but allowed for a continued probing of answers and for
the interviewer to make sure that the interviewee understood each
question. The interview was also best suited for an in-depth
exploratory study of this nature; it greatly improved the chances of
obtaining even more information than what was originally asked for.

4. Characteristics of the population and of the sample

The theoretical population under study comprised all organizations
audited by external professional accountants for their last financial
year. The inherent diversity of such organizations made it impossible
to control all key variables while varying the one under study. A
variety of sub-groups exist in this theoretical population, and it was
decided to limit the actual population to organizations with the
following characteristics:

1) Companies.

2) Privately-owned with non-traded stock.

3) Canadian-controlled.
4) Not a subsidiary.

5) Small and medium-size.

6) Most of the audit performed in the same location.

Privately-owned companies with non-traded stock were chosen since companies with traded stock are subject to special regulations and disclosures requiring special audit procedures and more time spent by auditors before issuing the auditors' report. The same reasons justified the choice of companies as opposed to non-profit organizations. Canadian control was important so that the issue of foreign ownership and accompanying audit requirements were of no concern.

If the company chosen were a subsidiary, its audit activities (schedules prepared and steps performed) would largely be dictated by its parent company. Small and medium-size companies were more likely to cover the whole spectrum of strategies available than large companies which were nearly all expected to be in the C3 category.

When most of the audit is performed in the same location, it is less likely that other offices of the same accounting firm play a role in the audit. Moreover, multiple location jobs are more costly than single location ones because extra communication and coordination are needed between auditors of different offices or more audit work needs to be done because both (or more) locations have accounting ledgers.

In order to control for auditors' interfirm differences, it was decided
to limit the pool from which the sample was chosen to one accounting firm's clients. The choice of only one firm was also justified by the sensitive nature of the thesis for auditing firms. The researcher found in the literature no evidence of different clients' or audit firms' behaviour in different parts of the country. No differences were identified by the audit partners with whom this question was discussed. Thus, it appeared reasonable to assume that the choice of clients from only one accounting firm did not unduly restrict the sample.

Optimally, the sample would have included companies with an equivalent level of internal control. A similar risk level, as estimated by the auditing firm, would have reduced the impact of internal control level as a major determinant of the steps performed by auditors. Similarly, it would have been desirable if all clients belonged to the same partner. However, even though efforts were made to achieve these ideal conditions, these could not be met.

The limitations brought to the theoretical population should not limit the generalizability of the findings to other areas of the service sector. The characteristics of the audit process remain valid for all sub-groups within the theoretical population. It is likely that some findings stemming from this research would not have been made and conversely, had other sub-groups been chosen.

Pre-testing of both the questionnaires and the interview guides followed the determination of the characteristics of the actual
population from which the sample was chosen.

5. Pre-tests

Two clients, whose audit the researcher was in charge of when he was in an accounting firm, participated in the pre-testing of the schedules questionnaire, of the steps questionnaire, and of the clients' interview guide. The first client performed only a couple of steps and prepared very few schedules (C1) in 1977 and by 1982 was a definite in-transit company (C2). The second client had been a major doer (C3) for the last ten years, but was still finding new ways every year to do even more activities in the tradeoff zone.

Both controllers received the two questionnaires and the guide one week prior to the interview. They filled in both questionnaires and read the interview guide prior to the researcher's visit. The interviews were conducted the same way as intended for clients in the sample. Both controllers were asked to mention to the interviewer any type of problem encountered with these research instruments. No changes were thought to be necessary. The researcher also found the answers to the questionnaires and the interview to correspond to expectations.

The schedules' questionnaire and the steps questionnaire were both discussed thoroughly with two chartered accountancy firm partners. Both were handed the questionnaires a few days before the discussion so that they could look at the lists of schedules and steps before the discussion. One of the partners also asked two managers (7-10 years of
auditing experience) to examine the lists carefully and to give their comments and suggestions for improvement. The other partner asked two supervisors (5-6 years of auditing experience) to do the same.

All agreed that the questionnaires would divide clients into three categories. They felt that the items listed were representative of the range of schedules and steps that clients could do/perform. Their suggestions to drop/add a few specific elements were followed.

No pre-testing was done for the interview guide for partners because it was a straightforward instrument for the level of expertise of the partners and included only four questions. The interviewer took care however to ensure that no misunderstanding occurred during the partners' interview.

Discussions with a few partners of large accounting firms revealed that a sample of two to four companies per category should be sufficient to determine the major reasons behind the strategies used by companies and to obtain sufficient data to discuss the propositions. This opinion reinforced the intention of research design (including clients and auditors) to use a small in-depth sample. About three hours were required from each partner and each controller participating in the research.

The target sample of clients chosen was five clients for each category. Thus, if some data-gathering difficulties were encountered, some safety
margin would still exist for each category. Moreover, in most cases, the non-parametric tests intended for the propositions did not require a sample size greater than four to have significance at the .10 level.

Once the researcher was satisfied with the instruments used for this research, he proceeded with the data collection phase.

6. Data collection procedures

One of the largest chartered accountancy firms in the Province of Quebec participated in the study. This firm had a sufficient pool of clients that met the characteristics desired in the population. The researcher described to the administrative partner of the collaborating office the characteristics of the actual population from which the sample would be chosen. The researcher also mentioned to the partner that five companies were needed in each of the following categories: clients preparing few audit schedules for the auditors, clients preparing most of the schedules and clients that could be considered as between the two categories mentioned.

One week prior to the researcher’s visit the administrative partner of the collaborating office received and distributed a number of copies of a package that was handed to the partners involved in the study. Each package contained:

1) The interview guide for partners.

2) A list of the activities to be carried out by clients and some reasons why clients should participate in the research.
3) A short description of the purpose of the research and of the intent behind the selection procedures for the sample.

The administrative partner - who knew personally most of the office's clients included in the pool - discussed with each partner involved in the research the characteristics that clients should have in order to fit the pool from which the sample would be chosen. He then made sure before the arrival of the researcher that clients in the pool appeared to fit the requirements set by the researcher and discussed each case at a meeting involving all partners participating in the research. A similar procedure has previously been used successfully by two other accounting researchers with a sample of 14 (1).

During a visit to the firm, the researcher discussed the questionnaires and the interview guides with the administrative partner. A few questions had to be deleted from the interview guide for clients. The deleted questions were all related to client efforts to reduce fees.

Interviews were then conducted with each partner. Each company the partner considered including in the sample was discussed by the researcher with the appropriate partner. Each of the six partners whose clients were included in the sample contributed at least two clients. Later the same week, each partner contacted his clients to ask for their collaboration. An interview date was then set by the researcher with the client. Five clients were chosen for each of the three categories, for a total sample of 15 (Appendix IX).
The researcher ensured that each partner filled in during the week following his interview (consulting when required the audit working papers for each client which accepted to participate in the study) the schedules questionnaire to determine which of the schedules listed his personnel had to prepare during the audit. These questionnaires were mailed back to the researcher in a pre-stamped envelope. The partners also provided the researcher with the audit fees billed to their clients for the previous five years (when the data were available).

The sampled companies were mailed both questionnaires and the interview guide, with instructions, about two weeks prior to the interviewer's visit. The mailing of the interview guide to the interviewee had been found to facilitate interviews (2). Most of the persons interviewed were controllers. They usually handled the dealings with auditors for companies of the size of the ones sampled. However, in a few instances, the interviewer met with the president.

Interviews were conducted using the interview guide; all questions were covered in the same order for each company. Each client was also invited to add any pertinent observation or fact deemed appropriate. At the end of the interview, the researcher collected the two questionnaires previously filled out by the client and ensured that all questions had been answered. Subsequently, each client's answers to the schedules questionnaire were compared with the ones given by the partners. The researcher used the partners' answers as a basis for determining both the number and percentage of schedules. Partners' answers were found to be closer to reality. Furthermore, partners
appeared to use a more similar framework than clients did to answer the questionnaires.

7. Qualitative data analysis

Considering that each of the three strategic categories had to be analyzed on an individual basis, it was decided prior to clients' interviews that one case would be written and analyzed for each of the categories, major buyers, in-transit and major doers. Accordingly, one representative client of each category was asked that the information obtained be written up as a short case in the thesis.

A large summary grid, with answers from each client to each interview question, was built. Then, the same was done with answers to the schedules questionnaire and the steps questionnaire. This grid allowed the researcher to reach some preliminary conclusions based on data grouped by strategic categories. All logical analyses and comparisons between answers were made in order to understand the framework and check how the answers supported the propositions. The qualitative aspects found were then written up.

The data analysis was clearly divided into two parts: the analysis of qualitative data and quantitative data analysis (non-parametric statistical tests; other quantitative tests). Both analyses were first done independently and then results were used jointly to reach the appropriate conclusions.
8. Quantitative data analysis

While the qualitative analysis was an iterative process, the quantitative side of the analysis was more straight-forward. The difficult part was the determination of the appropriate and most meaningful tests to be used.

The results of these tests were expected to shed light on the propositions and to contribute to the overall understanding of the audit process. Because of the small sample sizes, distinctions between categories or relationships between answers had to be very clear in order for the non-parametric statistical tests to yield a statistically significant answer at the .05 level. Table 1 summarizes the main tests used, their intended use and the propositions to which they were related.

Tests were used only for propositions for which quantitative data were available and where data needed to be analyzed statistically to yield valuable information. This type of analysis was used mostly for propositions I and III. No statistical test was used for proposition II because the discussion bears on qualitative data obtained during the interviews.

The discussion in this section is intended to present the tests used in a logical order for discussion purposes, rather than to describe them in the order of their use in Chapter IV (this order varies for each proposition). The following discussion adds information to Table 1.
Table 1 - Non-parametric tests as they relate to propositions.

<table>
<thead>
<tr>
<th>Test</th>
<th>Main intended use</th>
<th>Useful for propositions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kendall coefficient of concordance W</td>
<td>To determine the correlation between the methods used for the classification in three categories</td>
<td>X</td>
</tr>
<tr>
<td>Spearman rank correlation coefficient</td>
<td>To determine the correlation between two methods used or between two variables</td>
<td>X</td>
</tr>
<tr>
<td>Mann-Whitney U</td>
<td>To determine if two variables measured on the same scale tend to be in the same direction (one larger than the other)</td>
<td>X</td>
</tr>
<tr>
<td>Binomial</td>
<td>To compare the actual number of schedules done/steps performed vs. what would be done if at random</td>
<td>X</td>
</tr>
<tr>
<td>Kolmogorov-Smirnov</td>
<td>To determine how significant the difference is between the actual and the expected distribution</td>
<td>X</td>
</tr>
<tr>
<td>Fractional match coefficient</td>
<td>To measure the number of common questions answered &quot;yes&quot; or &quot;no&quot; by the two clients being compared</td>
<td>X</td>
</tr>
<tr>
<td>Tanimoto fractional match coefficient</td>
<td>To measure the number of common questions answered &quot;yes&quot; by the two clients being compared</td>
<td>X</td>
</tr>
<tr>
<td>J coefficient</td>
<td>Same as Tanimoto, but limits the denominator to the lowest maximum number of &quot;yes&quot; applicable for the two clients being compared</td>
<td>X X</td>
</tr>
<tr>
<td>Cochran Q</td>
<td>To determine whether or not companies in the same category tend to answer &quot;yes&quot; to the same questions</td>
<td>X</td>
</tr>
</tbody>
</table>
PROPOSITION I states that clients can be identified as belonging to one of three categories according to the steps they perform. In section 3 of this chapter, it was mentioned that the instruments that could be used for identifying clients were:

1) The number of schedules prepared

2) The number of steps performed

3) \( \frac{\text{number of schedules prepared}}{\text{potential schedules prepared}} \)

4) \( \frac{\text{number of steps performed}}{\text{potential steps performed}} \)

The Kendall coefficient of concordance \( W \) measures the degree of association between \( k \) variables. It was used to determine to what extent the four instruments ranked the clients in the same way. The coefficient of concordance \( W \) is:

"...an index of the divergence of the actual agreement shown in the data from the maximum possible (perfect) agreement."

(3)

The level of significance attached to this coefficient was determined.

The Kendall coefficient of concordance yields exactly the same results as combining, using the appropriate equation, all coefficients obtained by the Spearman rank test (4). The Spearman rank test also yields a correlation coefficient, but is used for comparing only two rather than \( k \) rankings. The Spearman rank correlation coefficient test was used to determine the correlation between the rankings of those variables thought to be the most related:

1) Number of schedules prepared vs. number of steps performed
2) Number of schedules prepared vs. $\frac{\text{number of schedules prepared}}{\text{potential schedules prepared}}$

3) Number of steps performed vs. $\frac{\text{number of steps performed}}{\text{potential steps performed}}$

It was necessary to use the Spearman rank test because Kendall's $W$ is an overall measure for which the result (coefficient) is depressed towards 0 by poor relationships between any of the variables.

Graphs were prepared for all relationships expected to be meaningful. These graphs were used mostly to determine the existence of clusters corresponding to the three strategic categories (Proposition I). When graphs exhibited a relationship that appeared meaningful, the Spearman coefficient test was used to determine statistically the strength of the relationship. This test was also used for PROPOSITION V which states that the larger the company size, the more steps/schedules a client performs/prepare.

The Mann-Whitney U test was used for a purpose similar to the Spearman test, but was used to compare one category with another, rather than to compare each company to the others, without paying attention to the category. The Mann-Whitney U test yields a significance level and is almost as power-efficient as the t-test; Siegel (5) says that the U test "is one of the most powerful of the nonparametric tests".

The summary grids for the schedules and the steps were used as a basis for all the tests described next. These grids included the answers of all companies to each question on the two questionnaires.
PROPOSITION III states that clients in the same category perform the same steps of the audit process. Similarities within a strategic category and discrepancies between categories were thus tested. Because of the importance of this proposition and the number of tests available the number of tests used was limited to those believed to yield valuable extra information.

The schedules questionnaire and the steps questionnaire can both be seen as a series of dichotomous (0-1) answers. According to PROPOSITION III, clients in a given category can be expected to have "yes" answers to the same questions. The binomial distribution of the number of clients expected to have "yes" answers was computed for each category, based on the total number of "yes" answers by each client in the category. Thus, probabilities were obtained for getting zero, one, two, three, four and five clients answering "yes" to a given question. Then, a comparison was made between the actual results and the binomial distribution to determine to what extent the actual differed from the probabilities.

Two different approaches were used to compare the probabilistic and the actual results. First, all "not applicable" answers were included with "no" answers which reduced the expected probability of obtaining "yes" answers; thus it increased the likelihood that the actual results would show a greater number of similar answers than the expected number based on the binomial.

Second, the "not applicable" answers of each company were pro-rated,
based on the number of "yes" and "no" answers. It was necessary to assign to each "n/a" a "yes" or a "no", in order to be able to compare the actual and the probabilistic results. For example, the schedules questionnaire includes 62 answers. Assuming that there were 40 "yes", 19 "no" and 3 "n/a", the first two "n/a" answers would have been assigned a "yes" answer and the last one, a "no".

The Kolmogorov-Smirnov test was then used to measure the level of significance of these findings. This test compares the probabilistic and the actual distributions of the variable under study. This is a simple test that complements the two approaches used for comparing the theoretical binomial distribution and the actual results.

The above tests using the binomial were concerned with each category and did not compare answers between categories. Two simple but useful coefficients were used to determine which clients had more similar patterns of answers (6). The Tanimoto fractional match coefficient measures the number of questions answered "yes" by two clients against the number answered "yes" by at least one of them. The basic fractional match coefficient is similar to the Tanimoto measure. The numerator is the sum of questions to which both clients answered "yes" or "no"; the denominator consists of the total number of questions less the ones to which at least one company answered "n/a". The fractional match coefficient was expected to yield results showing clearly that the coefficients are higher for companies within the same group than between two companies of different groups.
Finally, two instruments were used to check further the results obtained from the two coefficients just mentioned. First, the J coefficient was created in order to make comparisons more meaningful between two companies in different categories. This coefficient was the number of "yes" as the numerator and the lowest maximum number of "yes" applicable for the two companies being compared as the denominator. The level of significance of the difference between the J coefficient obtained and the result that could be expected at random (considering the actual number of "yes" answers) was also computed. Second, the Cochran Q test was used as an overall check of the similarities of answers between all companies within a category. However, the usefulness of this test was limited by its sensitivity to the large differences in the number of "yes" answers by companies within the same category.

9. Conclusion

Propositions were tested by using non-parametric tests and by analyzing answers to open-ended questions. Fifteen clients and one accounting firm contributed to the thesis. Their answers were collected through two questionnaires and one interview with each client. All clients were audited by the same firm. Care was taken to limit the number of variables that affected strategies; accordingly, only Canadian, privately-owned companies of small and medium-size were included in the population from which the sample was chosen.
FOOTNOTES


(5) Siegel, Op.cit., p.116. The power-efficiency of a test is a comparison between a given test and the corresponding parametric test. It is based on the sample sizes.

(6) Frank, Ronald E. and Paul E. Green, Numerical Taxonomy in Marketing Analysis: A Review Analysis, Journal of Marketing Research, February 1968, pp.83-94. The two authors cover in their article both the fractional match coefficient and the Tanimoto coefficient.
CHAPTER IV
DATA ANALYSIS - OVERALL FINDINGS

1. Introduction

In this chapter, each of the propositions is discussed using answers to interviews, questionnaires and non-parametric statistical tests. It was found that all clients could be identified with a strategic category; within each category, clients tended to prepare the same schedules. As size increased, clients prepared more schedules over the years, although this increase was not necessarily gradual. The control of audit fees appeared to be an important determinant of the client's choice of a strategy.

There were other findings stemming from this research. For example, the attitude of clients towards audits changed as clients progressed from C1s to C3s. For this progression to happen, certain accounting and auditing skills were required; the extent of a controller's auditing skills was a strong influence on the category a company could aspire to. Also, a client's perception of where the company was in the tradeoff zone could limit what would actually be done.

2. Proposition I

PROPOSITION I: Clients can be identified as belonging to one of three strategic categories according to the steps of the audit process that they perform.
It appears that clients can indeed be identified with one of the three strategic categories - major buyers, in-transit and major doers - as was expected from the experimental design. The confirmation of this categorization provides an opportunity to view client strategies in a perspective not apparent heretofore. The division of clients into three categories, depending on their position in the tradeoff zone, was intuitively easy to grasp for the partners who participated in this research.

External validity

When the partners involved in this research met to discuss the selection of clients to be included in the thesis, they agreed that in terms of preparation of working papers, three client divisions made sense. Recognizing that some schedules required much more work and time than others, the partners still felt that clients could be divided into the following categories according to their preparation of working papers: little, average and extensive. They felt that these categories would probably show more similarities between clients within each category than between clients of different categories. Even though the partners' reaction added valuable external validity to the notion of client categorization, it was possible to use non-parametric tests to provide further support.

The Kendall's coefficient of concordance W test

Four instruments were used to determine a client's category. These four instruments were:

1) The number of schedules prepared
2) The number of steps performed

3) \[ \frac{\text{number of schedules prepared}}{\text{potential schedules prepared}} \]

4) \[ \frac{\text{number of steps performed}}{\text{potential steps performed}} \]

The Kendall's test was used to determine how similar the rankings obtained by using the four instruments just mentioned were for the classification of the 15 companies. A coefficient of 1.0 would indicate that the instruments used rank the objects (in this case the 15 companies) exactly the same way. A low W coefficient would indicate little agreement between the rankings obtained from the instruments used. The \( W \) obtained was .673. This was a satisfactory result for a group of four instruments. This result did not imply that any of these instruments could be used interchangeably. It was necessary to determine first which instruments were the most similar. The Spearman test was used for comparing two rankings.

The Spearman correlation coefficient test

The Spearman correlation was .968 between the rankings obtained using the percentage of schedules prepared and the number of schedules prepared. When comparing the rankings obtained using the percentage of steps performed and the number of steps performed, the coefficient was .940. These two coefficients indicate that the .673 obtained for \( W \) was the result of a poor relationship between the two instruments using the schedules of the audit process when compared with the two others using the steps. For instance, the Spearman coefficient was down to .434 when the rankings of the number of schedules and of the number of steps were compared. The coefficient of .434 was significant at the .05
level, while the .968 and .940 were significant at much better than the .01 level.

As was expected by the audit partners and by the researcher, the best instrument to classify the clients was the percentage of schedules. It was expected that C1 clients would be the ones preparing the smallest percentage of schedules out of the schedules they could prepare, C3s, the largest percentage, and C2s, a percentage between clients in both other categories. These expectations, based on the experimental design, yielded the optimal results. These optimal results (Table 2) would have consisted of a diagonal with three cells of five clients, and zero clients in each of the six other cells. Only two clients fell short of expectations, as shown in the table.

As seen in Table 3, the Spearman test determined how different the ranking of clients using the percentage of schedules and the optimal ranking of clients were. The Spearman rank correlation coefficient obtained was .989, which was significant at much better than the .01 level.

Even though the percentage of schedules appeared to be the most promising instrument, it could not be used for other tests. This instrument can only be used as an overall measure because percentages (as opposed to "yes" and "no") can not be attributed to specific questions of the schedules questionnaire. This attribution of specific answers to each question was necessary for the binomial (used both in Proposition I and Proposition III), which needed dichotomous answers.
Table 2 - Summary of the classification of companies using the percentage of schedules prepared.

<table>
<thead>
<tr>
<th>% schedules prepared</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 50%</td>
<td>5</td>
<td>1</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>50-75%</td>
<td></td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>&gt; 75%</td>
<td>0</td>
<td></td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>15</td>
</tr>
</tbody>
</table>
Table 3 - Comparison of rankings: percentage of schedules prepared vs. optimal ranking.

