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The Association Between Perceived Audit Firm Service Quality and Behavioural Intentions

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Abstract

The aim of this study was to develop and test an instrument for measuring service quality in an audit firm setting and then use this instrument to evaluate the influence of service quality perceptions on audit firm clients' intentions to purchase additional services. Based on qualitative research and secondary data, a questionnaire-based instrument was developed and assessed for reliability and validity. Data collected with the developed instrument was then used in a canonical correlation analysis. The developed instrument was found to be reliable and valid. It was further found that enhanced service quality was not associated with the provision of additional services but was associated with recommendations to prospective new clients and was weakly associated with retention of the audit firm.

Introduction

Accounting firms have undergone a major change over the last few years. A new range of services have been introduced, requiring considerable adaptation by the more traditionally-oriented accountants previously accustomed to the statutory audit functions being the core business. However, auditing functions still remain a cornerstone of large accounting practices.

Among professional services, auditing is unique. The service is required by statute and hence there is a question as to whether the providers of these services need to pay any attention to the perceptions of service quality that their clients develop. The client entity effectively engages the audit firm and pays the fee, but auditors do not provide a service directly to the client, but instead report to the public on the financial statements prepared by the client. In the vast amount of audit quality research contained in the economics of auditing literature, measures of audit quality are only based on audit firm attributes observable to users of audited financial reports such as brand name. However, the competition among audit firms with equally good brand names is high, which means that these firms need something other than brand name to provide a competitive edge.

The attitudes and behaviour of service providers in audit firms have an impact on the perceived quality of the services offered (Mills & Margulies, 1980; Wemmerlöv, 1990). This would suggest that the selection and retention of an audit firm may well relate to factors in addition to the areas which have been traditionally considered of importance, such as the economic alignment of the client and audit firm. Moreover, in view of the relationships between service quality and business performance that have been identified in other industries (Capon, Farley & Hoening, 1990; Caruana & Pitt, 1997; Cook & Verma, 2002), service quality may also play a major role in the retention of audit firm clients, the extension of existing accounting firm business and the development of new clients.

There is a paucity of research addressing the action-related aspects of the marketing of professional services. In particular, accounting, management, marketing consulting, law and similar professional service firms are said to have been subject to particular neglect (Bloom, 1984; Kotler & Bloom, 1990; Bloom, Smith & Blackburn, 1990). This paper is intended to act as a catalyst for further research by investigating the role that is played by audit service quality in developing and retaining business for accounting firms.

This paper is comprised of seven sections. After this introduction is a brief synopsis of the literature on audit service quality. The next section outlines audit firm switching and behavioural intentions. This is followed by a section outlining measurement scale development, data collection and data analysis. The final section of the paper sets out the conclusions that are drawn from the research.

Audit Service Quality

Service quality and its effect on business development has been studied in a range of other areas (Finn & Lamb, 1991; Kettinger & Lee, 1995) and is generally determined as a gap between performance and expectations (Parasuraman, Zeithaml & Berry, 1988). Audit service quality has not, however, been studied to any major extent in the academic literature.

Clients of audit firms have difficulty in directly assessing traditional concepts of audit quality (competence and independence) due to the complexity of the techniques and the associated proprietary methodologies or standardised methods of approach which are used by such firms. Intangibility and technical complexity of the services offered have therefore been assumed to lead clients to identify and base their assessments of the value of a firm on surrogate indicators such as, for example, corporate image (brand name), audit firm size (DeAngelo, 1981), audit firm industry specialisation (Craswell, Francis & Taylor 1996), office ambience, internal decor and support staff performance.

In the literature on services marketing, variation in customer perceptions of the value of the *offer* that a business makes to its clients has most commonly been linked to the quality of the service and the use of surrogate indicators such as those that were, for example, investigated by Brown and Swartz (1989) in the pharmaceutical industry.

Audit Firm Switching and Behavioural Intentions

Auditor switches have been extensively researched. Most empirical studies of audit firm switching have involved the statistical analysis of economic determinates of observed changes such as the efficient economic alignment of auditors and clients based on client characteristics and audit firm investment in specific technology, location and brand name (Simunic & Stein, 1987; Francis & Wilson, 1988; Johnson & Lys, 1990; DeFond, 1992). Examples of other variables used in audit firm switching studies are listed in Table 1.