<table>
<thead>
<tr>
<th>Category</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimal ranking - % schedules prepared</td>
<td>24</td>
<td>26</td>
<td>35</td>
</tr>
<tr>
<td>Actual ranking - % schedules prepared</td>
<td>24</td>
<td>26</td>
<td>35</td>
</tr>
<tr>
<td>Rank - optimal</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Rank - actual</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Difference in ranks</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>(Difference in ranks)^2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Spearman rank correlation coefficient: .989.

NOTE: The optimal ranking corresponds to the 15 percentages ordered in increasing order.
Accordingly, the number of schedules was the classification instrument subsequently used. The number of schedules instrument is useful as long as it includes the schedules listed in the present questionnaire. Different results could be reached should a mere count be made of the number of schedules actually prepared by each company for an audit.

By using the percentage of schedules, only two companies were misclassified (Table 3); that is, for the purposes of this analysis, classified in a category different from the one they were expected to belong to. Table 4 illustrates that the number of misclassified companies became four when using the number of schedules prepared, rather than the percentage of schedules prepared. While all C1s remain well classified, two C2 companies are now classified as C3s and two C3s as C2s. The rankings from the number of schedules were used rather than the ones obtained using the number of steps, because answers could be more easily supported with evidence. All the discussion bearing on steps is made in a separate section at the end of this chapter.

The binomial test

The binomial test was used to compute the probability of obtaining zero, one, two, three, four or five clients from a given category with a "yes" answer to any one of the 62 questions of the schedules questionnaire. Accordingly, C1s were expected to answer mostly "no" while the opposite should have been true for the C3s. As expected, the results (Table 5) showed that clients in the C1 category had the smallest number of questions to which four or five clients answered "yes", and the largest number to which four or five clients answered
Table 4 - Summary of the classification of companies using the number of schedules prepared.

<table>
<thead>
<tr>
<th>Actual category</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>C2</td>
<td>-</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>C3</td>
<td>-</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>15</td>
</tr>
</tbody>
</table>

The resulting Spearman correlation coefficient is .954.

* Category in which it should have been.
Table 5 - Total number of "yes" answers per category for the schedules questionnaire.

<table>
<thead>
<tr>
<th>Category # &quot;yes&quot; to each question</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>44</td>
<td>18</td>
<td>6</td>
<td>68</td>
</tr>
<tr>
<td>2-3</td>
<td>9</td>
<td>20</td>
<td>18</td>
<td>47</td>
</tr>
<tr>
<td>4-5</td>
<td>9</td>
<td>24</td>
<td>38</td>
<td>71</td>
</tr>
<tr>
<td>Total</td>
<td>62</td>
<td>62</td>
<td>62</td>
<td>186</td>
</tr>
</tbody>
</table>

NOTE: Zero "yes" to a question indicates that no client out of five in a given category was preparing a given schedule.
"no". The exact opposite was true of C3s. No such concentration could be observed for C2s. Although these results made sense from a logical standpoint, how significant were they? Considering the actual percentage of "yes" answers by each client of a given category, the frequency of the probabilities of having respectively from zero to five clients with a "yes" answer was determined using the binomial. The Kolmogorov-Smirnov test was used to test to what level of significance the actual results obtained differed from the probabilistic results. For each category, the actual results were significant at the .05 level of significance or better and showed that clients could be divided into three strategic categories. Thus, these categories were more clearly divided into three clusters than what was expected based on the probabilities.

Comparison between partners' and clients' answers

There were important differences between what clients and partners indicated as answers to the schedules questionnaire. For each category, four out of five clients indicated a greater number of "yes" answers than what the partners indicated the clients were doing. Discussions with partners revealed that most clients tended to consider as complete the schedules they submitted to auditors, which was far from the case particularly for C1s and C2s. The discrepancy between partners' and clients' perceptions is summarized in Table 6. It would be normal to expect fewer discrepancies between auditors and their clients in the C3 category, as the C3 controllers have audit experience and do most of the schedules.
Table 6 - Differences by category among the number of schedules prepared by clients as per auditors and clients.

<table>
<thead>
<tr>
<th>Category</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difference</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-5</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>6-10</td>
<td>1</td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>&gt;10</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>15</td>
</tr>
</tbody>
</table>

**NOTE:** On average, C1 clients prepared 16 schedules, C2s, 33 and C3s, 45. The 3 cells below the main diagonal represent important differences.
When a controller or a president was not particularly satisfied with the management of the audit process, there was a tendency to answer "no" more often when in doubt. This tendency resulted in the three instances where the auditors indicated that their clients were doing more than what the clients actually indicated.

Table 7 gives the comparison between the clients' perception of how much they were doing as opposed to the percentage of schedules prepared by the clients according to the partners. Most clients who disagreed with partners as to where they stood as clients in the tradeoff zone, tended to err on the high side; they estimated doing more than was actually the case. A controller or a president ranking a company high for the number of schedules prepared also tended to overestimate the number of steps performed by the company. Moreover, there was a tendency for many clients to answer "yes" to a number of questions in the steps questionnaire because they perceived they were doing a step when in fact they were not. The researcher ensured through discussions with some partners and all clients that the answers given by clients were a matter of their perception and not because of a misunderstanding. One of the objectives of this research was to determine not only what controllers or presidents thought but also what was actually the case.

Further evidence

It would normally be expected that the number of companies in the C3 category with a "yes" answer would exceed the number of C2s and of C1s for most of the questions in the schedules questionnaire. The same
Table 7 - Comparison between the perception clients have of the extent they prepare working papers and the percentage of schedules prepared.

<table>
<thead>
<tr>
<th>Perception* clients have</th>
<th>1-4</th>
<th>5-6</th>
<th>7</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>% schedules prepared</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 50%</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>50-75%</td>
<td>-</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>&gt; 75%</td>
<td>-</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>5</td>
<td>8</td>
<td>15</td>
</tr>
</tbody>
</table>

* A 7 indicates that clients perceive they are doing everything possible and that they could prepare very few extra schedules.
should be true for C2s, as compared with C1s. This was actually the case, as shown in Table 8. In fact, only seven out of 132 comparisons (5%) were in a direction different than expected. These results were also strong support for Proposition III.

Two additional instruments were developed to help classify clients in the appropriate category. The first instrument was based on the controller’s accounting and auditing knowledge together with his desire to control audit fees. It appears that these characteristics were prerequisites for clients to get into a higher category. The most important prerequisite was auditing knowledge, because it usually encompassed accounting knowledge. The control of audit fees was the normal incentive to go to a higher category. A client might have to upgrade at least one of the three characteristics - and sometimes all three - in order to become a C2 or a C3 (Figure VI).

The second instrument used to classify companies (Figure VII) is a summary of the main company characteristics that differentiate a major buyer from a major doer. Although this classification instrument has not been extensively tested yet, it makes sense both from a logical standpoint and from the data of this thesis. This classification instrument is also thought to have interesting potential for future research.

It may be concluded that according to a variety of statistical tests along with the evidence from the partners and clients it was possible to divide clients into three strategic categories.
Table 8 - Comparison of the number of schedules of the schedules questionnaire for which a category has more "yes" answers than another category.

<table>
<thead>
<tr>
<th>Comparison group</th>
<th>C1</th>
<th>C2</th>
<th>C3'</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1</td>
<td></td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>C2</td>
<td>40</td>
<td></td>
<td>4</td>
<td>44</td>
</tr>
<tr>
<td>C3</td>
<td>49</td>
<td>36</td>
<td>4</td>
<td>85</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>39</td>
<td>4</td>
<td>132</td>
</tr>
</tbody>
</table>

* Category having more elements than the one identified in the column.

NOTE: The difference between (3 comparisons X 62 schedules=186 in total) and 132 comes from the number of answers in a category being the same as in the other category.
Figure VI - Diagram to help determine into which category a company fits.

Auditing knowledge  Accounting knowledge  Efforts to control audit fees  Resulting category

2-3 → 3 → 3 → C3
1 → 2 → 2 → C2
0 → 1 → 0-1 → C1

NOTE: No arrow can go up, as preliminary conditions would not be met.

A 3 indicates high, a 0, none.
Figure VII - Model to help to determine into which category a client fits.

LOW/SMALL

Controller's knowledge

Company size

Number of employees in the accounting department

Management's preoccupation with audit fees

Number of schedules prepared in the previous year

Number of steps (planning, execution, control) performed in the previous year

Audit fees in absolute $;

Internal control

Company needs for getting financial statements early after year-end

Size of the company's auditing firm

HIGH/LARGE

MAJOR BUYER

MAJOR DOER
3. Proposition II

PROPOSITION II: The desire to control audit fees is the main determinant of the clients' choice of strategy for the audit process.

It was hoped that it was possible to determine to what extent the desire to control audit fees influences clients' strategy. If the control of audit fees was the main determinant of clients' strategy, the degree of success of given strategies could then be measured against an objective instrument, audit fees.

For a number of clients, the amount of audit fees was available only for the last two or three years. One of the reasons was that many clients had been obtained in the last couple of years. Accordingly, audit fees were not a reliable measure of the impact of specific strategies on audit fees. No statistical test was found to be useful for this proposition. However, a number of questions were specifically asked during the interviews that were related to this proposition.

Approach vs. strategy

Many clients felt that the word strategy had a machiavellian connotation and implied the use of whatever means possible to reach a given objective, usually low audit fees. Clients preferred to describe their approach (rather than strategy) as "positive". "Positive" implied for clients that they expected good results and that good human relations were important. Once clients adopted a given approach, they
were apparently not inclined to modify it. Most clients did not include the preparation of more working papers as a modification to their approach except when there was a very substantial increase in the number of and/or quality of working papers.

Audit fees as a constant preoccupation

All partners mentioned that in recent years many clients formerly in the C1 category had switched to unaudited financial statements to lower fees. Given the tendency for clients to prepare more schedules every year, it was reasonable to expect that the C2 and C3 categories would grow relative to the C1 category. The partners' perception of the evolution of the relative percentage of clients in each category is presented in Figure VIII. Most partners mentioned that these changes over time occurred mainly because of audit fees.

The control of audit fees was not mentioned as an objective (question #10) as often as the researcher expected. However, in nearly all discussions, the clients made it clear that it was normal to control audit fees and that this was an important underlying objective. Although many clients did not identify, directly, the control of audit fees as an objective of their approach, it appears that it was an important variable influencing their behaviour.

Partners indicated that the present economic situation forced clients to be even more sensitive regarding audit fees. Accordingly, auditors were under greater pressures from clients to keep audit fees in check. There were also more changes of auditors than before because of
Figure VIII - Partners' perceptions of the evolution of the relative size of each category for small and medium-size businesses.
disagreements over fees - partners mentioned that this was particularly
the case for the public sector in which the final cost was seen as very
important.

Most clients taking part in the research indicated that they had indeed
increased their pressure on or the extent of their discussions with
auditors regarding audit fees. One partner observed that the new
attitude of clients was often to ask: "What can we do to decrease
audit fees?" For the sample chosen, audit fees increased by an average
of 13% from 1979 to 1980, but only by 5% from 1980 to 1981. In both
years, the largest increase was for C2s. While C1s and C3s had the
same average increase in 1979, C1s had an average increase of only 1%
in 1981, as compared to slightly over 5% for C3s. However, a variety
of factors likely influenced the increase in audit fees. The desire to
control audit fees was only one such variable. The cases in chapters
V, VI and VII provide specific examples of the impact of the desire to
control audit fees on the level of audit fees.

The C1 and C2 clients did not usually discuss audit fees as extensively
as C3s did, because of the absolute dollars involved and the perception
by C3s that they could influence the outcome (audit fees billed). C3
controllers were also more knowledgeable about audits and were well
aware of the greater importance the audit fees of their company had for
audit partners.
Internal cost of audit to clients

The cost of an audit comprises both external and internal costs. Clients can make a tradeoff between audit fees and internal costs for the preparation of schedules. Should clients prefer to incur extra (less expensive) internal costs rather than extra (more expensive) audit fees, this action would tend to support this proposition. No company considered the opportunity cost when asked to evaluate the internal cost of an audit as a percentage of the external audit fees. For nearly all auditees included in the sample, the only internal costs mentioned and evaluated were the accounting personnel's time and the controller's time. There was no effort made to evaluate soft costs such as tired personnel. Accordingly, the cost tradeoff simply became one between the cost associated with internal time versus external time. Internal time was nearly always found to be less expensive than external time. No client estimated that the internal audit cost was more than 60% of the external audit fees. Further details appear in Table 9. The fact that internal time—and thus internal cost—was perceived as a fixed expense could explain clients' efforts to control to a higher degree external fees rather than internal costs.

When controllers had the choice between time spent in more complete preparation for the audit and time spent in dealing with other business problems, many tended to choose the second part of the alternative because it was perceived as either more rewarding or more challenging. The controller's and the president's attitudes were of utmost importance in determining a company's category. For example, C3 companies had the option of being C1s and C2s.
Table 9 - Clients' perception of the internal cost of an audit as a percentage of the external audit fees.

<table>
<thead>
<tr>
<th>Category</th>
<th>Cl</th>
<th>C2</th>
<th>C3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>0-25%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26-50%</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>&gt; 50%</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Average %</td>
<td>21%</td>
<td>38%</td>
<td>39%</td>
<td></td>
</tr>
</tbody>
</table>
Clients looking at auditors' efficiency

Clients were becoming more critical of auditors' activities. They believed that these activities influenced external audit fees. Clients in the C2 and C3 categories were particularly aware that auditors generally tend to overaudit rather than underaudit. Thus, clients tried to monitor more closely the areas in which overauditing was more likely to happen. Controllers in different categories indicated that, with more time available, they would examine more closely what clients could do to facilitate work for auditors so that auditors would be less tempted to overaudit. Moreover, some said that they would even monitor how auditors used their time on the company premises. Apparently, clients perceived that proper time management by auditors might be one way to control fees.

Audit scope is the extent of the examination of evidence performed by auditors. Discussions about audit scope have increased in the last few years. Apparently, many clients felt that too many detailed audit procedures were carried out that were unnecessary and costly. Although most clients did not want to discuss the techniques used by auditors to gather evidence, clients had the impression that auditors were gathering too much evidence. It would appear that a discussion about audit scope was often used as a last resource element.

Another externally-controlled element perceived to affect audit fees was personnel turnover in the auditing firm which impacted on internal as well as on external costs. It was not clear, however, as to how this problem could be solved. Moreover, the audit effectiveness of
different auditors appeared to be quite different. Accordingly, most controllers mentioned at least once to an audit supervisor or partner that they would prefer not to see a given individual on the audit assignment again.

According to an audit partner, many clients did not even agree without arguing, to audit fees raised annually by the percentage rate of inflation. Thus, audit partners had to improve the efficiency and effectiveness of the audit process. It was becoming difficult for the partners to increase fees substantially without a great deal of justification. On the other hand, partners had no real incentive to decrease fees simply because their personnel were particularly effective, because these fees would be used by the client as a comparison the following year.

Evidence not supporting the proposition

Even though evidence to support the proposition has been given, there was also evidence that tended to disprove or not substantiate the proposition.

Most clients hoped to receive valuable suggestions from their auditors. The advice given might bear on taxes, on the company's accounting system or on other business aspects. Other objectives mentioned included to please directors with the controller's work, to please lenders and to determine to what extent internally-prepared financial statements corresponded to the externally-prepared ones. Apparently, lower audit fees was not the sole or necessarily the most important
objective of all clients.

Only one of the 15 clients hired external help for the end of the financial year. No company had ever hired a professional accountant as an external consultant to help in the management of the audit process. The reasons appeared to be threefold: first, clients did not know whom to turn to; second, very few clients thought that there could be net payoffs between the audit fees saved and the fees charged by the external consultant; and, third, most controllers and/or presidents felt quite satisfied with the way they were managing the audit process and did not see how an external advisor could help them significantly. There might also be a fourth reason, the self-esteem of the controllers or presidents involved in the audit process.

Clients did not relate planning and controlling steps with audit fees directly. Table 70 shows the percentage of reduction in audit fees expected by controllers should they prepare all possible schedules and perform all steps mentioned in the questionnaire. For instance, C3's expected average fee reduction of only 4% indicates that C3 clients felt they were doing about every possible activity to decrease fees. Thus, for many clients the audit process was limited mostly to the preparation of working papers and to the planning and control activities which were considered to be a required part of the audit process.

The controllers who perceived the greatest room for improvement in the reduction of audit fees indicated that they intended to put even more
Table 10 - Expected percentage of reduction in audit fees as estimated by the interviewee (president or controller), should the interviewee's personnel perform all applicable clients' activities (steps and schedules) of the audit process.

<table>
<thead>
<tr>
<th>Category</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-15%</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>16-30%</td>
<td>2</td>
<td>1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>&gt; 30%</td>
<td>2</td>
<td>1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Average %</td>
<td>26%</td>
<td>21%</td>
<td>4%</td>
<td></td>
</tr>
</tbody>
</table>

* Expected reduction in fees (in % of actual fees paid) should the company prepare all schedules and perform all steps mentioned respectively in the schedules and steps questionnaires.
effort this year and in subsequent years into improving their management of the audit process.

Conclusion about Proposition II
Lower audit fees appear to be an important objective of clients' strategy. However, it is not clear that the desire to control audit fees is always the main determinant of the choice of a strategy: other determinants might include the clients' perceived service level and the satisfaction with the work done by auditors to corroborate accounting data.

4. Proposition III

PROPOSITION III: Clients in the same category perform/do the same steps/schedules of the audit process.

This proposition was found to be supported; it is possible to predict which schedules a client is likely to add when it is decided that more schedules will be prepared for auditors. Also, auditors should be able to determine which schedules a new client is likely to prepare by identifying what strategic category the client occupies.

The analysis of the schedules prepared by clients revealed that it was possible to classify clients by using only certain key discriminating schedules, rather than all schedules. Indeed, only some of the answers to the schedules questionnaire were very different between clients in one category and the ones in another. These key schedules
differentiating clients from each category are enumerated in Figure IX.
The number of clients in each category preparing the key schedules appears in Table 11. The cut-off points between categories were clear, as shown by the sub-total appearing after each group of six schedules.

The Cochran Q Test

The Cochran Q test was performed for each category to determine if the probability of a client to answer "yes" was the same overall for each company within a given category (null hypothesis). The null hypothesis was rejected for each one of the three categories at the .05 level of significance, using the chi-squared tables (1). As expected, this rejection was caused by the wide range among the total number of "yes" answers given by clients in the same category. The range was at least 14 "yes" answers (out of maximum of 62) for each category.

The binomial test

The binomial test considers the actual number of "yes" answers of each client. The "not applicable" answers were first grouped with the "no" answers because of the dichotomous nature of the binomial. Then the "not applicable" answers were distributed at the pro rata of the "yes" and "no" answers. This procedure is a normal one for this test, considering its dichotomous nature.

For each strategic category, the largest individual difference between actual and probabilistic revealed by the Kolmogorov-Smirnov test occurred at the group of zero or five "yes" answers to the same question and was significant at the .05 level. This result is a strong
Figure IX - Key schedules to help determine into which category a client fits.

<table>
<thead>
<tr>
<th>C1</th>
<th>C2</th>
<th>C3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working trial balance</td>
<td>Cl and:</td>
<td>Cl, C2 and:</td>
</tr>
<tr>
<td>Bank reconciliation</td>
<td>Internal financial statements</td>
<td>Lead sheets</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>Explanations on working</td>
<td>Explanations on working</td>
</tr>
<tr>
<td>list</td>
<td>papers (W/P) re:</td>
<td>papers re: exceptional</td>
</tr>
<tr>
<td>Accounts payable list</td>
<td>extraordinary items</td>
<td>items</td>
</tr>
<tr>
<td>Post auditors' AJEs</td>
<td>Accounts receivable on the bad debt list</td>
<td>Current portion of</td>
</tr>
<tr>
<td>Post closing entries</td>
<td>Prepaid computations</td>
<td>long-term debt</td>
</tr>
<tr>
<td></td>
<td>AJEs for sales of fixed assets</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expense analysis</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managerial W/P</td>
<td>Evaluation W/P</td>
<td>Highly technical W/P</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 11 - Number of clients in each category answering "yes" to the question about the preparation of specific key schedules.

<table>
<thead>
<tr>
<th>Category</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working trial balance</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Bank reconciliation</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Accounts receivable list</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Accounts payable list</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Post auditors' AIEs</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Post closing entries</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td><strong>SUB-TOTAL (/30)</strong></td>
<td>28</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Internal financial statements</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Explanations re: extraordinary items</td>
<td>0</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Bad debt list</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Prepaid computations</td>
<td>0</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>AJEs for sales of fixed assets</td>
<td>1</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Expense analysis</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>SUB-TOTAL (/30)</strong></td>
<td>5</td>
<td>21</td>
<td>29</td>
</tr>
<tr>
<td>Lead sheets</td>
<td>0</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Explanations re: exceptional items</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Current portion of long-term debt</td>
<td>0</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Final set of F/S</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Notes to F/S</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Income taxes</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td><strong>SUB-TOTAL (/30)</strong></td>
<td>0</td>
<td>5</td>
<td>21</td>
</tr>
</tbody>
</table>
indication that clients prepared the same schedules as the other clients in their own category. In each of the zero and five "yes" groups, the actual results always exceeded the probabilistic results. Table 12 illustrates this point for the C2 category. When the "not applicable" answers were distributed on a pro rata basis of the "yes" and "no" answers, the levels of significance obtained were not as good as those just noted.

Coefficients: fractional, Tanimoto and J

The percentage of good matchings (same answer by the two clients being compared) as compared with the total number of questions to which both clients answered "yes" or "no" was computed. In total, 105 paired comparisons were made: the first company with the 14 others, the second one with the 13 others, and so on. Optimally, out of 105 comparisons, the 30 highest percentages of good matchings would be between companies within the same category. Twenty-three out of the first 46 comparisons were good matchings. The two companies involved in each matching had at least 70% of their applicable answers that were the same. The Kolmogorov-Smirnov test revealed that the difference between the frequencies of the actual and the probabilistic number of good matchings was significant at much better than the .01 level.

As would be expected, the good matchings first occurred mainly for the C1 and the C3 categories because of the large number of common "no" and "yes" answers for clients within each of these two categories. Also, most of the worst one third of the matchings were expected to be C1 with C3 comparisons, as these were the two extreme groups. This was
Table 12 - Comparison of the actual and expected results for the percentage of answers with a given number of "yes" - C2 category.

<table>
<thead>
<tr>
<th>No. companies with yes answers</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparison</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actual results</td>
<td>.194</td>
<td>.096</td>
<td>.129</td>
<td>.194</td>
<td>.177</td>
<td>.210</td>
</tr>
<tr>
<td>Expected results</td>
<td>.018</td>
<td>.118</td>
<td>.289</td>
<td>.340</td>
<td>.193</td>
<td>.042</td>
</tr>
<tr>
<td>Difference</td>
<td>.176</td>
<td>-.022</td>
<td>-.160</td>
<td>-.146</td>
<td>-.016</td>
<td>.168</td>
</tr>
<tr>
<td>Cumulative difference (for Kolmogorov-Smirnov test)</td>
<td>.176</td>
<td>.154</td>
<td>-.006</td>
<td>-.152</td>
<td>-.168</td>
<td>-</td>
</tr>
</tbody>
</table>

Significant at the .05 level.
actually the case, as about 70% of the last 35 paired comparisons were between companies in these two categories. Moreover, 81% of the fractional coefficients had a level of significance of .10 or better; the difference between actual and random was substantial. Thus this test supports proposition III strongly.

The Tanimoto coefficient was used to compare the number of common "yes" answers with the total number of questions for which at least one of the two clients had answered "yes". Accordingly, the lowest such coefficients for the good matchings should involve the C1 category and the highest, the C3 category. Table 13 confirms these expectations. The Tanimoto coefficient has one major drawback. Even though a match of six "yes" out of 12 "yes", given by a client looks good, the resulting coefficient is .333 (6 over 18) if the results are compared with the ones of another company with 12 "yes" but .107 (6 over 56) if the other company has 50 "yes". Consequently, it was expected that a lower percentage of the Tanimoto coefficients would be significant at the .10 level than for the fractional match coefficients. This was the case; however, 57% of the coefficients had a .10 or better level of significance. This percentage is high considering that C1s particularly had mostly "no" answers.

In fact, the maximum number of common "yes" is limited for each comparison between two companies by the lowest of the following two elements:

1) Total number of "yes" of Company A less all "yes" of Company A

for which Company B answered "not applicable".
Table 13 - Determination of the relative position of the good matchings, by using the Tanimoto coefficient - schedules questionnaire.

<table>
<thead>
<tr>
<th>Category</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; .600</td>
<td>-</td>
<td>-</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>0.400-.600</td>
<td>-</td>
<td>7</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>0.300-.399</td>
<td>1</td>
<td>3</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>&lt; .300</td>
<td>9</td>
<td>-</td>
<td>-</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>30</td>
</tr>
</tbody>
</table>
2) Total number of "yes" of Company B less all "yes" of Company A for which Company A answered "not applicable".

Computing the ratio of:

\[ J = \frac{\text{Number of common "yes" for Company A and B}}{\text{The lowest of 1) and 2) just above}} \]

a better comparison tool was obtained to compare the results from different categories. The above coefficient was called "J" for the purpose of this research.

The resulting average coefficients were 77%, 82% and 98% for C1, C2 and C3, respectively when comparing the answers of each client only with the answers of the four other clients within their own category. The average probabilities were respectively 39%, 53% and 88%. The level of significance of the J coefficient was determined for the 10 coefficients within each category. Results showed that out of 10 coefficients respectively 10, 8 and 9 J coefficients were significant at the .05 level or better. The J coefficients strongly supported the proposition under study. Indeed, these coefficients showed that the clients answered "yes" to basically the same questions.

Conclusion about Proposition III

The statistical tests and the coefficients used on the data related to Proposition III strongly supported the proposition for the answers to the schedules questionnaire. Clients in the same category tended to prepare the same schedules.
5. Proposition IV

PROPOSITION IV: Clients gradually prepare/perform, each year, more schedules/steps of the audit process.

The logical way to test this hypothesis would have been to examine how many schedules or steps were performed each year for each client over a five year period. For the sample chosen, the data was not recoverable. However, the interviews and questionnaires yielded information which tended to suggest that this proposition should hold.

This proposition implied that changes were likely to occur over time in the schedules prepared by clients in each category. One might expect that those C1 and C2 clients who wished to prepare more schedules would find themselves in a higher category at some point in the future. Based on propositions III and IV, auditors should then be able to suggest to their clients which specific schedules to add. The progression of schedules from C1 to C3 required a significant advance in accounting expertise. Hence, clients wishing to pass to a higher category required staff with the extra skills to handle the increased complexity.

It was found that clients did not necessarily prepare more schedules each year, but rather as the circumstances permitted and following the importance given by a controller to audit preparation. The increase in the number of schedules over the years was not necessarily gradual.
Partners of the auditing firm asked annually, that their clients prepare at least the same working papers as the ones prepared in the previous year. They tried to sell their clients on the idea of doing more each year, until each client's ability level was reached. Even the client's level of internal control did not affect the schedules that auditors suggested that their clients prepare. When the client's ability level was reached (or before), auditors tried to instruct the clients on how they could improve what they were already doing.

It appears that the initiative taken by partners in suggesting to clients that they prepare more schedules had two important advantages. First, this approach limited the discussions on fees actually billed. Fee discussions tended to be short as long as clients did not reach what they thought was their limit, because they perceived that their auditors were giving them the opportunity to perform more activities in the tradeoff zone. Second, auditors were doing more challenging auditing work rather than accounting work. The number of adjusting entries made by auditors tended to decrease as clients prepared more schedules for the auditors.

Most clients thought that auditors were really doing auditing — as opposed to accounting — work for their company, which is a false impression not uncommon for people without auditing experience. Clients perceiving that they could do significantly more and also decrease their audit fees as a consequence, were more inclined to make efforts to do more than those who perceived the opposite. Moreover, clients wanting to prepare more schedules tended to underestimate what
they were actually doing. However, the larger the difference in the number of schedules prepared by clients as per auditors and clients themselves, the more satisfied the clients appeared to be with the approach they were using for the audit, as compared with others in their category. In such cases, the client expected to make no changes as the present situation was found to be satisfactory.

It was difficult to determine from audit fees alone if clients prepared more working papers every year. One of the reasons was the lack of variability of fees for reasons other than inflation. Increases in the complexity of clients' operations or in the number of transactions would provide other reasons for changes in fees.

One way to determine if Proposition IV appeared to hold was to check if C3 clients had answered "yes" to at least the same questions as the C2s and C1s. Table 14 summarizes the average J coefficients between each of the categories. As can be seen, C3s prepared, on average, more of the schedules that each given C1 prepared, than did C2s or other companies in the C1 category. This gradual increase indicates that clients in a higher category (e.g. C3 as opposed to C2 and C1) tended to prepare most of the schedules prepared by clients in a lower category.

For comparisons other than between companies in the same category, the average J coefficients were 85%, 96% and 95%. The average probabilities were respectively 60%, 82% and 81%. The level of significance of each J coefficient was computed for comparisons between
Table 14 - Summary of the average J coefficients for each category - schedules questionnaire.

<table>
<thead>
<tr>
<th>Category compared with</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>77%</td>
<td>85%</td>
<td>96%</td>
</tr>
<tr>
<td>C2</td>
<td></td>
<td>82%</td>
<td>95%</td>
</tr>
<tr>
<td>C3</td>
<td></td>
<td></td>
<td>98%</td>
</tr>
</tbody>
</table>
companies in different categories. Out of 25 J coefficients, respectively 23, 19 and 23 had at least a .10 significance level for C1 vs. C2, C1 vs. C3, and C2 vs. C3. The J coefficients, therefore, strongly supported the proposition.

It appeared that clients tended to prepare more and more schedules. Changes in the number of schedules prepared were not, however, necessarily gradual.

6. Proposition V

PROPOSITION V: The larger the company size, the more activities of the audit process a company is likely to perform.

It was found that clients' attitude and audit strategies changed as the clients progressed in size from small to large. Audit partners could use a company's size to predict a new client's audit strategy.

According to the partners interviewed, all large companies were in the C3 category. To illustrate the company progression from one category to another they frequently mentioned the increase in a company's size over the years. The Conference Board (2) study also mentioned that large companies use a lot of planning and control activities, even when they are already preparing all audit schedules.

One would expect that as the assets of a company increased, so would the resources available for the audit preparation. For the sample
chosen, companies with larger assets or sales tended to fall at the end of the C2 or in the C3 category. The Mann-Whitney U test was conducted to determine the level of significance of the differences existing between categories for the number of schedules as related to each of the following variables: the number of persons in the accounting department, sales and assets.

The U statistic revealed that all differences between C1s and C3s were significant at the .01 level. The difference in assets was significant between C1s and C2s at the .15 level, but differences in the number of persons in the accounting department and sales were significant at the .05 level. Differences between C2s and C3s were found to be significant around the .25 level only. This result could be expected as there were some clients in the C2 category preparing more schedules than a few C3s. Accordingly, the results obtained from the Mann-Whitney U test supported the proposition.

The Spearman rank correlation test was used to test the rankings of the 15 companies based on the number of schedules against the rankings from successively, the number of persons in the accounting department, sales and assets. The correlation coefficients obtained were respectively .579, .629 and .534. When using the percentage of schedules rather than the number of schedules, the coefficients obtained were slightly better: .597, .654 and .544. These results indicate that even when the ranking of individual companies—as opposed to categories—was compared, there appeared to be a moderate relationship between the number/percentage of schedules and the number of persons in the
accounting department, sales and assets.

As soon as an accounting department reached a staffing level of three or four persons, and spurred by the necessity to improve the control over assets and the management of the accounting function, there was usually a strong consideration given to hiring a professional accountant. This hiring usually resulted in the company progressing to the end of the C2 or into the C3 category. Thus, it was not the mere size of a company that placed it in a higher category. It was the size of assets that influenced the hiring of more competent people in the accounting department, who, in turn, had the appropriate knowledge to perform more activities in the audit process.

For most C1 companies, the president was the one directly responsible for the accounting activities. The president or the accountant was the one who prepared the working papers. At the C2 level, it was usually the controller who performed most of the activities of the audit process while at the C3 level, the controller received help from assistants, at least one of whom, normally, had a good accounting knowledge. This assistance made more time available for C3 controllers to prepare more schedules.

The approach used by clients in the C1 category was rather passive and reactive as opposed to the one in the C3 category. Even though the approach could be seen as the result of other factors such as the importance placed on controlling audit fees, it influenced the number of audit activities carried out. A controller capable of becoming a C3
client might prefer the C2 category, in order to be able to devote more time to other activities.

It appeared that the number of schedules could be related to the size of a company as measured by its sales, assets and number of personnel in the accounting department.

7. Findings based on the steps questionnaire

Table 15 represents a comparison of the number of schedules and steps, and the results of a number of tests and classifications. On all counts the number of schedules appears to be a better instrument to discuss propositions primarily because controllers or presidents had the possibility to answer "yes" to most questions for the steps questionnaire while they could not do the same in practice for the schedules questionnaire. Some suggestions are made in the last chapter to improve the steps questionnaire.

The comparison of the number of questions for which a given number of clients answered "yes" was revealing (Table 16). Basically, there were two groups of answers to the questionnaire. Figure X illustrates how it was possible to predict into which one of the two groups a company fell.

The only step that was not related to the preparation of schedules in the tradeoff zone, and which distinguished the C2 and the C3 category from the C1 category was the evaluation of auditors' work. No step
Table 15 - Comparison of the number of schedules and of the number of steps as instruments of identification of the strategic categories.

<table>
<thead>
<tr>
<th>Description of the test or of the classification</th>
<th>Result of schedules</th>
<th>Result of steps</th>
<th>√ if result using schedules is better than by using steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of companies properly classified (/15).</td>
<td>11</td>
<td>5</td>
<td>√</td>
</tr>
<tr>
<td>Number of elements more than 3 ranks away from the optimal ranking.</td>
<td>-</td>
<td>4</td>
<td>√</td>
</tr>
<tr>
<td>Spearman coefficient between # of schedules/steps with optimal ranking.</td>
<td>.954</td>
<td>.794</td>
<td>√</td>
</tr>
<tr>
<td>% of questions for which a &quot;lower&quot; category has more &quot;yes&quot; answers than a &quot;higher&quot; category (C1 vs C2 and C3, C2 vs C3).</td>
<td>5% (7/132)</td>
<td>18% (15/83)</td>
<td>√</td>
</tr>
</tbody>
</table>
Table 16 - Total number of "yes" answers per category for the steps questionnaire.

<table>
<thead>
<tr>
<th>Category # &quot;yes&quot; to each question</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>14</td>
<td>8</td>
<td>3</td>
<td>25</td>
</tr>
<tr>
<td>2-3</td>
<td>16</td>
<td>19</td>
<td>18</td>
<td>53</td>
</tr>
<tr>
<td>4-5</td>
<td>11</td>
<td>14</td>
<td>20</td>
<td>45</td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
<td>41</td>
<td>41</td>
<td>123</td>
</tr>
</tbody>
</table>
Figure X - Instrument to predict the answer of a company to the steps questionnaire.

<table>
<thead>
<tr>
<th>Category</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-medium</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>High</td>
<td>A</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>Very high</td>
<td>A</td>
<td>B</td>
<td>B</td>
</tr>
</tbody>
</table>

* Client's satisfaction with approach used.

**NOTE:** Group A consists of 10 companies in the range of 17 to 23 "yes" and of 1 company with 27 "yes". Group B includes 4 companies with between 31 and 34 "yes". The maximum number of "yes" is 41.
clearly distinguished the C2 from the C3 category, which implied that clients in different categories could perform the same steps, a conclusion confirmed by the Cochran test. This test, used to determine if the five companies in each category appeared to have answered "yes" to the same questions, could not be rejected at the .05 level of significance.

The binomial distribution of the probabilistic results was also determined for each category. Even though the actual results were higher than the probabilistic ones for the groups of zero and five companies with a "yes" answer to given questions - which was hoped for because they were the extreme groups showing perfect agreement - the differences were not significant enough. The distribution of the "not applicable" answers to both other groups of answers at their pro rata did not modify the results in the steps questionnaire.

Because there were many more similarities between the 15 clients' answers to the steps questionnaire than to the schedules questionnaire, one could expect that the good matchings of the fractional coefficients would be more spread out over the 105 coefficients; therefore, there would be less evidence to support the fact that differences existed between categories. The Kolmogorov-Smirnov statistic did not allow rejection of the null hypothesis at the .10 level of significance. Accordingly, it was not possible to prove, at a satisfactory level of significance, that the answers of a client within a given category tended to match better with the ones of a client in the same category than with one in a different category.
The use of the Tanimoto coefficient test yielded the same results as for the fractional match coefficient test.

The J-coefficients indicated that the clients within each of the categories tended to answer "yes" to the same questions. Out of 10 coefficients, respectively 8, 4 and 6 J-coefficients, were significant at the .10 level. However, 7 J-coefficients exceeded the .50 level of significance. It appears that answers to the steps questionnaire were more different between companies than answers to the schedules questionnaire.

The average J coefficients of companies within the same category were 65% for C1, 81% for C2 and 89% for C3. The average probabilities were respectively 52%, 70% and 80%. Although somewhat lower than the actual percentages, the average probabilities showed much less discrepancy with the actual percentage than when the same comparison was made for the answers to the schedules questionnaire. The interpretation of the results obtained corresponded to the observations about the level of significance of the J coefficients.

The average J coefficients for comparisons between companies in different categories were respectively 72%, 81% and 82% for C1 vs. C2, C1 vs. C3, and C2 vs. C3. The average probabilistic results were 61%, 72% and 74%. These results indicate that actual results were slightly better than the probabilistic results. Moreover, the J coefficients increased when a C1 client was compared with a C2 or with a C3 rather than with other companies in the same category. The same was true of a
C2, when compared with a C3 rather than with a company in its own category.

Out of 25 J coefficients for comparisons between companies in different categories, respectively 14, 13 and 9 had a level of significance of .10 or better. However, a total of 11 coefficients had a significance level higher than .50. These results indicate that although most companies in a higher category appeared to perform about the same steps as companies in a lower category, there were some companies which had quite different patterns.

The changes a client made in the past and the intended changes for the near future gave some indication as to where a client was heading and to the client's perception of where the tradeoff zone was. Even though some clients (particularly in the C1 category) seemed to react rather than to act, the steps performed in a given year were usually done again in subsequent years. It was more difficult for a client to think about missing planning and control steps than schedules that could still be prepared. Thus, clients in the same category tended to perform the same steps. Differences with clients in other categories were not necessarily significant. Furthermore, although clients performed at least the same steps as in the previous year, it was not clear how and when they added to the number of steps performed.
In this chapter, each one of the five propositions has been discussed. It was found that clients could be identified with a strategic category based on the schedules prepared. Clients within the same category not only tended to prepare the same number of schedules, but also the same schedules. The desire to control audit fees was found to be a major determinant of the client's choice of a strategy. The size of a company was related to the category a client was in. Finally, clients tended to prepare more schedules each year, although this increase was not necessarily gradual. All propositions appeared to be supported.
FOOTNOTES


CHAPTER V

THE MAJOR BUYERS

1. Introduction

Major buyers prepared few schedules other than the managerial schedules; business considerations were much more important to them than audit preparation. Clients in this category seldom employed a controller. Usually, the one or two people who did all the bookkeeping did not have auditing knowledge and normally lacked the accounting background necessary for their company to become a C2 company.

According to the audit partners interviewed, many of their C1 clients have now switched to unaudited financial statements. Clients in this category perceived the tradeoff zone as smaller than it was in reality, because a number of activities that they could theoretically carry out were thought to be the auditors' responsibility. This perception explained in part why C1s had difficulty in adding each year to the schedules they prepared for the auditors.

2. A representative case - Harvey & Fils-Ltee

Harvey & Fils Ltee (HFL), a small building materials distributor with about ten employees, had not changed its approach to audits for years. The same auditing firm had stayed with the firm since its inception. Even though the number of transactions dealt with by the company increased over the years, the basic operations remained the same. The
president was responsible for most of the firm's accounting and he was fully satisfied to keep his involvement in auditing work to a minimum.

Company background

The company was established in 1955 by the father of the current president. In 1959, the six sons bought out the father and subsequent share buyouts reduced the number of owners to two by 1968. In 1978, the president, Leopold Harvey, bought out the shares of his last brother in the business through non-taxable dividends paid out of the undistributed pre-1972 income. This $400,000 transaction substantially reduced the assets of the company.

Leopold Harvey was passing on more responsibility to his son and son-in-law who were both active in the business. In 1982, the president held 2/3 of the shares and his son and son-in-law held 1/3 together. It was Leopold Harvey's intent to retire and sell the control of the company as soon as he felt that his two successors were ready to manage the business.

HFL sold plywood, doors, and windows of all types mostly at the retail level. It did not sell lumber for house frames. Company sales boomed from 1974 to 1976 and had reached $750,000 in 1982 on assets 1/3 this amount. However, the company was faced with a depressed construction industry and sales levelled for the last few years. The company was modestly profitable and the overall financial picture of the company was healthy.
Audit history and the company’s approach

Leopold Harvey, self-taught in accounting, did most of the accounting for the company and always presented the auditors with the same type of working papers: bank reconciliations, list of accounts receivable, list of accounts payable and list of inventories, together with related information. The auditors performed the same level of work from year to year and annual audit fees increased accordingly: for example, the last three years’ increases were roughly 10%/year, approximately the rate of inflation. The company was now paying approximately $3,000 annually in audit fees alone.

The working papers prepared by Mr. Harvey were useful for managerial purposes and would have been prepared anyway, even if there had been no audit. In fact, Mr. Harvey estimated that he spent approximately 15% of his time in audit-related activities at audit time, most of these activities being discussions with auditors. During the audit period, his son spent no more than 10% of his time with auditors, mostly pulling out documents for them and answering questions.

Mr. Harvey believed that many audit steps were not necessary for a company the size of his. Also, more stringent audit requirements now forced audit personnel to spend eight man-days when they spent only four man-days six years earlier. He respected the audit firm’s quality standards and did not attempt to measure the quality of an audit. The president did not pursue any objectives for the audit; he was satisfied with the current audit and with his approach. Moreover, Mr. Harvey did not think that it would be useful for him to set audit
objectives, as their use would be extremely limited. He thought that possible changes could come when his son and his son-in-law took over the control of the company.

Mr. Harvey's approach towards auditors was friendly; he asked them a lot of questions and discussed extensively with them adjusting and reclassification entries with which he did not agree. He did not feel that his comments and questions were upsetting the auditors. Moreover, he felt he was getting good collaboration from auditors and that it was helping him to monitor the company's accounting records and financial statements. Overall, he felt that the audit was extremely useful to him and to his company. The president did not see any inconvenience to his approach apart from losing his office to auditors for a week. He felt that annual audits allowed the company to begin a new fiscal year with the proper figures. The friendly discussion he had every year on the draft of the financial statements with the audit partner covered all aspects of the business. Accordingly, he did not hesitate to contact the partner when he had problems during the year.