Table 1: Auditor Switching Studies

Reason for Switch	*Studies*
Disagreements between auditor and management	De Angelo (1982) and McConnell (1984)
Poor working relationship	Eichenseher and Shields (1983) and Williams (1988)
Qualified audit opinions	Chow and Rice (1982), Smith (1986), May (1987) and Craswell (1988)
Financial distress	Schwartz and Menon (1985) and Haskins and Williams (1990)
Availability of other services	DeBerg, Kaplan and Pany (1991)

Source: Original table.

A growing area of market research has linked clients' perceptions of service quality and customer satisfaction to intentions to repurchase a service from the same supplier (Oliver, 1980; Bitner, 1990; Cronin & Taylor, 1992; Patterson, 1993; Taylor & Baker, 1994; Zeithaml, Berry & Parasuraman, 1996). The effect of service quality on business development in the audit area has, to the researchers' knowledge, not been the subject of any prior academic research though some evidence does exist in the audit literature to suggest that audit firm changes are precipitated by a poor working relationship between the auditor and audit client management (Eichenseher & Shields, 1983) and by the perception of poor service quality (Williams, 1988) (Table 1). Defining behavioural intentions as the client's intention to repurchase the service from the same supplier is, however, somewhat problematic for the following reasons:

- To propose that perceptions of audit service quality have an impact on intentions to switch audit firms assumes that the switch is not driven by any economic factors which make the present alignment between audit client and auditor inappropriate (Johnson & Lys, 1990; DeFond, 1992).
- Managers may only nominate auditor removal and appointment. The removal and appointment of external auditors is governed by Corporations Law which requires that auditors be appointed through a vote of the shareholders (*Corporations Act 2001*, section 327).
- Auditor switches are relatively infrequent (auditors are appointed until such time as they choose to resign or are removed by the shareholders [*Corporations Act 2001*, section 329]).

- It is costly to switch auditors. In addition to transactions costs it may include possible negative share market reactions (Craswell, 1988).
- There is considerable uncertainty about the level of quality provided by alternative suppliers.

Thus, repurchase intentions can only be considered in terms of managers' recommendations to shareholders rather than actual decisions to retain or remove their auditors. Behavioural intentions of audit clients can also be defined in another way as intentions to recommend the purchase of other services from the audit firm. The purchase of other services from the audit firm by audit clients is a significant source of revenue for audit firms. Therefore, to allow for the adoption of the concept of behavioural intentions to the audit service, behavioural intentions are defined as managers' intentions to recommend:

- at the next review of the audit firm's appointment that it be retained
- that other services be purchased from the audit client
- the audit firm to a colleague.

The purchase of other services from the audit firm represents an alternative behavioural intention in this context. Managers are expected to observe the nature of the audit service to assess the level of the quality likely to be provided in respect of other services. Thus, pre-purchase uncertainty about the quality of other services provided by the audit firm is reduced with exposure to the audit service. Moreover, recommendations of the audit firm to a colleague of the audit client can be a potentially valuable source of business development for audit firms.

In order to investigate the relationship of audit service quality to aspects of audit firm business development, it is first necessary to establish a method of measuring audit service quality. This was achieved in the research detailed in this paper by developing a valid and reliable instrument for such measurement.

Measurement Scale Development

First it was necessary to ensure construct face validity and reliability by including the relevant variables in the data collection instrument. Perceived audit service quality is the latent variable or construct and the relevant variables were those which represented this construct. Audit service quality was assumed to be made up of credibility (brand name), reliability (auditor competence), control (the auditor's contribution to internal control) and ancillary services (service and attitude of audit team members).

Variables to capture these constructs were initially developed through a review of the behavioural audit survey literature and exploratory research. An exploratory research phase then took the form of personal in-depth interviews until no new information was obtained. This level was achieved after interviews with four managers of audit clients and three audit partners. In addition, one of the Big 6 accounting firms provided access to the results of a national survey research report dealing specifically with audit and other accounting services. Four other Big 6 firms and one non-Big 6 firm also provided copies of their client survey data. These secondary data sources dealt specifically with perceptions of audit service quality, variable importance and the impact of engagement characteristics on perceptions.

The survey instrument also drew on information from the SERVQUAL scale developed by Parasuraman *et al.* (1988). Due to the previous differences which have been found between the dimensions of the quality of service between industry sectors (Roberts, Pascoe & Attkissin, 1983; Zink, 1990; Hamilton & Crompton, 1991; Hedvall & Paltschik, 1991; Scott & Shieff, 1992), however, it could be hypothesised that audit service clients would reflect a different set of needs to those examined in respect of other service firms and the SERVQUAL questions were therefore adapted to better reflect an audit setting. After consolidating the information from these sources, a questionnaire was obtained that contained 28 questions designed to measure the reliability, control and ancillary services attributes of audit service quality.

The next step was to subject the initial list to independent review. This was carried out by three senior managers and six marketing and auditing academics including two who specialised in this type of study. The questionnaire was then pretested by eight senior managers/executives of audit clients who were asked to identify any difficulties or ambiguities. This process resulted in some minor changes being made to the wording of the questionnaire.

Data Collection

A highly structured self-administered mailed questionnaire was used to collect the data on which the research in this paper is based. Initially, 200 companies were chosen at random from *Who Audits Australia 1995?* (Craswell, 1995); a data bank containing virtually all companies listed on the Australian Stock Exchange.

Using this sample, the companies were contacted by telephone to obtain the name of the chief financial accountant. Care was taken to identify the respondent required because responses may vary depending on who in the organisation is asked to complete a questionnaire (Phillip, 1981; Lynn, 1989). Chief financial accountants were chosen because discussions with auditors and company directors revealed that they have extensive contact with most members of the audit team throughout the audit and could therefore be expected to form perceptions about team members' performance. Moreover, it seems reasonable to expect that the opinion of the chief financial accountant will be sought by directors when the audit firm's performance is under review. This view was confirmed by comments received first-hand from chief financial accountants during an exploratory phase of the research.

Internationally, there is debate on the response rates that may be achieved using mail surveys. Some writers (Boyd & Westfall, 1972; Luck, Wales & Taylor, 1970) report that mail surveys achieve low response rates, while other writers (Yu & Cooper, 1983; Hoinville & Jowell, 1978) report that it is possible to achieve satisfactory response rates if the correct procedures are used. Within Australasia, Chui and Brennan (1990) have shown that effective response rates can be achieved if respondents are initially advised of the survey by means of letter or telephone and then a follow up letter is sent to non-respondents. It was consequently decided that a mail survey with suitable preliminary advice and subsequent follow up was appropriate for this study.

A covering letter was personally addressed to the chief financial accountant of the companies selected. The potential value of the research was briefly explained and a request was made to complete the questionnaire and return it in the attached reply paid envelope.

The initial response rate was 88.5 percent (177), but this was reduced to 68 percent (136) because either a questionnaire was not fully completed or because the company was no longer listed on the Australian Stock Exchange. Responses were received from each of the six Australian states. Sixty eight percent of the companies in the sample were audited by one of the Big 6 firms and 62 percent had had the same auditor for five or more years. Of the individual respondents, 78 percent were members of either the Institute of Chartered Accountants in Australia or the Australian Society of CPAs. This implies additional reliability of the responses as these respondents are likely to understand the role of the external auditor better than most others. Moreover, 42.6 percent of them were members of their company's audit committee. These respondents, in particular, are likely to have a significant influence on the decision to change auditors. The perceptions of the respondents chosen were, therefore, of relevance.

Data Analysis

Two possible measures of service quality were derived from the questionnaire results. Following on from the early work on service quality by Parasuraman *et al.* (1988), there has been a general acceptance that customer perceptions of service quality arise from a *disconfirmation* paradigm (where disconfirmation is understood to represent the difference between scored service quality components relating to expectations of service performance and perceptions of actual performance). In the instrument developed to measure service quality, Parasuraman *et al.* (1988) developed a disconfirmation score for each set of performance-expectation measures by subtracting performance scores from expectations scores. The same procedure was firstly followed in this research and the measures that resulted were then examined for convergence using confirmatory factor analysis and were also assessed for reliability. The confirmatory factor analysis indicated that the construct did not fit the data (GFI=0.43, AGFI=0.33,CFI=0.24 Standardised RMR=0.27) although the reliability was acceptable (at Cronbach's alpha = 0.86) (Nunnally, 1967). This result was not surprising since a problem with the use of difference scores in a service quality instrument has previously been identified (Cronin & Taylor, 1992; Peter, Churchill & Brown, 1993; Teas, 1993).