The president did not feel it was worthwhile to hire extra people to prepare more working papers for the auditors. However, one of the very few recent changes in his approach was to discuss audit fees more extensively. This discussion included audit techniques and audit scope. He knew that in the case of his company the fees could be considered fixed to a large extent, but that he could probably reduce his audit bill by up to 25% by performing all steps and preparing all audit working papers. He believed that it was probably not worth the
effort.

3. Observations on the case

The president of the company knew how HFL was doing financially. In fact, his estimate of the last fiscal year-end profit was within $1,000 of the one presented in the audited financial statements. He did not require long computations to get his figures. Furthermore, accounting was a secondary preoccupation, not a key interest. It was more important for him to spend his time running the business. Thus, it was not surprising that Mr. Harvey did not intend to increase the number of schedules he was already preparing for the auditors. Moreover, the president perceived that he could not reduce the audit fees by more than $750, even if he prepared all schedules.

Mr. Harvey used the strategy he felt most comfortable with: discussions about audit fees, audit techniques and audit scope. Audit techniques and audit scope were usually considered mostly by clients that were major doers. Indeed, one had to be quite knowledgeable in auditing in order to use discussions about techniques and scope with a relative degree of success. It was unlikely that Mr. Harvey had any success using these. The president probably also felt that he could not really influence audit techniques and audit scope, but that he could indicate to the auditors his increased preoccupation with audit fees. The president indicated to the researcher that he had never succeeded in having the auditors lower their fees from the invoice sent to him, an indication of the relative power of both parties.
The audit partner knew that Mr. Harvey was not going to modify his strategy significantly in the coming years. The audit partner probably preferred it this way also: this client was cooperative, generated revenues other than audit fees only, and the client's lack of preparation allowed junior auditors to learn the basics of a simple accounting system. Even if the president made an effort to improve his management of the audit process, he would probably have had difficulty in improving it substantially because of his limited accounting and auditing knowledge. He would thus have been dependent on external persons, probably the auditors, to reach this goal.

Since the president was doing most of the accounting, this company was likely to remain in the major buyers category. Mr. Harvey could have taken a few accounting courses, but he had other priorities. However, since schedules are not difficult to prepare for this size of company, a competent part-time bookkeeper could have made regular accounting entries and prepared most of the schedules required. Auditors could have given the bookkeeper perhaps two hours of explanation the first year, and Mr. Harvey could have added the information necessary to explain certain amounts. As the auditors acquired a nearly complete confidence in the entries posted in the ledgers, they could have decreased both their accounting and auditing work. However, unless Mr. Harvey became very dissatisfied, it was unlikely that he was going to change his approach. He thought that he did not need to measure the quality of the annual audit because he had always been satisfied overall by the services rendered by the personnel of the accounting firm.
The annual auditors' visit was an important event that gave the president the opportunity to discuss his business with professionals. The president wanted the comfort of knowing that he was starting the new fiscal year with the proper balance sheet figures. Accordingly, it was understandable that he contacted the audit partner on many occasions during the year when he needed advice on financial matters.

The president could not retire before both his son and his son-in-law knew the business. His most important goal was to show them how the business worked. To explain his audit strategy was probably one of his last priorities. In fact, it was such a reactive strategy that it did not require much explanation. The president appeared confident that the two minority shareholders would develop their own audit strategy when it was time to do so.

4. Generalizations about the characteristics of the major buyers (C1 category)

Major buyers used a satisficing approach towards the audit. As long as the auditing firm met the subjective criteria set by the president or controller, the client was not likely to argue extensively over fees or other aspects of the audit or to consider changing auditors. The fact that none of the clients in this category had varied the approach used for the audit in the last five years, also showed how little importance this category of clients tended to give to the annual audit, with the exception of the few days per year when the auditors were on the premises.
Overall, the C1s' approach was characterized as passive and neglected, but open and collaborative. C1 clients saw no inconvenience to the approach they used, which might explain why they have kept the same basic approach for at least the last five years. The advantages given for their approach were often restricted to only one: they were satisfied with the approach and it caused them no problem. Only one client, the one most likely to switch to another category, made a conscious tradeoff between audit fees and the general manager's time.

The major buyers seldom had more than one person in the accounting function. Often, this person took care of other administrative tasks as well. The accountant's main concern was with the business aspects rather than with activities such as audits. Thus, it was not surprising that usually no special effort was made for the audit. Daily activities were sufficient to keep the accountant busy, and had priority over audit-related activities. There was also a belief by C1 clients that auditors could detect accounting errors easily. Adjusting journal entries made during the audit provided an opportunity for clients to start the new fiscal year with the proper accounting figures.

Clients in this category prepared the basic "managerial" working papers: bank reconciliations, list of accounts receivable, list of inventories and list of accounts payable. The audit supervisor did not prepare a list of schedules which the client should prepare, as the few that might have been required were asked for informally. These extra schedules were often sketchy and required fixing by auditors;
therefore, auditors often preferred to prepare these schedules themselves. C1s could seldom prepare more audit working papers mostly because of their limited accounting knowledge. Accordingly, the tradeoff zone was perceived as relatively small by a C1 client.

In fact, the C1 clients included in the sample perceived themselves as doing more activities than what they were actually doing. Moreover, they usually considered the tradeoff zone to include a smaller number of schedules than were actually included. For instance, income tax returns and final financial statements preparation were often considered to be part of the auditors' zone. Both income taxes and financial statements were the last two elements in the schedules questionnaire that clients were considering doing. For these clients, there were many other schedules they considered difficult and necessary before they could even consider preparing financial statements, a typical C3 activity.

C1s felt that auditors were the ones who had to perform the audit and who knew how to do it. An audit was also perceived as the auditors' problem, but the client was willing to help when asked. As shown in Table 17, the C1 accountant did not spend much time on audit-related activities during the audit period. Moreover, since clients required little preparation for the audit, they were often ready for the audit as early as two weeks after their fiscal year-end.

Audit fees usually cost C1 companies $3,000 to $5,000. Clients estimated the extra internal cost to be no more than 15% to 20%. Even
Table 17 - Time spent by controllers on audit-related activities at audit time.

<table>
<thead>
<tr>
<th>Category</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-25%</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>26-50%</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>&gt;50%</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>15</td>
</tr>
</tbody>
</table>

NOTE: The above percentages are in comparison to the weekly office hours e.g. 35 or 37.5 hours.
though the disbursement did not seem high, most clients considered that an audit was not an income-generating activity. Accordingly, the clients who intended to add steps to the ones they were already performing, were considering steps related to audit fees. For instance, the discussion on budgeted audit fees constituted such a step. This step was often taken mostly because C1 clients saw no alternative to control fees other than discussing budgeted fees and preparing substantially more schedules. Thus it seemed that there had been little real pressure on auditors by C1 clients to control their fees more tightly. C1s appeared to accept more willingly than clients in other categories an annual increase in audit fees corresponding to the rate of inflation.

Junior auditors often compensated for the lack of accounting staff of clients. For a number of C1 companies, accounting work - including preparation of audit working papers - and advice by chartered accountants during the year amounted to fees as high as audit fees. This situation was understandable as C1 accountants normally had no auditing experience, no professional accounting designation and usually only basic bookkeeping courses. Their lack of auditing knowledge limited their interference with auditors' work and their discussions with auditors. Thus, they rarely really challenged what the auditors were doing.

Although audit scope and audit techniques were sometimes discussed, C1s did not think that either their discussions or approach had more than a minor impact - when it had one - on auditors and on the audit process.
Moreover, audit scope, and particularly audit techniques, were considered to be completely the auditors' decisions. Most C4 clients were thus reluctant to discuss topics related to these two areas.

The company in the sample of five C4s that was the most likely to switch soon to the C2 or C3 category was different from the other four. Its assets and sales were over $2,000,000, the client was paying approximately $8,000 in audit fees, and the internal cost was estimated the highest at 30%. Moreover, this company's general manager's answers corresponded to the lowest estimates in his category for: the extent of detailed planning used and working papers prepared; the level of discussions on audit scope and audit techniques; and the improvements to internal control carried out. However, the discussions on audit fees were at the highest point on the 1 to 7 scale. All these answers were indicative of a conscious attitude on the part of the general manager to determine where the company actually was in the tradeoff zone. Incidentally, the general manager had just hired, as controller, the audit senior who was formerly responsible for the audit assignment of his company. The general manager expected a better management of the audit process in 1982 than in previous years.

Even though there was usually a very short meeting at the beginning of the audit, the only official meeting between the owners of each company and the audit partner took place before the finalization of the financial statements. During this meeting, the discussion focused on the financial situation of the company but many other business aspects important to the company were discussed. This meeting was perceived as
one of the most important meetings owners had during the year. Fees charged for this discussion and for other meetings and phone calls during the year did not matter as much as audit fees.

Owners of C1 companies counted on audit partners as friends and even as business confidants; an excellent relationship was thus important. In general, the particular relationship between a C1 owner and the audit partner might have explained in part why clients in this category found it difficult to select a professional firm. Clients lacked the knowledge as to what criteria they should use for the selection of an audit firm. In the selection process, the fact that the C1 category based its choice on the reputation of the auditing firm proved the extent to which external validity was important. Clients in this category thought that a prestigious auditing firm added significance to their financial statements and also weight to their standing with bankers.

Each strategic category had high quality standards for its auditors. Each one also treated auditors as professionals; clients expected that it was favorable for them to act this way. C1s measured the quality of an audit mostly by their judgement of the auditors on the company premises. This judgement appeared to be extensively influenced by the type of questions auditors asked. Rarely were other quality measures used; it was believed that the good reputation of the accounting firm and the partners' knowledge guaranteed the quality of an audit.

The overall attitude of C1s' personnel towards auditors on the premises
was friendly. However, three of the five C1 companies included in the sample even described their attitude towards auditors as "relaxed". None did so in the two other categories, an indication as to how important human relations were for this category.

5. Conclusion

The major buyers had a rather passive approach towards the audit. They lacked the competent accounting personnel that would have helped them to reach a higher category. An audit was important mostly because it helped the company to obtain "accurate" figures and important business and financial advice. Overall, the major buyers' strategy appeared to be reactive and the audit process was not thought of as one that clients should have managed.
company's computer and to take whatever other steps were required to improve the management of the audit process.

3. Observations on the case

Audit preparation is easy when the extra requirements imposed are well integrated with the other accounting tasks. However, when a client of the size of GGI has problems preparing and planning for an audit, this situation is usually indicative of more important problems, at least in the accounting function. In this case, the accounting system and controls fell behind the growth of the company. When this falling behind occurs and the company's previous growth level continues, it is difficult to get the accounting function on the right track again. Priority is usually given to the most pressing accounting activities, i.e., accounts receivable, accounts payable and inventory listing preparation. These are the basic managerial schedules characterizing the C1 category.

The level of audit preparation could have been a sign of the accounting function's falling behind at GGI. As many other small business managers do, GGI's president waited until GGI's growth and level of activities exceeded by too wide a margin the capacity of the accounting department and the competence of personnel to handle more complex tasks. The problems faced by the president could have been reduced had the company been staffed better in the accounting department. Audit preparation would have picked up accordingly. It is likely, that the president then would have developed a deliberate audit strategy, rather
2. A representative case - G. Gaspard Inc.

For the last five years, Mr. Pierre Gaspard, president of G. Gaspard Inc., struggled with the annual audit. Even though the personnel of his company prepared a fair number of working papers for the auditors, Mr. Gaspard felt uneasy about the planning and control steps of the audit. Moreover, he did not feel that his company was preparing for the audit at a level that was suitable for its size. The president preferred to organize audit-related activities better before trying to have his personnel perform substantially more work for the auditors.

Company background

G. Gaspard Inc., an automotive parts distributor, was established 40 years ago by Mr. G. Gaspard. The founder succeeded in gradually developing a local market in the Montreal area. In 1972, his two sons took over the business as president and vice-president.

In recent years sales increased by 15%-18% annually to reach $30 million; the company had assets of $9 million. Sales and asset amounts included a large, recently-acquired subsidiary operating in the Toronto and Vancouver markets. The subsidiary was in the same type of activity as the parent and would have been a direct competitor had both companies operated in the same market. Even though this acquisition hit hard on the cash flow, the company was profitable and the president was optimistic about the future of his company.
Audit history and the company's approach

Up to 1978, G. Gaspard Inc. (GGI) dealt with a one-man audit office. Mr. Pierre Gaspard then decided to change auditors for three reasons. First, his rapidly-expanding company was becoming too dependent on a single individual. What would happen should this individual die? Second, Pierre Gaspard expected that GGI could get a much wider variety of services from larger accounting firms. These firms would be in a better position to meet the expectations of management. Third, the president was thinking about possible trade relations; for example he knew that most companies spend at least $200/employee on items such as the ones sold by GGI: accordingly, it was possible for his company to acquire a new client which might bring in more revenues than what it would cost the company in audit fees. Finally, Mr. Gaspard considered four audit firms and evaluated each one against a number of criteria before selecting the present audit firm.

After the first audit, the audit partner made it clear to Mr. Gaspard that the audit fees were closely related with the number of and the quality of the working papers prepared by the company. However, the firing of the controller and the resignation of his successor which occurred during two consecutive years near the fiscal year-end, made it impossible for GGI's president to improve significantly his management of the audit process. Pierre Gaspard subsequently organized the company differently, following in many regards, a number of suggestions made by the auditors. He was expecting important improvements for the next audit.
Mr. Gaspard made sure that all members of his personnel were assigned specific responsibilities for the audit. The extent of the preparation was limited by the human resources of the company and the particular circumstances present at year-end. The president described his approach as professional, positive and realistic. He thought the impact of his approach on the audit to be positive overall. His two main objectives for the audit were to get the actual financial results of the company no later than six weeks from year-end and to get valid figures, particularly for inventories. Mr. Gaspard's objectives were closely related to the manner in which he measured the quality of an audit, the delivery of the set of audited financial statements six weeks after year-end and the accuracy of inventory stocktaking.

Out of seven meetings held with auditors, six were related to the planning and accuracy of the inventory stocktaking procedures. The seventh one, which involved the two main shareholders and the audit partner, consisted of a discussion about the draft of the financial statements.

Mr. Gaspard estimated that his company could have aimed for as much as a 50% reduction in audit fees to $7,000 should his personnel prepare all schedules and perform all steps of the audit process. The last two years had seen audit fee increases of 20%. However, it was estimated that for the last audit period key accounting personnel spent between 80% and 100% of their regular office hours on audit-related activities. Consequently, it was one of the president's goals to increase significantly the quantity of working papers prepared through the
company's computer and to take whatever other steps were required to improve the management of the audit process.

3. Observations on the case

Audit preparation is easy when the extra requirements imposed are well integrated with the other accounting tasks. However, when a client of the size of GGI has problems preparing and planning for an audit, this situation is usually indicative of more important problems, at least in the accounting function. In this case the accounting system and controls fell behind the growth of the company. When this falling behind occurs and the company's previous growth level continues, it is difficult to get the accounting function on the right track again. Priority is usually given to the most pressing accounting activities i.e. accounts receivable, accounts payable and inventory listing preparation. These are the basic managerial schedules characterizing the C1 category.

The level of audit preparation could have been a sign of the accounting function's falling behind at GGI. As many other small business managers do, GGI's president waited until GGI's growth and level of activities exceeded by too wide a margin the capacity of the accounting department and the competence of personnel to handle more complex tasks. The problems faced by the president could have been reduced had the company been staffed better in the accounting department. Audit preparation would have picked up accordingly. It is likely that the president then would have developed a deliberate audit strategy, rather
than face chaos at each year-end. Losing a controller two years in a row at year-end certainly did not help.

The acquisition of a subsidiary placed an extra burden on the accounting department, although most of the clerical accounting operations of the subsidiary were still retained in Ontario and British Columbia. It would not have been a major problem if five or six years earlier the president had hired a competent controller and one or two assistants knowledgeable in accounting.

A proper planning and scheduling of the regular accounting operations were probably necessary before any appropriate planning of the audit-related activities could be done. The accounting department personnel still appeared to be buried under their regular tasks. Indeed, the passing of 80% to 100% of regular hours on audit-related tasks at audit time was generally indicative of the necessity to put books back into shape before the auditors' arrival. It was also a sign of the extent of the collaboration brought to auditors when they were on the premises; in this case, the collaboration appeared good. This duality of "problems and efforts to improve" was characteristic of this company.

Although some important problems remained, the president was making serious efforts to improve the management of the audit process. He knew that as a result of improving the situation in the accounting department, it was likely that the management of the audit process would be improved. For example, with the accounting personnel
available, three planning meetings and three meetings to discuss the value of inventories with the auditors regarding inventory stocktaking should not have been necessary. Normally, a total of two meetings instead of six should have been sufficient. The six meetings might have been because of the lack of confidence that the president had in the inventory procedures set up, mainly because his controller did not review these procedures before leaving. However, if the inventory stocktaking and valuation procedures had been satisfactory, they should have remained basically the same from year to year. The president also had the option to develop substantially the accounting function and to ask his personnel to prepare more audit schedules. He rejected this option as more risky because of the difficulty to control the developments in the accounting department on top of consolidating the operations already performed.

The selection process used for the choice of an accounting firm was typical of a large-size C3 company. The president considered other important business considerations, including trade relations, in the selection process. As a consequence, mostly large accounting firms were considered. The possibility of future trade relations excluded the changing of auditors for reasons other than major disagreements between the president and the audit partner.

The auditors made a number of suggestions to CCI for improvements to its audit process. The president followed most of their suggestions, including the hiring of a chartered accountant responsible for organization and methods, which would improve substantially not only
the planning, execution and control of the audit but also other activities for which this person was responsible. The president's personal involvement indicated the importance he was giving to improving all accounting-related activities. He was really trying to improve the activities of the audit process carried out by his personnel. He also was aware that improving the audit implied improving other aspects of accounting.

Although the president's audit objectives had been limited and the strategy used mostly reactive, it was likely that changes were coming. It would not have been surprising if the president's audit strategy became more and more deliberate and active, as he improved the audit process. Another probable consequence of the improvements to the process was likely to be the examination of auditors' activities, a number of which might be challenged.

The G. Gaspard Inc. case particularly showed how much the management of the audit is dependent on a company's accounting system and personnel. In this case, the company had fallen far behind in terms of audit preparation and management from what would normally be expected from a company of this size. The desire and efforts of the president to straighten out the accounting function and the audit process could result in a move to the C3 category.
4. Generalizations about the characteristics of the in-transit group

(C2 category)

The in-transit group was so called because clients in this category usually had a good perception of what should be done to get into the C3 category. According to the partners and the clients themselves, the sample chosen were companies which fitted the full range of the in-transit group.

As seen in Table 17, the in-transit group was the category in which controllers tended to spend the most time on audit-related activities, particularly in the preparation of schedules with which they were not always familiar. Preparing schedules once a year was not enough to become thoroughly familiar with the process. Furthermore, the lack of supporting accounting staff placed a heavy burden on the controller at a company’s fiscal year-end. When the controller left an organization, particularly near year-end as occurred twice at G. Caspard Inc., the degree of preparedness of a client for the annual audit was seriously affected.

One of the major problems encountered with C2s was that they were not always ready for the audit as scheduled. An audit was not yet important enough for clients in this category to make it worthwhile for them to be ready on time. Moreover, the controller often assumed most of the audit-related tasks. Finally, audit staff rescheduling was not costly for the company, but it was for the accounting firm.
Although C2 controllers were making efforts to improve some aspects of their management of the audit process, they tended to overestimate what they were actually doing. On average, there was no difference between companies in the C2 and C3 category as to how they evaluated themselves on the use of the following: extent of audit planning, internal control improvements, working papers preparation and discussions about audit techniques and audit scope. The two C2 companies that were evaluated by their controllers or presidents as the highest in the number of schedules and steps prepared/ performed were not the same as per the audit partners' evaluation. For the three categories, but particularly for C2s, the larger the difference between a controller's and an audit partner's evaluation of the number of schedules prepared by the client, the less likely it was that the client would consider doing more schedules in the coming years. However, such a client was likely to want to add or tighten a few control steps such as monitoring more closely what auditors were doing when on the company premises.

Four out of the five clients included in the C2 sample appeared satisfied overall with their position within the C2 category. They felt they had neither the required resources nor the desire to go much further for a few years. This satisfaction might appear surprising, since this category was called the "in-transit" category. However, a professional accountant hired as a controller or consultant appeared to be required to make the president aware of the resources (time and personnel) necessary for the company to get into the C3 category. This consciousness of the required resources did not appear to come at the same time as the consciousness of the steps necessary to become a C3.
As the case in the following chapter shows, a company can sometimes pass rapidly from one category to another. But overall, it was more difficult for a client's personnel to pass from the C2 to the C3 category than from the C1 to the C2 category. Indeed, partners have observed companies passing from the C1 to the C2 category within a few years simply because these clients followed auditors' suggestions on how to prepare working papers and also because the company's accounting personnel had the basic required accounting knowledge to do so.

What C2s needed to become C3s was personnel with auditing experience and a more complete accounting knowledge. GGI met both these criteria. The president of GGI was not satisfied with being a C2 and he wanted to reduce audit fees substantially. As was the case for the C1 in the corresponding situation, the president evaluated his company lower on the extent of audit preparation and discussions than all other controllers in his category did for their companies. The president chose to put considerable effort into improving detailed audit planning because he felt that it was in this area that the ratio of marginal utility over efforts was the best.

There are instances where C2 controllers with a professional accounting designation do not or cannot move their company into the C3 category. A lack of interest from the controller to prepare working papers, the presence of other important business problems and issues, and a lack of accounting personnel support are some examples of these instances. Clients in the in-transit group did not prepare more working papers than those that auditors requested. Moreover, the
working papers they prepared were not considered by partners to be as complete as the same ones prepared by clients in the C3 category. Controllers in this category were the ones considering audit fees as the nearest to completely variable but, surprisingly, most of them did not want to increase the number of working papers prepared. Their limited accounting and auditing knowledge, together with their time available to prepare more schedules, were probably the reasons for preferring not to do more.

C2 controllers preferred to look at varying their strategy by ways other than increasing their preparation of working papers. For instance, realizing that it was possible to influence junior auditors, some C2 controllers sometimes tried to do so when they felt some audit program steps were far too detailed.

Clients in the in-transit group appeared more aware of the possible impact that their approach might have on both the audit and the auditors. For instance, they saw disadvantages to the approach they used, while C1s did not. Even though audit fees were mentioned to be an important consideration, no client seemed to have integrated all important steps and to have considered the tradeoffs present in the audit process.

There was no agreement between clients as to the steps to perform well in order to control fees. The answers clients made seemed to be closely related to three factors: the company's weaknesses, the company's problems during audits and the controller's preferences. For
instance, no client agreed as to what steps he would consider doing last. Clients in this category appeared to have a better idea than clients in the C1 category as to what should be done well in order to control audit fees.

C2 companies needed fewer adjusting entries by auditors than C1s did because of better and more constant monitoring of the entries made by clerical personnel and better accounting knowledge by controllers. C2s prepared not only managerial, but also evaluation working papers, such as prepaids computations and the list of accounts receivable on the bad debts list. However, controllers' knowledge was far from sufficient to allow them to fill out income tax returns and prepare finalized financial statements (highly technical working papers). Clients in this category still thought that audited financial statements were the auditors' and not the client's. Accordingly, they did not think that their approach influenced substantially the quality of the financial statements prepared by auditors.

While C1s did not measure the quality of financial statements, C2s did measure it. Clients in the C2 category evaluated the quality of financial statements on the clarity and appropriateness of the notes to financial statements and also on the format (presentation) of the financial statements. Some clients in this category also measured the quality of income tax returns preparation through notices of assessment received from Revenue Canada. Although C2s used several measures to determine the quality of financial statements, they used the same criterion as C1s for measuring the quality of an audit: the type of
questions asked by the auditors working on the company premises.

Often, only one meeting was necessary between the audit partner and the owners of companies in this category. This meeting was held before the finalization of the financial statements, as was the case for C1s. When a client owned large quantities of different types of inventories, had complex operations, or needed consolidated financial statements, extra meetings were held. Clients in this category also put a lot of emphasis on receiving good advice from the auditors, or, as in a few cases, the satisfaction of lenders was also mentioned as an important objective of the audit.

5. Conclusion

The in-transit group could probably also have been called the in-between group. Even though it had characteristics of its own, it stood in many regards between the C4 and C3 categories. It had more resources to devote to the audit process, but still lacked the controller able to carry the company competently into the C3 category. Even though C2s often made considerable efforts to prepare schedules, their approach did not integrate all important steps and, as such, this group did not manage the audit process completely. An audit was still often an activity carried out by the auditors while the personnel of the company could only collaborate in certain respects.
CHAPTER VII
THE MAJOR DOERS

1. Introduction

Major doers (C3s) prepared most of the audit schedules; consequently, C3 controllers and their personnel performed most of the activities in the tradeoff zone. Schedules prepared usually included highly technical working papers such as financial statements and the notes to financial statements. C3s thought that doing all the steps mentioned on the step questionnaire plus the preparation of all schedules in the tradeoff zone would decrease their audit fees by no more than 5%.

Although it appeared difficult for clients in this category to do more than what they were currently doing, certain controllers succeeded in marginally improving their management of the annual audit so that they reached the flexibility section of the tradeoff zone (see Figure V) and/or reduced the internal resources required to prepare adequately for the audit.

2. A representative case – Technart Inc.

The arrival of Claude Arbour as controller drastically changed the role played by auditors for Technart Inc. (TNI). Until he joined TNI (disguised name) towards the end of fiscal year 1981, auditors had to prepare most of the audit schedules and make numerous adjusting entries. In 1981, when the auditors walked in, nearly all possible
working papers were ready and the controller had prepared the financial statements; no adjusting entry was necessary. Few further improvements to the management of the audit process were thought to be possible.

Company background

TNI, a supplier to printing companies, was established in 1973 by the present two shareholders. TNI had four main suppliers, 20 employees and consisted of four departments: the order desk, accounting, shipping/receiving and sales. The first three departments were the controller's responsibility. Sales could be divided into three related activities: materials, machinery and maintenance (including repairs). Since competition was intense, service was an important factor in the company's strategy.

In the first years, the partners received a lot of help from the present audit partner, who had been in charge of the audit engagement since incorporation. The company growth was substantial, with sales near the $15 million mark and assets of about $3 million. However, sales were slowing down because of a downturn of the economy and the limited market size. The company was in a sound financial position with the appropriate level of cash flow.

Audit history and the company's approach

The company's audit history was divided into three phases. For the first five years, the personnel prepared only a working trial balance. In a few instances they helped the auditors by preparing a few basic
schedules under the auditors' supervision. The accounting firm personnel were often called in during the year to perform accounting tasks such as preparation of T4s and interim financial statements. These services were costing the company twice as much as audit fees. At year-end, numerous adjusting and reclassification entries had to be made to offset errors made during the year.

From 1978 to 1980, the client prepared some working papers for the auditors: bank reconciliations, list of accounts receivable and accounts payable, list of inventories and a few more basic audit schedules when specifically asked for by the auditors on the premises. Auditors still had to prepare adjusting entries.

Even though sales had regularly increased by 40% or 50% from one year to the next, the level of preparation for the audit and the competence of the accounting personnel of the company did not keep up the pace. Accordingly, audit fees increased by $2,500 every year from 1978 to 1980 and by 1980 were over $10,000.

Towards the end of the fiscal year 1981, the president of the company hired a knowledgeable controller, Claude Arbour, a chartered accountant with five years of auditing experience. Although Mr. Arbour had never been on this audit assignment before, his experience was with the firm auditing TNI's books. Accordingly, he knew exactly what was required by the auditors at year-end and how to prepare correctly the required audit schedules.
Mr. Arbour preferred to prepare all working papers for 1981 rather than use the previous approach because audit fees were costly and he had the experience and knowledge for this type of task. As a result of the extensive audit preparation of TNI, audit fees decreased by $2,000 instead of increasing by approximately $2,500 or $3,000, as would otherwise probably have been the case.

For 1982, Mr. Arbour intended to prepare progressively for the audit. He did not believe in an audit prepared only during the last fiscal month. When members of his accounting personnel had some time available, he asked them to update audit working papers that could be updated such as expense analyses and fixed assets acquisitions. This approach also allowed him to evaluate the competence of his personnel.

The two major disadvantages the controller saw were the extensive time it took him and his personnel to prepare so adequately for the audit and the more passive attitude of auditors, who had no entries to make or financial statements to prepare.

The controller evaluated the quality of the audit based on the type of questions asked by auditors and on the way they managed the audit. He felt that an audit was really useful because auditors could bring him suggestions for one aspect or another of the accounting or internal control systems. Also, Mr. Arbour felt that both shareholders were receiving an external confirmation of the quality of the work done by the controller and his personnel.

Claude Arbour estimated 20% of his regular office hours were spent on
audit-related activities at the time of the audit. His estimate for key accounting personnel was 30% for the corresponding period. In order for these percentages to remain constant, he insisted that auditors group their questions before bothering either his staff or him.

Three meetings were held with auditors. The first one, six or seven weeks prior to year-end, included planning activities and some discussions with the audit partner on the financial and operational results of the company. These discussions were greatly facilitated by the controller sending the audit partner monthly financial statements. The second meeting, five weeks after year-end, at the time auditors were to start the year-end audit was held to operationalize the audit so that it could run smoothly. The last meeting was held one month later and consisted of discussions of the financial statements among the two shareholders, the audit partner and the controller.

Mr. Arbour pursued two main objectives during the audit: first, to satisfy the lenders and three very important suppliers, and second, to control audit costs. He thought that there were two key areas of the auditors' work to focus on in order to control fees: inventory costing and tests on sales and purchases. The first area was complex and needed explanations; the controller could prepare no working paper on the second one since the auditors were the ones who decided on the selection of items to test.

Overall, the controller did not believe he could do more or better
working papers for the audit, as he was already meeting the same standards for the preparation of working papers as he had to meet when working as an auditor. Accordingly, he intended to increase annually the working papers that could be prepared through the already sophisticated computer software, until he saw no further improvement possible. Should he find time to do so, Claude Arbour intended to examine how auditors were actually spending their time when on the premises of TNI.

The controller was aware that the major tradeoff for the audit was between his time and audit costs and that he might have to change his approach should the company size continue to increase and accounting resources not expand accordingly.

3. Observations on the case

The hiring of a controller who is both knowledgeable in accounting and auditing can substantially influence the strategy used by a client. This was the case for Technart Inc. TNI was now preparing all schedules including the financial statements and the tax returns. The approach also had changed from laissez-faire (passive) to active which illustrates that working papers preparation is only one of the steps available to clients in their management of the audit.

As was the case for GGI, the owners might have searched for a competent controller a few years earlier. The annual savings in audit-related fees alone were about $5,000 in 1981 dollars. A good controller also
brought strong support to accounting and to inventory control, thereby allowing the owners to concentrate on high priority matters such as client development and service. Moreover, all accounting problems could then be solved more rapidly and less expensively within rather than outside the company. The savings on accounting activities performed and on advice previously given by personnel of the accounting firm probably amounted to about $10,000 annually. These savings more than covered the difference between Claude Arbour's and the former controller's salary. There were probably other savings stemming from the hiring of Mr. Arbour, including a better management of inventory and of the accounting function. However, it was not the purpose of this research to identify the savings from these other sources.

If Mr. Arbour had been hired by G. Gaspard Inc. instead of TNI, it would have been more difficult to reach the major doers category because of the size of the operations, the type of activities of the company and the situation and backlog that existed.

Mr. Arbour gave the complete preparation of audit schedules a high priority. The low percentage of time spent on audit-related activities at year-end by the controller and his personnel was a good indication of the level of planning and control reached. The two planning meetings with auditors indicated that Mr. Arbour really wanted the audit process to go smoothly in all aspects. Mr. Arbour was mostly concerned with the activities in the auditors' zone. He knew he had little influence on the activities not in the tradeoff zone and that activities like the selection of a sample were subject to the audit
supervisor's judgement.

Although Mr. Arbour spent only 20% of his time on audit activities, the explanations on the working papers were quite complete. The accounting reports and system were both easy enough to understand that the auditors did not often need explanations. The audit process can become a straightforward process but it requires constant effort from the controller.

Mr. Arbour knew that there were still improvements possible in his management of the audit process. He intended to carry these out gradually. Thus, it was likely that in a few years TNI would be even further in the C3 category.

Once all the activities in the tradeoff zone - including the activities in the flexible part - were exhausted, controllers who still wanted to improve the process had no alternative: they had to look more closely at the auditors' zone. Mr. Arbour intended to determine how auditors spent their time on company premises and to influence a few auditors' activities, as much as he could without getting personally into the auditors' zone.

This case distinguishes two types of controllers, one who focuses on preparing most schedules adequately and one for whom the preparation of audit schedules is only part of the audit process. Claude Arbour was in the second group and was likely to use to a greater extent all opportunities he had to refine his strategy. He even expected that his
available time might not always be sufficient to leave him the opportunity to do as much as he did for the 1981 audit. It is interesting to note that Mr. Arbour intended to computerize as many of the audit schedules as possible. As a consequence, he should have more time available (although many schedules were prepared by his personnel, under his supervision). In general, it is much easier to allocate some time to key planning and control steps than to audit schedules preparation. Whatever preparation Claude Arbour does in the future will likely be a deliberate tradeoff on his part.

This case illustrates that a controller's knowledge and attitude are probably the most important factors in the determination of a client's strategy. Although a company is in the C3 category, it is still possible to improve the audit process, particularly by analyzing the process carefully. Proper care should also be given to the planning and control of steps important in the control of audit fees.

4. Generalizations about the characteristics of the major doers (C3 category)

The major doers prepared virtually all working papers except, in many instances, the ones related to income taxes. The financial statements were usually ready before the auditors began the year-end audit. Even though there might have been detailed discussions between controllers and audit managers or partners on some important entries, adjusting entries, other than income taxes, were seldom made.
For these adjusting entries to occur, the amounts had to be material and auditors needed support from the CICA Handbook and/or the accounting literature. Adjusting entries were felt to be costly for the company and efforts were thus made to have the correct figures before the auditors arrived. C3 controllers knew that the financial statements were theirs, and they acted accordingly.

C3s behaved as if an audit was not the auditors' business only. For example, major doers sometimes tried to stretch the tradeoff zone to the point where it included a few activities usually considered in the auditors' zone but that auditors were willing to let go. These activities are represented by the flexible part of the tradeoff zone (see Figure V).

C3s perceived planning as an essential audit activity. Time spent planning was felt to be saved many times during the audit. The planning of steps included the time necessary to plan the preparation of audit schedules. The controllers who ensured that working papers were prepared as early as they could and on a regular basis for the expense analyses, did not spend much time at year-end on audit-related activities. They ensured that working papers were in the expected order and format and with the clarity of explanations expected by the auditors.

The importance of planning explained why there were two planning meetings with the auditors, one a few weeks before the audit started and another one during the audit. These two meetings were on top of
the informal daily discussions between the client and the audit supervisor. The meeting held during the audit was also useful to monitor the progress of the audit. C3 clients wanted to collaborate to the greatest extent possible with auditors. They tried to determine in what areas and in what ways they could be helpful to auditors. Clients felt that an extensive and improved preparation of detailed working papers was an essential element in their strategy. What helped C3 companies was that, with time, the requirements of an audit became well integrated into their accounting and planning systems.

There were some instances where controllers in this category performed some of the activities that they knew auditors would carry out. The purpose of this activity was to make sure that auditors would not encounter any difficulty. In one instance a controller participated in the preparation of working papers and was passing on audit trails; he believed he could discover potential sources of savings, not necessarily related to savings in audit fees.

Extensive efforts by the controllers in this category were often the result of C3s cost-consciousness. Reasonable audit fees were not sufficient, as in the case for C1s; audit fees had to be as low as possible. Surprisingly however, low audit fees were mentioned only once as an objective pursued during the audit. This objective appeared to be integrated in each client's approach. In fact, each controller interviewed saw lower fees, less disturbance of his personnel by auditors and less audit time spent by auditors as important advantages to his approach.
On the other hand, there were drawbacks mentioned. Controllers thought that auditors were more passive and gave a smaller number of useful recommendations when all working papers were prepared by the client. Auditors also tended to ask for more information when they were given more working papers. The audit period was busy for accounting personnel from an accounting standpoint as well as from an auditing one; the personnel were tired. A controller even suggested that auditors felt less useful, did not have the last word on the notes to financial statements and worked under more pressure because of a tight audit budget. Accordingly, there could even be some antagonism present at times. Some controllers felt that a very friendly attitude towards auditors could jeopardize the means used by controllers to add pressure on auditors.

In all five major doers there was at least one person in the accounting department who had an accounting professional designation and who also had auditing experience; usually this person was the controller. Accordingly, controllers in this category did measure the quality of an audit on audit steps performed and not only on the questions asked by auditors. The quality of an audit was perceived as an objective of the chartered accountancy firm rather than as one of the company management. Management already knew the financial figures and auditors acted as competent external personnel who came to confirm the internally-generated figures. This procedure was necessary for legal reasons in most instances, but was felt to be important for the client's lenders.
The auditing knowledge and experience of controllers have usually made them more critical about audit techniques and steps. For instance, controllers of companies included in the sample often found that many audit steps were far too theoretical, and not as useful as they could be. They agreed that their perception had changed from the time they were auditors themselves. This change of perception might explain at least partly why the C3 category was the one in which the largest number of controllers had changed their approach in the last five years. The statistics appear in Table 18. C3 controllers changed their approach because they felt it could be improved and they wished to control audit fees. Improvements to the level of audit fees were thought to come from many sources, and controllers acted accordingly. In a few instances, controllers even considered "squeezing auditors more to make sure that they are about 100% productive". Overall, although they respected the auditors, the controllers knew they could influence auditors, especially junior auditors.

The three controllers who were already preparing the largest percentage of schedules wanted to spend a greater portion of their time on more activities requiring audit-related brainwork than on the preparation of most of the audit schedules. Such activities included better planning and controlling of the audit process. They would have liked to develop software that would have enabled them to "simply press a button at year-end to obtain many of the audit schedules". All controllers would have liked the audit to become as straight-forward a process as possible. One controller responsible for consolidated financial statements even mentioned that he was developing a "mass-production
Table 18 - Number of controllers who have changed their approach in the last five years.

<table>
<thead>
<tr>
<th>Category</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>approach</td>
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<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>15</td>
</tr>
</tbody>
</table>
approach to the preparation of audit schedules.

Improvements to the audit process not only resulted in a better bargaining position for clients when actual audit fees were discussed, but also impacted on the following year's budgeted audit fees. In fact, most C3 controllers considered audit fees as fixed, once the budgeted audit fees had been agreed upon with the auditors as long as what controllers said would be done was done on time.

As was the case for C1 and C2 companies, the last meeting between the client and the audit partner was held to discuss the draft of the financial statements. The detailed content of the discussion however was different than it was for C1s and C2s. The discussion focused less on business aspects and more on aspects of the presentation of financial statements and suggestions for improvement of the audit process. C3 companies had the internal resources required for solving finance-related problems. Accordingly, although auditors acted as external sounding boards, they were not required as often for advice on financial problems as for the two other categories.

Companies in the C3 category could have regressed back into the C2 category for a variety of reasons. Some clients indicated that the installation of an EDP system and the loss of a key accounting person or of the controller were examples which forced them to pay less attention to the audit for at least one year. It was possible (as one client did) for a controller to give back to auditors some activities previously performed by his personnel in order to allocate his
resources in a more productive manner and to be able to perform other marginally more useful activities.

5. Conclusion

In summary, the major doers prepared most of the audit schedules. The annual audit was a major undertaking for controllers. Accordingly, proper planning was essential. The control of audit costs was an important element in the determination of the strategy used by C3 clients. Controllers in this category appeared to be more conscious of the options available to them than controllers in the other categories. Normally, however, C3 clients also aimed to explore additional measures to control the audit.
CHAPTER VIII
CONCLUSION

1. Introduction

The focus of this thesis was on the purchase of audit services, using an operations management approach. Although this research makes some contributions to the auditing literature — particularly by using the client's point of view — the most important contributions are in the operations management area, particularly in the area of procurement of services. It is believed that the same approach as the one used in this thesis could be used for other services.

Some of the concepts thought to be useful for other services include the importance of the negotiation process, the make-or-buy decision with its characteristics for services, the use of a proper strategy fitting the objectives set out by management, and the flexibility existing in the tradeoff zone. The division of the tradeoff zone into strategic categories, the similar characteristics of clients within the same category, and the possible identification of categories using a few key characteristics are some other generalizations of this thesis that could be of use to other areas of the service sector.

2. Summary of the major findings

Major findings stemmed not only from the analysis of propositions, but also from additional comments made by audit partners and clients during
interviews. Clients were identified as belonging to one of three strategic categories according to the audit schedules they prepared. Some key schedules prepared by clients and certain characteristics of a company or of a controller could be used as well to determine the company's strategic category. Similarly, clients in the same category tended to perform/prepare the same steps/schedules of the audit process. The control of audit fees appeared to be a main determinant of the clients' choice of strategy for most clients.

Over the years, clients followed a progression in the preparation of audit schedules; they started with the managerial schedules and then added the evaluation and technical schedules. Also, the number of activities performed by a company tended to be related to its size, when size was used as a proxy for assets, its number of accounting personnel and other resources.

In addition, the controller's perception of the schedules that were part of the tradeoff zone could actually limit the number of schedules prepared by a client; consequently, a client's perception of the audit process determined what was actually done. According to audit partners, the tradeoff zone was, theoretically, the same for all clients. In practice, many clients lacked the knowledge to prepare all the schedules in the tradeoff zone. However, what partners did not mention was that some flexibility in the tradeoff zone existed which often appeared to be the result of the relative power of clients and their auditors. The partners strongly indicated that who the client was influenced the extent of the auditors' work. This fact added
further evidence to the flexibility left in the auditors' zone of the audit process.

Clients' attitude towards an audit changed as clients progressed from the C1 to the C3 category. While clients in the C1 category did not appear consciously to use a strategy for the audit process, C3s' strategy appeared to be more deliberate. Accordingly, C3 clients were also more aware of the impact on auditors of the strategy they used. C3 clients also made more deliberate tradeoffs in their approach. In smaller companies, the strategies used for the audit were influenced by the president; in medium-size organizations, the controller also influenced the strategies.

A controller with auditing and accounting skills together with the desire to control audit fees was necessary in order for a client to become a C3 company. A client could require only one audit to move from the C1 to the C3 category (as TNI did), or even with competent personnel (as in the case of GGI), this transition could take a number of years.