In a second measurement method, direct disconfirmation scores were obtained by asking the respondent clients for their perceptions of disconfirmation in regard to the component elements of the service quality construct. Such service quality instruments have been shown to overcome many of the objections levied against the classical subtractive disconfirmation instrument and to offer superior performance (Carman, 1990; Babakus & Boller, 1992; Devlin, Dong & Brown, 1993). The instrument that was used is shown in Table 2.

Table 2: Audit Service Quality Assessment Instrument

FEATURE	Performance on this feature is: MUCH WORSE THAN EXPECTED			ABOUT THE SAME			MUCH BETTER THAN EXPECTED
a. The audit firm's **work is technically accurate.**	1	2	3	4	5	6	7
b. Their **employees are pleasant and polite.**	1	2	3	4	5	6	7
c. The external audit **augments your organisation's system of internal control.**	1	2	3	4	5	6	7
d. The audit team's **attitude is one of sceptic,** not one of a management advocate.	1	2	3	4	5	6	7
e. The audit firm provides a sufficient **level of staff continuity.**	1	2	3	4	5	6	7
f. The audit engagement **partner** makes sufficiently frequent **visits to the audit site**.	1	2	3	4	5	6	7
g. The audit firm makes good use of their **international contacts and resources** to service your organisation's needs. (Please leave blank if not applicable to your organisation)	1	2	3	4	5	6	7
h. The engagement **partner** demonstrates a thorough **understanding of your organisation's industry.**	1	2	3	4	5	6	7
i. The external audit provides you with **assurance that your organisation's financial reports are free from material misstatements**.	1	2	3	4	5	6	7
j. The firm is **responsive** to your organisation's needs.	1	2	3	4	5	6	7
k. The audit team has a **co-operative relationship** with your organisation's staff.	1	2	3	4	5	6	7
l. They provide useful **assistance** with **interpretation** of accounting standards.	1	2	3	4	5	6	7
m. The audit firm makes **sufficient use of your organisation's internal audit** as part of the external audit process. (*Please leave blank if your organisation does not have an internal audit)	1	2	3	4	5	6	7
n. They act as a **deterrent against fraud** by your organisation's employees.	1	2	3	4	5	6	7
o. The audit firm provides adequate **details of the audit fee**.	1	2	3	4	5	6	7
p. The audit firm **delivers work by an agreed deadline.**	1	2	3	4	5	6	7
q. The relevant members of the audit firm are **available when needed**.	1	2	3	4	5	6	7
r. They **promptly communicate** significant audit findings.	1	2	3	4	5	6	7
s. They give high quality **advice** about **corporate finance**.	1	2	3	4	5	6	7
t. They give you **personal attention**.	1	2	3	4	5	6	7

u. The audit firm provides **value-for-money.**	1	2	3	4	5	6	7
v. The audit firm has a **high reputation** among users of financial reports.	1	2	3	4	5	6	7
w. Without charging an extra fee they provide **relevant advice** as part of the audit process.	1	2	3	4	5	6	7
x. They **identify weaknesses** in your organisation's **system of internal control.**	1	2	3	4	5	6	7
y. The audit team demonstrates **independence.**	1	2	3	4	5	6	7
z. The engagement **manager** demonstrates a **thorough understanding of your organisation's industry**.	1	2	3	4	5	6	7
aa. You have a high level of **confidence in the engagement partner**.	1	2	3	4	5	6	7
bb. The audit team is **trustworthy.**	1	2	3	4	5	6	7

Source: Original table.