It is possible to improve audit management whatever category a company is in. Even though there was a clear difference between C1s, C2s and C3s for the schedules prepared, the questionnaire showed little difference between categories for the steps performed. Most C1 and C2 clients tended to overestimate the number of steps they were actually doing. It also appeared that clients could use the planning and control steps available to them more effectively. It was surprising
how little impact clients thought the steps listed in the steps questionnaire had on audit fees; C3s expected the reduction in audit fees to be on average less than five percent. It seemed that auditing experience impacted substantially on the execution stage of the audit, that is on the preparation of schedules. However, the impact was much less obvious on the aspects of planning and control.

More controllers now have auditing experience than in the past, and, therefore, prepare a greater number of schedules. C2 and C3 categories may over time become relatively larger than the C1 category. The switch of many C1 clients to unaudited financial statements would further support this trend.

Clients appeared ready to pay higher audit fees when they attached a premium to the signature of a particular chartered accountancy firm. Even in such cases, they intended to control closely audit fees billed to them, thereby illustrating the perceived marginal utility and subjectivity normally present in the purchase of professional services.

3. Implications of the findings for operations management

Generalizations from one area of the service sector to another may be possible. Although it was not the purpose of this research to determine specifically to which other service areas a finding could also be applicable, it appears that some educated guesses can be made.

The examination of a process from a client's rather than from a
supplier's point of view offers interesting opportunities for the improvement of a process. Operations management deals with the management of inputs and of a transformation process so that the inputs yield a satisfactory output. Because of the frequent interaction between the customer and the supplier in services, it appears that the procurement strategies used might significantly influence the process.

The determination of the activities included in the tradeoff zone represents a key step in each make-or-buy decision. It is only when all activities in the tradeoff zone are clearly determined that managers know the extent of their possible choices. There are instances in which no tradeoff zone exists in practice: the decision is a straight make-or-buy. For example, the editing of a book is usually done by the same individual although different individuals could theoretically edit different parts of the book.

Managers should understand the nature of the tradeoff zone and the implications it has on the strategies that can be adopted. For example, art work is more important for a calendar than for a book. Similarly, the tradeoff zone is wide for the procurement of auditing or consulting engineering services as opposed to health services. Managers may not want to decide the same way for an annual, project-type activity, such as an audit, as they do for the irregular but frequent buying of a commodity like steel.

The procurement literature and conventional wisdom suggest that buying is preferred to making in most cases. This thesis suggests that...
"Making as much as possible in the field of external auditing might represent a better solution for most companies. Buying appears quite attractive for most situations in which substantial investment is involved. It is possible that an initial stance favoring "doing" makes sense for services with a large intangible content, while the opposite might be true for operations producing mostly goods with a relatively small intangible content.

Small companies have fewer resources than larger ones. The findings of this thesis would suggest that they are more likely to buy rather than make. Their resources are usually devoted more specifically to their direct line of business and there might not be enough slack in the organization to free up resources to make rather than buy. Larger organizations are more often faced with a given type of purchase and/or with a higher total purchasing cost than smaller companies in the same sector of activity. Hiring the personnel and buying the equipment required for doing makes more sense for larger organizations because of the absolute value of resources devoted to a type of purchase. It appears, therefore, that with respect to client size, a parallel exists between auditing and other make-or-buy decisions.

Richardson (1) and Etienne (2) found that as the size of a manufacturing company increased, the company performed more activities in-house. This choice was the consequence of the companies having more resources and thus being able to consider performing more activities in-house. In terms of this thesis, companies were faced with a tradeoff zone that was actually becoming larger, although the
theoretical tradeoff zone remained the same. This thesis emphasized the importance of the difference between the theoretical and the actual tradeoff zone faced by a company. Accordingly, managers seeing the tradeoff zone as increasing over time might be more inclined to rethink previous make-or-buy decisions.

As a company grows, activities previously bought could be considered for in-house operations. The allocation of resources to the activities representing the best benefits for the company appears to be an important decision faced by managers; managers select to perform more activities in one tradeoff zone than in another. Their understanding of all tradeoff zones becomes a key success factor in the proper allocation of the organizational resources.

This thesis would suggest that once clients have experienced a given level of "make" in their make-or-buy decision for services, they might tend to do more and more of the activities in the tradeoff zone. This progression is easily understandable for services involving equipment. For those involving little or no equipment, the learning-curve process explains such a phenomenon. Once the activities involved in the process are well mastered by some people in the organization, it becomes possible to delegate more activities to lower staff levels. Strategies used by clients evolve in the same direction.

While little flexibility exists in the sequencing of operations like printing, activities such as auditing are much more flexible. In auditing, although some steps are still required before others can be
done, the scheduling of resources becomes less critical for a greater number of activities. As a consequence, however, the critical path becomes hidden because of the large number of activities that are not on it.

Buyers are faced with much flexibility in the make-or-buy decision of the schedules to prepare in auditing. They could choose to prepare any number and any of the required schedules, and the auditors would automatically do the missing ones. Such flexibility, and on such short notice, are rather uncommon, particularly in manufacturing. Buyers appear to have more flexibility when intangibles rather than expensive goods are involved.

The perceived service level is a mixture of a number of variables and is, according to the literature, loaded with subjectivity. This research shows that, even for an activity with an intangible output, the cost element is very important. In hard economic times, buyers might be more frequently using a satisficing approach for the subjective variables and place more emphasis on the cost variable. For example, a company usually hiring marketing consultants for research might choose less-knowledgeable people from inside the organization to perform the research.

It might be possible to classify clients into categories of major buyers, in-transit and major doers for a variety of make-or-buy situations. Such a classification could be interesting for two reasons: first, clients' strategies can be understood and dealt with
by the supplier. Second, the strategies might help in managing the
process more efficiently.

Finally, it would seem that clients in the same strategic category
(having similar characteristics) would tend to perform the same "make"
activities. It can be suggested that the make-or-buy decision is a
logical one depending not only on the circumstances, but also in large
part on some observable characteristics. Knowing a particular
company's category for the procurement of one service might result in
an educated guess of the strategy it uses for the procurement of other
services and even goods.

4. Implications of the major findings for clients

It is possible to discuss implications for clients and auditors arising
out of this research, despite the tentative nature of the findings. If
the findings on the propositions were assumed to be correct and
generalizable, certain implications could be mentioned at this point.

Although better audit management is not a high priority for all
companies, clients should be aware that improvements are generally
possible. One simple way for clients to look for improvements is to
examine what the auditors are doing and to discuss what could be done
by themselves rather than by the auditors. Clients aware of the three
strategic categories can picture themselves more easily in the tradeoff
zone. Clients could then take the appropriate measures to get where
they want to be in the tradeoff zone. Controllers, knowing that
clients follow a pattern in the preparation of schedules (from managerial to technical), might make an appropriate choice of which schedules they should prepare.

Controllers who want to improve their management of the audit process might consider taking refresher courses on new auditing techniques or on accounting trends. The controller of a small company with relatively simple operations might need only a few auditing and accounting courses to become a C3 client.

There was a tendency for all but one of the persons interviewed to think that the preparation of schedules impacted substantially more on audit fees than most of the elements mentioned in the planning and control sections of the steps questionnaire. The one client who was the exception was also the one who prepared the most completely for the audit both from the steps and the schedules standpoint. Paying more attention to the steps might be useful.

The audit partners indicated that there was the tendency for clients to misallocate their time when there was not enough time available for clients to prepare all schedules. Clients tended to prepare all the easy working papers first, rather than first doing the most difficult ones that they could handle competently. Audit partners and some controllers of the C3 category thought that the preparation by clients of the most difficult schedules could save clients more than preparing easy schedules and letting auditors prepare the most difficult ones. Clients are most familiar with their documents and can best explain
what occurred to the business during the year. With the exception of controllers who have recently had audit experience, auditors although more expensive are better able to prepare working papers. Auditors can explain exactly what information they need on the working papers prepared by clients. Auditors interviewed complained about the incompleteness of audit schedules, calling it "a lack of quality of many working papers". What auditors needed were the explanations, much more than the enumeration of transactions taken right out of the ledgers. To prepare, clients would require a better understanding of what information auditors needed and also why they needed it.

An audit is a serious and costly process. Only three clients, all in the C1 category, indicated that their approach was relaxed. Controllers should schedule their personnel so that they can give the auditors appropriate attention. The auditors' meters seldom stop when working on the clients' premises. Similarly, it was suggested that controllers should not object when auditors ask either them or their personnel to perform more work for which they have both the competence and the time. Furthermore, clients should attempt to determine the relative cost of internal and external time; for most, internal costs are less expensive. Accordingly, clients might prepare all schedules they have the competence to prepare.

No client included in the sample attempted to determine how much time was spent by the company's personnel on audit-related activities. It appears that clients made the tradeoff between one hour of internal time and one hour of auditors' time rather than between the estimated
required time for both parties to prepare given schedules of the tradeoff zone. Similarly, clients might consider the opportunity cost of the time used by their personnel for audit-related activities, since this cost probably does not remain constant over time and might be reevaluated from year to year.

Each audit corresponds to a negotiation between clients and auditors, even though most C1s and C2s do not see it as a negotiation. The use of a proper strategy reinforces a client's power position. The strategy used by clients should be changed if clients consider that they can do better without too much extra effort. In order to do so, controllers should not only go through each audit from year to year, but also give the audit process some thought, and take notes about possible improvements, particularly during and just after the audit. An audit is a process that should be carefully and continually monitored. The timing of the schedules prepared by clients is an example of an activity which can be improved, and yet, it is not an obvious element.

It appears difficult to decrease audit fees from one year to the next; indeed, the budgeted and actual audit fees for the first year appear to lead the way for future years. This situation is true even when audit fees decrease as occurred at Techpart Inc. Clients have to act with this reality in mind. Clients who add gradually to either the number of or the quality of schedules they prepare do not get an evident impact on audit fees. Moreover, this approach does not add as much bargaining power to clients as they would obtain by preparing
substantially more schedules in just one year, rather than spreading their improvements over a number of years.

5. Implications of the major findings for auditors

Although the major findings are based on a sample of clients rather than auditors, there are certain implications for auditors as well.

The choice of the personnel assigned to a client's audit is a major decision for a number of reasons. All personnel should probably be exposed to clients in each of the three strategic categories. Not only do strategies, but also the knowledge and attitude of auditors vary from one category to the other. For instance, it is more difficult to stay sharp on a C3's audit when all schedules are already prepared, than on a C1's in which a lot of adjusting entries need to be made. The behaviour and questions from the auditors doing the field work appear to be important factors by which clients judge the quality of an accounting firm. For work at a specific client, the partner could attempt to send an individual whose personality is likely to match that of the controller. A personality clash between a controller and an audit senior or supervisor could seriously harm the relationship between a client and the audit partner.

Many controllers now have audit experience and can determine the reasonableness of audit fees. Controllers of companies in the C3 category, in particular, feel that auditors could improve the way they manage the audit process and that auditors should go beyond the obvious
in improving their productivity. Clients believe audit partners should strive to manage all audits as efficiently and effectively as possible, rather than wait for clients to put pressure on fees. Auditors should avoid the attitude that an audit is a standard annual ritual.

Auditors might well consider the tradeoffs made by and the strategy used by their clients as an input to the overall audit strategy—including the technical part—partners should adopt. An audit is not only the gathering and evaluation of evidence, but also an occasion to improve the relationship with a client in different ways. Responsiveness to clients' needs appears to be a basic prerequisite for any satisfactory relationship. Auditors can help clients manage the audit process. Because clients follow a pattern in their preparation of audit schedules, auditors could suggest which schedules their clients should consider doing next. Auditors could also identify, particularly to their clients in the C1 and C2 categories, the full range of activities included in the tradeoff zone because a client's perception of the tradeoff zone often limits the number of schedules prepared by clients.

Understanding the characteristics of clients in each category should help the auditors in at least two ways. First, they can predict the strategy that a new client is likely to adopt and the schedules a client is likely to prepare. These predictions could be particularly helpful in the preparation of audit budgets for new clients. Second, auditors could determine where a client stands in the tradeoff zone compared to other clients with similar characteristics and determine
the reasons for any major differences.

By helping their clients to manage the audit process better, audit partners could lose a certain amount of audit income. Most clients included in the sample expected such a reduction in audit fees might be offset by increased consulting, particularly if they were satisfied that the auditors managed the audit process efficiently and charged reasonable audit fees. According to audit and management services partners of different accounting firms, the main source of consulting jobs is assignments coming from audit clients. As auditors spend less time preparing audit schedules, time previously spent on this shrinking part of the business could be transferred to consulting. It might be necessary to train auditors in consulting skills.

6. Limitations of this thesis

The exploratory nature of this thesis and the small sample chosen place rather obvious limitations on the generalizations that can be drawn from this thesis. Although a number of ideas made sense intuitively and were supported in the feedback from those interviewed, it was not the purpose of this thesis to provide statistically unassailable proof.

The choice of only one accounting firm and its clients produced an obvious bias. The Montreal location, and the selection process for clients may also have limited the findings. For example, the data gathering methodology used a combination of questionnaires which partners and clients filled out ahead of time; the questionnaires were
followed up by personal interviews. It is possible that, if interviewees had been available for a period longer than three hours, the questionnaires might have been filled out in the researcher's presence. It appears that the steps questionnaire, in particular, may have given some clients difficulty, and different clients may have used different criteria for responding. Since the schedules questionnaire apparently did not suffer from this deficiency, and paralleled the steps questionnaire in a number of areas, this problem may not be serious.

The limitations of this thesis were largely known ahead of time, at the design stage. They were the result of a deliberate tradeoff between conflicting aims of a broader understanding versus a more detailed examination of a particular phenomenon. Therefore, it is hoped that future research will explore, confirm or prove the validity of issues raised in this thesis.

7. Potential for future research

The locus used for this thesis was auditing. As a consequence, more precise and a greater number of suggestions are made for auditing than for operations management as a whole. It is believed that this observation parallels the intent behind the thesis, i.e. to focus on a specific area of operations management. The following section includes suggestions that are for operations management as a whole. These suggestions are followed by suggestions specific to auditing. It is believed that most of the suggestions for future research are
applicable to other services and particularly to law, engineering, and management consulting.

**Operations management**

Based on this research, it seems that the examination of a process from an operations management and particularly from a client's point of view may reveal opportunities for improving the efficiency and the effectiveness of a process. There are a number of areas, particularly in the professional sector, for which a study of the type used for this thesis would be useful.

The study of the impact of clients' strategies on suppliers of services represents an interesting topic. This study would be particularly interesting for the procurement of services considered to be mostly of an intangible nature, such as law and management consulting.

This study used the tradeoff zone as the main framework for discussing the strategies used by clients for the management of the audit process. Does a tradeoff zone exist in each procurement situation? How does it differ between the manufacturing and service sectors? What is the nature of the tradeoff zone for different processes? Who is responsible for the identification of the tradeoff zone?

This thesis suggests that, in the tradeoff zone, making might be preferable to buying in auditing. This observation goes against conventional wisdom, particularly in manufacturing. Do the important factors influencing whether to make or buy differ among service and
manufacturing applications? Are there services, other than auditing, where doing appears to be a better choice than buying in most instances?

Smaller organizations have fewer resources than larger ones. Therefore, they have to choose more carefully where to allocate their resources. The procurement of services and goods is only one of the sectors requiring resources; selling, manufacturing, personnel, etc. are other areas competing for resources. Major buyers gave high priority to the performance of other regular tasks before doing any extra work for audits. More research is needed to confirm or disprove that small companies do not give a high priority to procurement activities other than the ones directly necessary for their line of business.

In the same vein, the determination as to whether or not procurement strategies tend to be more deliberate as organizations grow in size could be interesting and meaningful. A confirmation of this observation would indicate that small organizations might not be using their resources efficiently for their procurement activities. Should this lack of efficiency be confirmed, the next logical step would be to find out how managers of smaller companies could choose better procurement strategies.

It was observed that auditees behaved differently depending where they were in the tradeoff zone. Auditors could use the flexibility in the auditors' zone as a consequence of using a different strategy with some
clients as compared to others. It is believed that the determination of the behaviour of buyers and suppliers with respect to activities within the tradeoff zone is important. The behaviour could vary substantially, depending on the process involved, as well as on the position adopted by the buyer in the tradeoff zone, and on the strategies adopted by each party.

Although flexibility from one purchase of services to the next exists in choosing where to be on the make-or-buy continuum, it appeared that clients did not usually regress once they started to increase the "make" component. It is important to determine whether this observation stands for many services other than auditing. If so, the flexibility existing in the make-or-buy of services would be mostly theoretical as a company moved towards the "make" end of the continuum.

An interesting finding of this thesis is the tendency of clients in the same strategic category to perform the same "make" activities. Should this finding be generalizable to other services, it would be possible not only to predict which activities a company would perform next, but also to determine whether a company lagged behind others in the same strategic category and why.

For auditing, the buyer's attitude, knowledge and skill in the planning, execution and control steps were observed to be important considerations affecting the total process. Are these components, key for the procurement of other services too? If not, what are the important factors that buyers should be aware of in the procurement of
other services?

It was observed that cost was an important factor affecting a buyer's decision for an audit, even though an audit had a high intangible content. It was also found that the prestige of the supplier affected the buyer. It might be possible to determine for different services how important for buyers in different categories the subjective components are as compared to cost and where services fit on this continuum.

It is likely that other findings are applicable to some specific areas of the service sector. This application can be demonstrated only by the use of specific examples. The relationships among different services have not been extensively studied yet and it is believed that the procurement route and other findings in this thesis would be helpful in linking service areas.

Auditing

Many of the aspects developed in this thesis could be interesting topics for future research. Aside from the academic merit, clients and partners appear eager for further research and publications on this topic. Some of the more obvious potential directions for future research arise from the sample chosen for this thesis. It may be possible to repeat the questionnaire with a larger, more geographically diverse sample, and with multiple audit firms in an effort to give greater statistical significance to the findings.
It would also be possible to make both instruments used in this research more "objective" by defining yardsticks to measure what a company actually does, so that answers given to each question in the schedules and steps questionnaires could be checked. These two questionnaires would then be more precise in terms of classifying a company by category and by position within a category. These questionnaires would then require more time to fill out.

Both questionnaires could be tested on a number of companies to see whether or not the results found in this thesis are confirmed. Depending on the results, both instruments could be refined by adding or taking out schedules or steps. The testing of both questionnaires on companies in similar industries might be particularly interesting. These instruments could be used to identify rapidly the strengths and weaknesses related to their management of the audit.

It might be possible to develop another instrument which allows an even easier and better classification into strategic categories. It would be interesting to prepare a list of questions integrating only key discriminant factors, such as schedules, steps or other client characteristics to classify clients.

One way to evaluate where a client stands in the tradeoff zone would be to determine the following percentage, based on auditors' time:

\[
\frac{\text{Budgeted time for the working papers (W/P) prepared}}{\text{Total budgeted time for the preparation of all W/P}}
\]

This ratio takes into consideration the fact that some working papers
are more difficult to prepare than others. The percentage and number of schedules do not consider the time required for the preparation of each schedule. Such time data may not be easily gathered, however. Auditors' time is used rather than clients' time because there are likely more differences in expertise among clients than among auditors: usually junior auditors prepare most schedules not prepared by a client, while a senior auditor prepares the others. It is probable that certain types of tradeoffs might have higher pay-offs for clients than others. It was not the purpose of this research to find out what these areas were. For instance, what would happen to audit fees should a company use mainly planning and control steps in lieu of preparing more schedules?

There was a clear progression of clients in their preparation of schedules: managerial, evaluation, technical. However the progression of clients in their use of steps was not clear for the reasons already mentioned. However, one might speculate that companies follow a progression similar to the one presented in Figure XI. Is this progression supported by evidence using a more "objective" measure for steps? If not, what is this progression, if there is one? Is it the same for most companies? What are the factors affecting it?

Often, the main tradeoff is external versus internal cost. Whether this is a deliberate tradeoff or not, no client estimated the internal cost to be any higher than 60%. Is this so in reality? It would be useful to determine what the actual cost is for clients, both in dollars and in soft costs.
Figure XI - Progression of companies along the planning, execution and control steps.

<table>
<thead>
<tr>
<th>Category</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>0-1</td>
<td>1-2</td>
<td>2-3</td>
</tr>
<tr>
<td>Execution</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Control</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

NOTE: A "0" indicates low emphasis and a "3", a high one.
Certain schedules are normally identified with each of the categories. Schedules could be considered from a different angle. For instance, to fill in the corporations' income tax returns and schedules properly and to take advantage of the related tax planning opportunities requires a tremendous investment in learning time. Clients probably feel that they could make better use of their time. The preparation of this type of schedule in-house for smaller companies often corresponds to an overall negative marginal utility. One might consider a perspective in which a client in each category prepares schedules up to the point of a zero marginal utility, as shown in Figure XII.

Clients tend to start with the working papers that are the easiest to prepare and might wait a while before doing working papers that require from them a perceived substantial effort. Within each audit section, easy-to-prepare working papers are usually a prerequisite for the more difficult to prepare. Even though clients experience a learning curve for the preparation of working papers, the annual savings in time are not necessarily substantial for three reasons. First, many schedules in the C2 and C3 categories are prepared only once a year. Second, the improvement in extra available hours goes down each year for which no new activity was added the year before. Third, some clients are afflicted with a high personnel turnover.

However, most of the available schedules not yet done by a client are also the ones demanding the most investment in time. This important investment in time goes in the opposite direction from the extra time freed up each year. Accordingly, fewer and fewer schedules are likely
Figure XII - Theoretical limit of each category and the required effort to reach the limit.
to be added each year if no more resources are devoted to the audit. Since clients appeared to prepare more working papers every year (or at the minimum the same number), these extra working papers have to be the result of extra resources allocated to the audit rather than only to resources made available because of the learning curve. It would be interesting to find out to what extent such additional resources stem from other client accounting needs and what weight the audit requirements would lend to such resource augmentation decisions.

Compared to the efforts made by C3s, clients in the C1 category need to make little effort for the schedules they are preparing; therefore, what results is a more accurate division of the tradeoff zone in three strategic categories by taking into consideration the relative efforts of each category. Figure XIII tentatively represents such a division of the tradeoff zone. A clear identification of both skills and time required to perform certain schedules and steps would be of significant help to those who face the tradeoff decision.

The relative size of the tradeoff zone and of the auditors' zone represents a similar problem. Figure XIV attempts to determine the size of the tradeoff zone as a percentage of the whole audit process. The two independent variables were the size of the company and the complexity of its operations. Further research could prove or disprove these numbers based on the sample chosen and on the researcher's experience. The percentages in the figure can be related to potential savings for clients only when clients determine their internal cost for preparing the schedules in the tradeoff zone and compare this cost to
Figure XIII - Relative importance of the activities of the tradeoff zone carried by clients in each category.
Figure XIV - Relative size of the tradeoff zone and of the auditors' zone for companies of different sizes with varying degrees of complexity in their accounting function and operations.

<table>
<thead>
<tr>
<th>Size of company</th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple</td>
<td>30%</td>
<td>40%</td>
<td>50%</td>
</tr>
<tr>
<td>Moderately difficult</td>
<td>40%</td>
<td>50%</td>
<td>60%</td>
</tr>
<tr>
<td>Complex</td>
<td>50%</td>
<td>60%</td>
<td>70%</td>
</tr>
</tbody>
</table>

* Complexity - operations and accounting.

NOTE: The size of the auditors' zone is obtained by subtracting the applicable percentage for the tradeoff zone above from 100%. 
the auditors' fees.

The topic of whether or not clients perceive audit fees as fixed, variable or semi-variable (Figure XV) could be explored further. It seems logical that a client perceiving audit fees as fixed is not likely to use the same strategy as one who perceives fees as variable or semi-variable. For example, a client who perceives that large increases in audit fees might occur from one year to the next, might try to use this fact as a basis to negotiate a low fixed fee increase with the auditors. Clients who perceive audit fees as mostly variable could be expected to prepare as many working papers as possible. However, a client who has approved an audit budget prepared by the auditors appears to have no incentive to do more than what was agreed upon with the auditors. These strategic aspects could be researched further.

As a result of the increasing number of accounting recommendations by the CICA (and of regulations in the US), it will probably become more and more difficult to be a major doer who is at the limit of the tradeoff zone. However, the number of C3 clients is expected to continue to increase. Graphically, this situation can be represented as in Figure XVI. Although there will be more knowledgeable accountants, many might not be able to keep up to-date with changes affecting their company. This topic in itself might represent challenging research.

Another dimension might be the exploration of how auditors spend their
Figure XV - Impact of clients' perception of the variableness of audit fees on clients' strategy.

![Graph depicting variableness of fees and time spent by auditors.]

<table>
<thead>
<tr>
<th>Fees Above graph-actual fees</th>
<th>Variable</th>
<th>Semi-variable</th>
<th>Fixed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point A</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Point B</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Point C</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

+ = Clients gain (best option)  
- = Clients lose
Figure XVI - Expected distribution of clients in the C3 category: 1982 vs. 1990.

% of schedules in the tradeoff zone for the C3 category.
time on clients' premises. How productive is it? How easy and how good a tradeoff would it be to transfer some of auditors' activities in the tradeoff zone to clients' personnel? Substantial further work could be done in the audit area, focusing on the client's side, the client's premises, and client strategies. It is assumed that the auditors' side will continue to receive the lion's share of future research attention. Nevertheless, it is hoped that the client side will be properly recognized.

8. Conclusion

One of the fascinating aspects of research is the exploration and revelation of previously unexplored territory. The description of the audit process from the client's perspective, the strategies used by clients, the identification of schedules and steps normally used, the tradeoff zone and the three categories of major buyers, in-transit and major doers are all believed to be useful contributions in this exploration. The switch to unaudited financial statements by many CIs, the evolution of categories over time and the importance of a client's perception of the tradeoff zone are other contributions perceived as useful.

It is believed that the findings for the audit process are generalizable to other other services and operations management. The characteristics of a specific service under study should be compared with auditing in order to determine which of the findings are generalizable. The description of the audit process from an operations
management perspective, the classification of clients into strategic categories, the pertinence of the make-or-buy decision for services and the determination of the relationship between certain characteristics of the process and their impact on the strategies used by clients are some of the contributions of this thesis believed to be of interest to operations management.

It is clear, however, that this thesis enlightened only some aspects of client behaviour and client strategy in audits. Further exploration could still contribute significantly to client behaviour and strategy in audits as well as in other areas of the service sector in both theory and practice.
FOOTNOTES


# APPENDIX I - QUESTIONNAIRE FOR CLIENTS AND AUDITORS: LIST OF SCHEDULES

## INSTRUCTIONS TO INTERVIEWEES

Interviewee's name: __________________________

Company name: ______________________________

Before the coming interview and in the following order, would you please:

1) Fill in the questionnaire entitled "List of schedules" by circling the appropriate answer for each element mentioned. **Duration:** approximately 15 minutes.

2) Fill in the questionnaire entitled "Planning, Execution and Control" by circling the appropriate answer for each element mentioned. **Duration:** approximately 20 minutes.

3) Read the "Interview guide for clients".

The sample for the thesis consists of only 3 groups of 4 representative companies. Accordingly, each of your answers carries a big weight for the data analysis phase and considerably influences the results.

## LIST OF SCHEDULES

Which of the following schedules/steps did your organization prepare/perform for the last audit?

(Y=Yes, N=No, N/A=Not applicable to the company for the last audit).

### I- GENERAL

1. Prepared an operations memo (summary of operations for the year) for the auditors  
   Y  N  N/A

2. Updated the auditors' description of client's procedures (whether diagram or long-form)  
   Y  N  N/A

3. Typed accounts receivable, accounts payable and other confirmations  
   Y  N  N/A

4. Prepared roll-forwards (from date of confirmation/stocktaking to year-end) for accounts receivable, accounts payable and inventories  
   Y  N  N/A
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5- Got most original vouchers out (without supervision of 1 member of the audit team)</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>6- Took at least 90% of all photocopies required by the auditors while on the client's site (to avoid auditors taking photocopies themselves)</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>7- Balanced books (Dt=Ct)</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>8- Cleared suspense account(s)</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>9- Prepared lead sheets for each section of the audit</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>10- Posted in company's books all AJEs (adjusting journal entries) prepared by auditors</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>11- Prepared a working trial balance</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>12- Prepared the initial set of financial statements (before these were audited)</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>13- Wrote explanations for extraordinary transactions</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>14- Wrote explanations for complex transactions that were however coming from regular operations</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>15- Prepared the draft of the lawyers' letter</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>16- Prepared notes to financial statements</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>17- Prepared the draft for the representation letter</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>18- Prepared final set of financial statements (not consolidated)</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>19- Typed and duplicated final financial statements</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>20- Prepared working trial balance for consolidated financial statements (before adjusting journal entries)</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>21- Made adjusting journal entries for consolidated financial statements</td>
<td>Y</td>
<td>N</td>
</tr>
</tbody>
</table>
22- Prepared a summary of intercompany transactions (for consolidation purposes) | Y | N | N/A

23- Prepared consolidated financial statements | Y | N | N/A

24- Made closing entries for year-end | Y | N |

### II- SPECIFIC

1- Prepared a list of postdated cheques | Y | N | N/A

2- Prepared a list of outstanding cheques & deposits | Y | N | N/A

3- Prepared bank reconciliations for all bank accounts | Y | N |

4- Prepared aged listing of accounts receivable (A/R) | Y | N | N/A

5- Reconciled A/R balance as per G/L with aged listing | Y | N | N/A

6- Reconciled A/R balance as per individual auditors' confirmations with individual balances on listing | Y | N | N/A

7- Prepared a list of A/R on the bad debt discussion list (as per auditors' instructions) | Y | N | N/A

8- Prepared list of accounts corresponding to the provision for bad debts | Y | N | N/A

9- Prepared list of quantities per item (inventories) | Y | N | N/A

10- Supplied auditors with staff, to facilitate auditors' count | Y | N | N/A

11- Indicated individual cost of each item on the inventories list | Y | N | N/A

12- Prepared explanatory sheets for inventory pricing method used (particularly work-in-process) | Y | N | N/A
<table>
<thead>
<tr>
<th></th>
<th>Prepared list of obsolete inventories and indicated beside each item the value to be written off</th>
<th>Y</th>
<th>N</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Reconciled balance as per G/L with inventories list</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
</tr>
<tr>
<td>15</td>
<td>Prepared details of all prepaid insurance</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
</tr>
<tr>
<td>16</td>
<td>Prepared details of all other prepaids</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
</tr>
<tr>
<td>17</td>
<td>Made computation of prepaid portions for all prepaids</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
</tr>
<tr>
<td>18</td>
<td>Prepared a list and gave details of various receivables other than A/R (cf. notes etc.)</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
</tr>
<tr>
<td>19</td>
<td>Prepared a list of investments and gave details</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
</tr>
<tr>
<td>20</td>
<td>Computed interest receivable on investments</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
</tr>
<tr>
<td>21</td>
<td>Prepared a list of acquisitions/dispositions of fixed assets</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
</tr>
<tr>
<td>22</td>
<td>Made proper adjustments to assets, accumulated depreciation, profit/loss on sale of fixed assets</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
</tr>
<tr>
<td>23</td>
<td>Computed depreciation – all categories of fixed assets</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
</tr>
<tr>
<td>24</td>
<td>Prepared a list of accounting profits on sales of fixed assets (for income taxes purposes)</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
</tr>
<tr>
<td>25</td>
<td>Listed and detailed all bank loans</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
</tr>
<tr>
<td>26</td>
<td>Prepared a list of accounts payable (A/P)</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
</tr>
<tr>
<td>27</td>
<td>Reconciled A/P balance as per G/L with detailed list</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
</tr>
<tr>
<td>28</td>
<td>Reconciled A/P balance as per individual auditors' confirmations with individual balances on listing</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
</tr>
<tr>
<td>29</td>
<td>Computed accrued interest payable &amp; gave details</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
</tr>
</tbody>
</table>
30 - Gave details of various payables other than A/P
   Y  N  N/A
31 - Prepared a list and gave details of long-term debt
   Y  N  N/A
32 - Computed current portion of long-term debt
   Y  N  N/A
33 - Computed current period's provision for income taxes
   Y  N  N/A
34 - Computed current period's deferred income taxes
   Y  N  N/A
35 - Reconciled balance of deferred income taxes account with differences between accounting and income taxes balances
   Y  N  N/A
36 - Prepared a list of all transactions during the year for capital stock
   Y  N  N/A
37 - Prepared a list of all transactions during the year for retained earnings
   Y  N  N/A
38 - Prepared all expense analyses required by auditors
   Y  N  N/A
APPENDIX II - QUESTIONNAIRE FOR CLIENTS: LIST OF STEPS

PLANNING, EXECUTION AND CONTROL - LIST OF STEPS

Interviewee's name: __________________________

Company name: __________________________

Which of the following steps did your company perform for the last audit?

I- PLANNING STAGE

1- Defined clearly the goals of your company for the audit
   Y    N    N/A

2- Made your company's personnel aware of these goals
   Y    N    N/A

3- Defined explicitly a procedure to solve problems arising during the audit (cf. whom to see, etc.)
   Y    N

4- Discussed with the auditors their intended audit scope before the audit budget was presented to your company
   Y    N    N/A

5- Discussed with the auditors the overall budgeted fee
   Y    N

6- Discussed with the auditors the budgeted fees for specific audit sections
   Y    N    N/A

7- Discussed with the auditors the content of specific audit programmes
   Y    N    N/A

8- Discussed timing of audit work with auditors
   Y    N

9- Discussed with the auditors what staff members they would assign to the audit
   Y    N

10- Discussed the staff level mix of the audit team (cf. number of juniors, seniors, etc.)
    Y    N

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11- Ensured that the internal auditors were relied upon to the fullest extent possible
Y N N/A

12- Agreed with the auditors about deadlines for all audit steps performed by them or by your company
Y N

13- Agreed in writing with the auditors as to which party was responsible for each audit step
Y N N/A

14- Planned working space for the auditors rather than assigned them to whatever available seats
Y N

15- Discussed with the auditors the major modifications to the accounting, computer and/or internal control systems
Y N N/A

16- Advised the auditors of areas most likely to cause them problems
Y N N/A

17- Briefed the auditors about company policies and operations of the company
Y N

II- EXECUTION STAGE

NOTE: Some items in this section look similar to or are the same as some on the "List of Schedules". This procedure facilitates data gathering. Feel free to look back at your answers on the other questionnaire. Please answer all questions.

1- Prepared all the following schedules:
Y N

1. Bank reconciliations, list of accounts receivable, list of accounts payable

2- Prepared all the following schedules:
Y N N/A

2. List of accounts in provision for bad debts, computation of accruals, list of obsolete inventories

3- Prepared all the following schedules:
Y N

3. Deferred income taxes, current income taxes, additions to fixed assets (including computation of depreciation)

4- Pulled most invoices and took most photocopies needed by the auditors
Y N
5- Prepared working papers using the format needed by the auditors Y N N/A

6- Wrote on working papers most of the explanations expected to be asked for by the auditors about important/unusual transactions Y N N/A

7- Prepared in advance the package of working papers rather than handed these piecemeal Y N N/A

8- Prepared the initial set of financial statements (before these are audited) Y N N/A

9- Discussed all adjusting entries made by the auditors Y N N/A

10- Prepared the final set of financial statements Y N

11- Prepared the notes to financial statements Y N

12- Typed financial statements Y N

13- Printed financial statements Y N

III- CONTROL STAGE

1- Met formally a few times with the auditors to discuss the progress of the audit Y N

2- Controlled regularly progress of company's personnel on steps that were the company's responsibility Y N N/A

3- Discussed with the auditors the problems they encountered in their audit and that were caused by our company's personnel or system Y N N/A

4- Had a key person on site when the auditors worked overtime Y N N/A

5- Discussed with the auditors all work they did that was not originally agreed upon and approved it before it was started Y N N/A
<table>
<thead>
<tr>
<th></th>
<th>Discussed with the auditors their letter of recommendations on accounting and internal control procedures</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discussed with them the auditors' report and the drafted financial statements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discussed with the auditors all potential improvements of the audit process they saw as possible for the year to come</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wrote down and later implemented (or intend to implement) suggestions for improving the company's management of the audit process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td>N</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Evaluated the auditors' work at the end of the audit and discussed it with the president, the senior financial officer or the audit committee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reviewed and discussed with the auditors the actual audit fees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX III - INTERVIEW GUIDE FOR PARTNERS

1) How extensive is the impact of your estimate of a client's internal control on the number of schedules you will allow him to prepare? 
   Extremely important
   1
   2
   3
   4
   5
   6
   7
   No impact at all
   Why?

2) What other factors (if any) would influence the number of schedules that you would allow him to prepare?

3) What schedules or type of schedules (if any) won't you allow a client to prepare if your estimate of a client's internal control is that it is weak? Average? Strong?

4) Based on your knowledge of your clients, do you think it is possible to divide them into three categories using as a basis:
   a) The number of working papers prepared?
   b) The percent of working papers prepared?
   c) The type of working papers prepared?
   d) The planning or control steps used by clients for the audit?

5) Discuss each client that is expected to be part of the sample.

6) For each client accepting to collaborate to the research, ask the partner to:
   a) Get the amount of audit fees for the last five years.
   b) Obtain for each of the last five years the list of schedules that auditors have asked the client to prepare (PBCs).
   c) Fill out the questionnaire listing activities that could be traded off in the audit process, to determine which of these activities the auditor ended up doing in the last audit.
   d) Determine which of the activities performed by the auditor he would not have left the client doing, had the latter had the capability to perform these.
APPENDIX IV - INTERVIEW GUIDE FOR CLIENTS

Interviewee's name: ______________  Date: ______________

Company name: ______________

The attached list of questions is sent to you to give you the opportunity to get familiar with the content of the coming interview.

It is not intended to point towards a better way to handle the audit process. The researcher's intent is to determine how companies are currently handling audits rather than how they should handle them.

The interviewer is going to take note of the answers and comments you make during the interview; accordingly you do not have to write down your answers, even though you may for all the questions for which you want to do so. All the questions will be discussed during the interview.

If you want some information to remain confidential, please mention it to the interviewer.

Thank you very much!

1) Was there any item in either one of the two questionnaires that was unclear or that you would like to discuss?

2) How often has your company changed auditors in the last 10 years? (If applicable) Why did it change auditors?

3) How was the decision made the last time the firm hired auditors?

4) For how long has this firm of auditors audited this company?

5) Have you or another key person dealing with the auditors been an auditor?

7) How many persons in the accounting department have completed at least 5 university courses in accounting?

8) Do you measure the quality of the audit? If so, how?

9) What is the impact of the approach your company has for the audit on the quality of the audit? Of the financial statements?

10) What are your company's goals regarding the audit process? Rank them in decreasing order of importance.

11) What is the approach that your company uses for the audit process?

12) What are the tradeoffs involved?

13) What are the opportunities and difficulties inherent to the approach chosen?

14) Has your company's approach been modified in the last 5 years? Why? (If applicable) How?

15) Do you intend to modify it in the next few years? Why? (If applicable) How?

16) What level best describes your personnel's attitude towards the auditors?

   Antagonistic  Neutral  Very friendly
   1 2 3 4 5 6 7

17) What level best describes your personal attitude towards the audit?

   Very useful  Neutral  Completely useless
   1 2 3 4 5 6 7
18) To what extent does your company use the following elements in its dealings with the auditors or for the audit as such?

<table>
<thead>
<tr>
<th>Element</th>
<th>Not at all</th>
<th>Moderately</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detailed planning</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Improvements to internal control</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Preparation of as many audit schedules as we know the auditors will need</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Discussions regarding audit techniques used</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Discussions regarding the audit scope</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Discussions regarding the actual fees</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Use of an external consultant to help in the preparation of schedules and/or planning of the audit and/or controlling</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

19) How many meetings did you have with the auditors for the last audit? When were these meetings held? What were the topics discussed?

20) Expressed as a percent of regular working hours during the audit process, what percent of time (including overtime) was spent preparing for/working on the audit by the controller? (At audit time). By other key "audit-related" personnel?

21) (Examine the List of Steps). Mention the changes that you have made in the last few years regarding the steps of the audit process performed by your company.

22) Do you intend to make any further changes regarding the steps performed?
23) What are the steps of the audit process that your company first performed at the time few were performed?

24) Of the steps a company can do as part of the audit process, which ones would you last consider doing?

25) (Examine the List of Schedules). What schedules were first prepared for the auditors? Why?

26) Of the schedules a company can do as part of the audit process, which ones would you last consider doing?

27) What are the most important steps of the audit process that you have to do well in order to control audit fees?

28) Do you perceive audit fees as mostly fixed or mostly variable in practice?
   Mostly fixed
   Mostly variable
   1  2  3  4  5  6  7

29) When are audit fees paid to the auditors?

30) As expressed as a factor of the actual audit fees, what is the actual cost of the audit for the company? (Considering overtime costs, delays in accounts receivable collections, etc.).

31) By what percent of the audit fees presently paid do you think the audit fees would be reduced, if your company were to perform all possible steps and schedules of the audit process?

32) What are you intending to do as you see fewer and fewer improvements possible in the way you manage the audit process?

33) As of the last year-end, what were the company sales? How many employees worked for the entity subject to the audit? How many employees worked in the accounting department?
NOTE A L'INTENTION DES RÉPONDANTS

Nom du répondant: __________________ Date: ______________

Nom de la compagnie: __________________

Avant l'interview qui vient et dans l'ordre suivant, auriez-vous l'obligeance de:

1) Remplir le questionnaire appelé "Liste des feuilles de travail" en encerclant la réponse appropriée. Durée: environ 15 minutes.

2) Remplir le questionnaire appelé "Planification, exécution et contrôle" en encerclant la réponse appropriée. Durée: environ 20 minutes.

3) Lire le "Guide d'entrevue - clients".

L'échantillon pour cette thèse consiste en seulement 3 groupes de 4 compagnies représentatives de leur catégorie. En conséquence, chacune de vos réponses s'avère importante pour l'analyse des données et influence d'une façon marquée les résultats.

LISTE DES FEUILLES DE TRAVAIL

Quelles sont les feuilles de travail/activités que votre organisation a préparées/effectuées lors de la dernière vérification?

(0: Oui, N: Non, N/A: Non Applicable pour votre compagnie lors de la dernière vérification).

I - GÉNÉRAL

1- Préparer un mémo d'opérations expliquant aux vérificateurs les causes des principaux écarts entre le réel et le budget et les problèmes rencontrés par la compagnie dans l'année courante

2- Mettre à jour pour les feuilles de travail des vérificateurs la description écrite de vos procédures (soit sous forme de diagramme ou autre)

3- Dauphinois de la confirmation des comptes à recevoir, à payer et autres
4. Préparer le roulement (depuis la date des confirmations/de la prise d'inventaire) pour les comptes à recevoir, comptes à payer et les stocks

5. Extraire des dossiers et apporter aux vérificateurs les pièces justificatives, factures (etc.) sans être sous la surveillance continuelle d'un vérificateur

6. Prendre au moins 90% de toutes les photocopies requises par les vérificateurs lorsque ceux-ci sont dans l'enceinte de votre compagnie (afin d'éviter à ceux-ci de les prendre eux-mêmes)

7. Vous assurer que - et corriger au besoin - les livres comptables pour que débit-crédit

8. Ramener à zéro (0) les comptes de suspens

9. Préparer les feuilles de travail maîtresses (feuilles sommaires pour chaque section des états financiers) pour les dossiers des vérificateurs

10. Enregistrer aux livres toutes les écritures d'ajustement préparées par les vérificateurs

11. Préparer la balance de vérification

12. Préparer les états financiers préliminaires (avant vérification)

13. Écrire sur les feuilles de travail des explications pour les transactions de nature extraordinaire

14. Écrire sur les feuilles de travail les explications relatives aux transactions complexes mais reliées aux opérations courantes de la compagnie

15. Préparer l'ébauche (draft) de la lettre envoyée aux avocats en regard des passifs éventuels de la compagnie

16. Préparer les notes aux états financiers

17. Préparer l'ébauche de la lettre de représentation

18. Préparer les états financiers non consolidés (après la vérification)

19. Dactylographier puis reproduire en nombre requis les états financiers vérifiés
20- Préparer la balance de vérification aux fins d'états financiers consolidés (avant écritures d'ajustement) 0 N N/A
21- Effectuer les écritures d'ajustement aux fins de consolidation 0 N N/A
22- Préparer un sommaire des transactions inter-compagnies 0 N N/A
23- Préparer les états financiers consolidés 0 N N/A
24- Effectuer les écritures de fermeture 0 N

II- SPECIFIQUE

1- Préparer la liste des chèques antidatés 0 N N/A
2- Préparer la liste des chèques et dépôts en circulation 0 N N/A
3- Préparer la conciliation bancaire pour chacun des comptes de banque 0 N
4- Préparer la liste ventilée (chronologique) des comptes à recevoir 0 N N/A
5- Concilier le solde des comptes à recevoir selon la liste ventilée avec le grand livre général (G/L) 0 N N/A
6- Concilier le solde individuel de certains comptes à recevoir selon les confirmations avec celui selon la liste ventilée 0 N N/A
7- Préparer la liste des comptes susceptibles de faire partie de la provision pour mauvaises créances (en suivant les instructions des vérificateurs) 0 N N/A
8- Préparer la liste des comptes à recevoir correspondant à la provision pour mauvaises créances 0 N N/A
9- Fournir aux vérificateurs du personnel pouvant faciliter les décomptes qu'ils effectuent de certains items en stock lors de la prise d'inventaire 0 N N/A
10- Préparer la liste des quantités par item-stocks de marchandises (liste des stocks) 0 N N/A
11- Indiquer le coût unitaire de chacun des items sur la liste des stocks 0 N N/A
12- Préparer une feuille explicative de la méthode utilisée pour évaluer les stocks (particulièrement les stocks de produits en cours)  

13- Préparer la liste des stocks désuets et indiquer la valeur à être effacée des livres pour chacun des items  

14- Concilier le solde des stocks selon le grand livre général avec celui de la liste des stocks  

15- Fournir les détails du poste "assurances payées d'avance"  

16- Fournir les détails sur tous les autres postes de frais payés d'avance  

17- Effectuer tous les calculs relatifs à la portion payée d'avance pour tous les frais payés d'avance  

18- Préparer la liste et fournir les détails appropriés quant aux items à recevoir autres que les comptes à recevoir (cf. notes, etc.)  

19- Préparer une liste des placements et fournir les détails appropriés  

20- Calculer les intérêts courus à recevoir sur les placements  

21- Préparer la liste des acquisitions/dispositions d'actifs immobilisés  

22- Effectuer les ajustements appropriés aux comptes d'actifs, d'amortissement accumulé et de profit/perte sur disposition d'actifs  

23- Calculer l'amortissement pour chacune des catégories d'actifs immobilisés  

24- Préparer une liste des profits comptables sur disposition d'actifs (aux fins d'impôts sur le revenu)  

25- Préparer une liste et fournir tous les détails quant aux emprunts bancaires  

26- Préparer la liste des comptes à payer  

27- Concilier le solde selon la liste des comptes à payer avec celui au grand livre général
28- Concilier le solde individuel des comptes à payer selon les confirmations avec celui apparaissant sur la liste des comptes à payer.

29- Calculer le montant d'intérêts courus à payer et fournir les détails appropriés.

30- Fournir les détails des items à payer autres que les comptes à payer.

31- Préparer la liste et fournir les détails relatifs à la dette à long terme.

32- Calculer la portion courante de la dette à long terme.

33- Calculer le montant de la provision pour impôts.

34- Calculer pour la période courante le montant des impôts reportés.

35- Concilier le solde du compte "Impôts reportés" avec les différences individuelles de certains postes entre leur solde comptable et leur solde fiscal.

36- Préparer une liste de toutes les transactions ayant affecté durant l'année le compte de capital-actions.

37- Préparer une liste de toutes les transactions ayant affecté durant l'année le compte de bénéfices non répartis.

38- Préparer toute analyse des postes de dépenses requise par les vérificateurs.
Nom du répondant: ____________________________

Nom de la compagnie: ____________________________

Parmi les activités suivantes, quelles sont celles que votre compagnie a effectuées lors de la dernière vérification?
(0:Oui, N:Non, N/A:Non Applicable pour votre compagnie lors de la dernière vérification).

1- PLANIFICATION

1- Définir clairement les objectifs de votre compagnie pour la vérification 0  N  N/A

2- Expliquer au personnel de votre compagnie les objectifs visés par votre compagnie pour la vérification 0  N  N/A

3- Définir explicitement la procédure à suivre pour résoudre les problèmes survenant durant la vérification 0  N

4- Discuter avec les vérificateurs l'étendue de leur vérification (audit scope) avant que le budget de vérification ne soit présenté à votre compagnie 0  N  N/A

5- Discuter avec les vérificateurs les honoraires de vérification budgétés 0  N

6- Discuter avec eux le temps budgété sur certaines sections spécifiques de la vérification 0  N  N/A

7- Discuter avec les vérificateurs de la teneur de certains de leurs programmes de vérification 0  N  N/A

8- Discuter avec les vérificateurs de la période à laquelle ils viendront 0  N

9- Discuter avec eux des membres de leur équipe qu'ils comptent assigner à la vérification de votre compagnie 0  N

10- Discuter du niveau des membres de l'équipe de vérification (cf. nombre de juniors, de premiers vérificateurs, etc.) 0  N
11- S'assurer que les vérificateurs tiendront compte le plus possible du travail effectué par les vérificateurs internes

12- Se mettre d'accord avec les vérificateurs quant aux dates prévues pour terminer les étapes qu'ils font et celles que vous faites

13- Mettre par écrit l'entente avec les vérificateurs concernant la responsabilité de chacune des parties quant à la préparation des feuilles de travail

14- Planifier un espace de travail approprié pour les vérificateurs plutôt que d'assigner ceux-ci aux bureaux qui s'adonnent à être libres

15- Discuter avec les vérificateurs des principales modifications apportées aux systèmes de comptabilité, d'ordinateurs ou/et de contrôle interne

16- Aviser les vérificateurs des secteurs où il est le plus probable qu'ils rencontrèrent des problèmes

17- Expliquer à l'équipe de vérification les politiques et la nature des opérations de la compagnie

II- EXECUTION

NOTE: Certains éléments de cette section paraissent semblables à ou apparaissent également sur la "Liste des feuilles de travail". Au besoin, consultez votre réponse sur l'autre questionnaire. Cette répétition facilite grandement l'analyse finale. Conséquemment, veuillez répondre à toutes les questions.

1- Préparer toutes les feuilles de travail suivantes qui sont applicables à votre compagnie: conciliations de banque, liste des comptes à recevoir et liste des comptes à payer

2- Préparer toutes les feuilles de travail suivantes qui sont applicables à votre compagnie: liste des comptes correspondant à la provision pour créances douteuses, calcul des frais courus et liste des stocks désuets

3- Préparer toutes les feuilles de travail suivantes qui sont applicables à votre compagnie: impôts reportés, provision pour impôts courants et liste des additions aux actifs immobilisés (incluant calcul de l'amortissement)
4- Sortir les factures et prendre le plupart des photocopies dont les vérificateurs ont besoin

5- Préparer les feuilles de travail requises par les vérificateurs en utilisant le format approprié à leurs besoins et tel qu'ils l'ont demandé

6- Écrire sur les feuilles de travail la majorité des explications que vous vous attendez à devoir fournir aux vérificateurs et qui concernent les transactions de nature exceptionnelle ou extraordinaire

7- Préparer à l'avance l'ensemble des feuilles de travail afin de pouvoir les remettre ensemble aux vérificateurs, plutôt que peu à la fois

8- Préparer les états financiers avant qu'ils ne soient vérifiés (version préliminaire)

9- Discuter de toutes les écritures d'ajustement apportées par les vérificateurs

10- Préparer la version finale des états financiers

11- Préparer les notes aux états financiers

12- Dactylographier les états financiers

13- Imprimer ou reproduire toutes les copies des états financiers requises

III- CONTRÔLE

1- Rencontrer officiellement à quelques reprises les vérificateurs afin de discuter du progrès de la vérification (s'oppose à rencontres ad hoc)

2- Contrôler régulièrement l'avancement des travaux sous la responsabilité du personnel de votre compagnie

3- Discuter avec les vérificateurs des problèmes qu'ils ont rencontrés dans leur vérification et qui sont causés soit par votre personnel, soit par votre système comptable

4- Avoir une personne-clé sur les lieux lorsque les vérificateurs font du temps supplémentaire
5- Discuter avec les vérificateurs tout travail qu'ils font en sus de celui originellement approuvé et approuver avant le début de ces travaux  O  N  N/A

6- Discuter avec eux leur lettre de recommandations quant aux améliorations à apporter à votre système comptable et de contrôle interne  O  N  N/A

7- Discuter avec les vérificateurs le rapport du vérificateur et l'ébauche (draft) des états financiers  O  N

8- Discuter avec eux de toutes les améliorations au processus de vérification qu'ils pensent possible pour les années à venir  O  N

9- Prendre note et mettre en pratique (ou, avoir l'intention de mettre en pratique) leurs suggestions pour améliorer la façon dont la compagnie gère le processus de vérification  O  N  N/A

10- Evaluer à la fin de la vérification le travail des vérificateurs et discuter de celui-ci avec le président, le principal responsable des finances ou encore avec le comité de vérification  O  N

11- Réviser et discuter des honoraires facturés par les vérificateurs relativement à la vérification  O  N
APPENDIX VII - INTERVIEW GUIDE FOR PARTNERS (FRENCH VERSION)

GUIDE D'INTERVIEW - ASSOCIÉS

1) Jusqu'à quel point votre évaluation du contrôle interne d'un client influencera-t-elle le nombre et le type de feuilles de travail que vous lui laissez préparer?

Enormément : 1 Passablement : 4 Aucunement : 7
2) Pourquoi?

2) Quels facteurs, s'il y en a, influencent le nombre et le type de feuilles de travail que vous laissez le client préparer?

3) Quelles feuilles de travail ne laisserez vous pas préparer par le client, advenant un contrôle interne faible? Moyen? Très bon?

4) En vous basant sur votre connaissance de vos clients, croyez-vous qu'il soit possible de les diviser en 3 catégories distinctes en se basant soit sur:
   a) Le nombre de feuilles de travail préparées?
   b) Le % de feuilles de travail préparées
      # total de feuilles que le client pourrait théoriquement préparer?
   c) Le type de feuilles de travail préparées ou encore sur
   d) Certains procédés de planification ou de contrôle qu'appliquent les clients pour la vérification?

5) Discuter de chacun des clients potentiels prévus comme pouvant faire partie de l'échantillon.

6) Pour chacun des clients contactés et acceptant d'être interviewé:
   a) Obtenir le montant facturé aux fins de vérification seulement pour les 5 dernières années.
   b) Une photocopie de la liste des feuilles de travail demandées à ce client pour les 5 dernières années.
   c) Faire remplir par l'associé responsable un questionnaire d'une durée de quinze (15) minutes. Le questionnaire consiste en une liste de feuilles de travail pour lesquelles l'associé n'a qu'à cocher s'il laisse ou non le client préparer cette feuille de travail.
APPENDIX VIII - INTERVIEW GUIDE FOR CLIENTS (FRENCH VERSION)

GUIDE D'INTERVIEW - CLIENTS

Nom du répondant: __________________________ Date: __________________________

Nom de la compagnie: ________________

La liste de questions qui suit vous est envoyée afin de vous permettre de vous familiariser avec le contenu de l'interview qui vient.

Elle ne vise pas à démontrer comment mieux gérer le processus de la vérification externe. Le chercheur vise à déterminer de quelle façon les compagnies gèrent une vérification plutôt que comment elles devraient la gérer.

L'intervieweur prendra note de vos réponses et commentaires durant l'interview; conséquemment, vous n'avez pas à écrire vos réponses, bien que vous puissiez le faire pour les questions pour lesquelles il vous plaira de le faire.

Si vous désirez que quelqu'information que ce soit demeure confidentielle, veuillez le mentionner à l'intervieweur.

Merci beaucoup!

______________________________

1) Avez-vous rencontré sur l'un des deux questionnaires une ou des questions qui n'étaient pas claires ou dont vous aimeriez discuter?

2) Combien de fois votre compagnie a-t-elle changé de vérificateurs au cours des 10 dernières années? (Si applicable) Pourquoi?

3) De quelle façon la décision a-t-elle été prise la dernière fois que votre compagnie a engagé ces vérificateurs-ci?

4) Depuis combien d'années cette firme-ci de vérificateurs vérifie-t-elle les états financiers de votre compagnie?

5) Est-ce que vous ou une autre personne-clé parmi celles ayant affaires aux vérificateurs déja été un vérificateur?

6) Combien de personnes faisant partie du département de comptabilité détiennent un titre professionnel comptable (C.A., C.G.A., R.I.A.)?

7) Combien de personnes du département de comptabilité ont complété au moins 5 cours de comptabilité de niveau universitaire?

8) Mesurez-vous la qualité d'une vérification? Si oui, comment?
9) Quel impact l'approche de votre compagnie pour la vérification a-t-elle sur la qualité de la vérification? Sur celle des états financiers?

10) Quels sont les objectifs de votre compagnie face à la vérification? Veuillez mentionner ces objectifs en ordre décroissant d'importance.

11) Quelle approche votre compagnie emploie-t-elle face à la vérification?

12) Quels sont les arbitrages ("trade-offs") en résultant?

13) Quels sont les avantages et inconvénients inhérents à l'approche choisie?

14) Votre compagnie a-t-elle modifié son approche au cours des 5 dernières années? Pourquoi? (Si applicable) Comment?

15) Avez-vous l'intention de modifier cette approche dans les années à venir? Pourquoi? (Si applicable) Comment?

16) Quel niveau décrit le mieux votre attitude personnelle face aux vérificateurs?
   Très antagoniste  1  2  3  4  5  6  7
   Neutre
   Très amicale

17) Quel niveau décrit le mieux votre attitude personnelle face à la vérification?
   Très utile  1  2  3  4  5  6  7
   Neutre
   Complètement inutile

18) Jusqu'à quel point votre compagnie emploie-t-elle les éléments/méthodes suivant(e)s dans ses relations avec les vérificateurs ou pour la vérification comme telle?
   - Planification détaillée? Aucunement  1  2  3  4  5  6  7
     Modérément
     Énormément
   - Améliorations au contrôle interne? 1  2  3  4  5  6  7
   - Préparation d'autant de feuilles de travail que vous savez que le vérificateur aura besoin
     1  2  3  4  5  6  7
   - Discussions concernant les techniques de vérification employées 1  2  3  4  5  6  7
   - Discussions concernant la portée de la vérification (audit scope) 1  2  3  4  5  6  7
- Discussions quant aux honoraires chargés par les vérificateurs
  1 2 3 4 5 6 7
- Emploi d'un consultant externe afin d'aider à la préparation des feuilles de travail ou au contrôle de la vérification
  1 2 3 4 5 6 7

19) Combien de réunions avez-vous tenues avec les vérificateurs lors de la dernière vérification? Quant ces réunions ont-elles eu lieu? Quels ont été les sujets abordés?

20) Exprimé en % des heures de travail normales en vigueur au moment de la vérification, quel % du temps (incluant le temps supplémentaire) le contrôleur a-t-il passé sur des activités reliées à la vérification? Quel est ce % pour les autres personnes-clés impliquées dans la vérification?

21) (Examiner la Liste des Activités). Veuillez mentionner les changements apportés ces quelques dernières années quant aux activités maintenant effectuées par du personnel de votre compagnie.

22) Avez-vous l'intention d'apporter d'autres changements quant aux activités faites par votre compagnie?

23) Quelles sont les premières activités que votre compagnie a effectuées, alors qu'elle n'en faisait que peu?

24) Quelles sont celles que vous considérez faire en dernier lieu, si votre compagnie effectuait à peu près toutes les activités?

25) (Examiner la Liste des Feuilles de Travail). Quelles sont les premières feuilles de travail que vous avez préparées pour les vérificateurs (alors que vous n'en faisiez que peu)?

26) Quelles sont les feuilles de travail que vous considérez faire en dernier lieu, si votre compagnie préparait à peu près toutes les feuilles de travail?

27) A quelles étapes de la vérification devez-vous particulièrement porter attention afin de contrôler les frais de vérification?

28) Votre impression est-elle que les frais de vérification sont plutôt fixes ou plutôt variables?
  Complètement fixes
  1 2 3 4 5 6 7
29) Quand votre compagnie paie-t-elle leurs honoraires aux vérificateurs?

30) Exprimé en termes des frais de vérification versés aux vérificateurs, quel est à votre avis le coût réel de la vérification pour votre compagnie? (En tenant compte du temps supplémentaire, des délais dans la perception des comptes à recevoir, etc.).

31) De combien, en %, estimez-vous que les honoraires de vérification diminueraient si votre compagnie effectuait toutes les activités et préparaît toutes les feuilles de travail reliées à la vérification?

32) Que comptez-vous faire à mesure que vous percevez de moins en moins d'améliorations possibles à la façon dont vous gérez la vérification?

33) Afin de mieux situer votre compagnie, auriez-vous l'obligance de fournir le chiffre des ventes? Le montant des actifs? Le nombre de personnes faisant partie du département de comptabilité?
### APPENDIX IX - SUMMARY OF IMPORTANT CHARACTERISTICS OF THE COMPANIES INCLUDED IN THE SAMPLE

<table>
<thead>
<tr>
<th>Characteristic Name of company</th>
<th>Assets (Million)</th>
<th>Sales (Million)</th>
<th>Number of employees of account dpt.</th>
<th>Audit fees (’000)</th>
<th>Line of activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cl1</td>
<td>$3.5</td>
<td>$3.5</td>
<td>4</td>
<td>$9.6</td>
<td>Communications</td>
</tr>
<tr>
<td>Cl2</td>
<td>0.7</td>
<td>1.5</td>
<td>2</td>
<td>3.4</td>
<td>Construction</td>
</tr>
<tr>
<td>Cl3</td>
<td>0.2</td>
<td>0.5</td>
<td>1</td>
<td>3.3</td>
<td>Transportation</td>
</tr>
<tr>
<td>Cl4*</td>
<td>0.3</td>
<td>0.7</td>
<td>1</td>
<td>3.0</td>
<td>Building materials distributor</td>
</tr>
<tr>
<td>Cl5</td>
<td>0.2</td>
<td>0.3</td>
<td>1</td>
<td>5.1</td>
<td>Communications</td>
</tr>
<tr>
<td>C21</td>
<td>2.5</td>
<td>1.5</td>
<td>4</td>
<td>8.0</td>
<td>Agriculture</td>
</tr>
<tr>
<td>C22</td>
<td>0.2</td>
<td>1.6</td>
<td>2</td>
<td>5.2</td>
<td>Construction</td>
</tr>
<tr>
<td>C23*</td>
<td>9.0</td>
<td>30.0</td>
<td>9</td>
<td>14.0</td>
<td>Automotive parts distributor</td>
</tr>
<tr>
<td>C24</td>
<td>3.0</td>
<td>5.0</td>
<td>3</td>
<td>21.6</td>
<td>Pharmaceuticals (manufact. &amp; distrib.)</td>
</tr>
<tr>
<td>C25</td>
<td>2.0</td>
<td>6.6</td>
<td>4</td>
<td>15.4</td>
<td>Pharmaceuticals (retailer)</td>
</tr>
<tr>
<td>C31</td>
<td>5.0</td>
<td>7.0</td>
<td>9</td>
<td>17.2</td>
<td>Forest industry</td>
</tr>
<tr>
<td>C32</td>
<td>13.0</td>
<td>2.0</td>
<td>5</td>
<td>25.0 (est.)</td>
<td>Communications</td>
</tr>
<tr>
<td>C33</td>
<td>4.5</td>
<td>25.0</td>
<td>4</td>
<td>7.9</td>
<td>Food distributor</td>
</tr>
<tr>
<td>C34*</td>
<td>2.8</td>
<td>9.3</td>
<td>3</td>
<td>8.5</td>
<td>Distributor to printing companies</td>
</tr>
<tr>
<td>C35</td>
<td>2.5</td>
<td>3.7</td>
<td>4</td>
<td>9.8</td>
<td>Printing</td>
</tr>
</tbody>
</table>

**NOTE:** *C11 stands for the first client interviewed in the Cl category (etc.). The * indicates the company chosen for a case study.*
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