The component questions of this instrument were tested for convergence using confirmatory factor analysis. The initial analysis, however, indicated that the data was not multivariate normal, as is required for maximum likelihood, or generalised least square analysis, as used in most confirmatory factor analysis programs (Mardia's coefficient [G2,P] = 46.36 normalised estimate = 4.20). However, EQS (Bentler, 1989) is a program that is effective for confirmatory factor analysis and features some special estimation procedures and statistics that may be used for some types of non-normal data. One of the methods that is featured in EQS does not assume multivariate normality and is based on elliptical distribution theory, which allows for kurtosis in the univariate or multivariate distributions. The program can also calculate a robust version of the Bentler Comparative Fit Index, which is an index of the overall fit of the model to the data and can use arbitrary distribution theory. Since the sample size was too small for arbitrary distribution theory to be utilised, the confirmatory factor analysis was carried out by employing the EQS program facility to analyse an elliptical distribution of data so as to take into account the size of the Mardia coefficient. The results of this analysis are shown in Table 3.

The results showed that the construct fitted the data well and that the items that had been identified did indicate a single latent variable that could be used as an instrument to measure service quality in an audit firm setting. Cronbach's alpha was used to assess the reliability of the construct and the value of 0.94 indicated a very good level of reliability (Nunnally & Bernstein, 1994).

The construct was also assessed for discriminant validity by examining the correlation between the summed score for this construct and that of a pure expectations construct. The value was 0.42 which indicated a low level of association and supported the discriminant validity of the construct.

A consolidated service quality score for the instrument was obtained for each client's response by summing all the construct indicators and dividing by 28. This value was then used in a further analysis to assess the relationship between the audit service quality score, the likelihood of business retention, likelihood of using additional services and propensity to recommend the audit practice to other possible customers. Because this analysis examined three dependent variables with one independent variable, the SAS canonical correlation process PROC CANCORR was used (SAS Institute Inc, 1989).

Table 3: Fit Indices and Cronbach Alpha

Fit Index	*Value*
Bentler-Bonett normed fit index (NFI)	0.96
Comparative fit index (CFI)	1.00
Bentler-Bonett non-normed fit index (NNFI)	1.05
Lisrel adjusted goodness of fit index (AGFI)	0.97
Lisrel goodness of fit index (GFI)	0.98
Bollen incremental fit index (IFI)	1.00
Root mean-square error of approximation (RMSEA)	0 .00
Cronbach alpha	0 .94

Source: Original table.

Canonical correlation is designed to examine situations when there are several independent and several dependent variables. The analysis that was carried out was therefore a simplified version of a canonical correlation analysis since there was only one independent variable. This meant that the canonical variates for all the dependent and all the independent variables were not calculated as part of the analysis since doing so would have been meaningless. The results are shown in Table 4.

Table 4: Canonical Correlation Statistics for Prediction of the Dependent Variables by the Independent Variable

	Standardised regression coefficients	*t-values*	*Prob > t*	*Adjusted R-Square*	*F Value*	*Prob> F*
Retain audit firm services	0.29	2.16	0.04	0.06	4.66	0.04
Provide additional services	0.14	1.00	0.32	0.001	0.99	0.32
Recommend to others	0.48	3.93	<.001	0.21	15.42	<.001

Source: Original table.

The results of this analysis showed that service quality was associated with the retention of audit services, although this association was weak with only 6.45 percent of the variance in client retention being associated with audit service quality. However, service quality was not associated with the provision of additional services to the client and therefore did not feature as an item of importance in developing further business with current clients.

The largest effect identified was that which existed between audit service quality and the recommendation of the firm to other possible clients. The analysis showed that 21.4

percent of the variance in recommendation of the firm to other possible clients was explained by service quality. This indication of a link between audit service quality and the recommendation of the service to others could therefore represent a useful tool to be used in attempting to gain new clients.

Conclusions

This research firstly developed and then tested an instrument for assessing service quality in an auditing context. Face validity of the instrument was achieved by the use of secondary information and exploratory research. Quantitative research methodologies were then utilised to assess convergent and discriminant validity. The instrument was found to exhibit good levels of validity and reliability. The proven instrument was then used to assess several possible relationships with audit service quality that could be expected to exist in professional service firms.

However, this study found that there was little association between service quality and client retention. This result is not surprising since according to legislation there is no limit to auditors' tenure and it is costly to change auditors. Moreover, this result supports the economics of auditing literature that suggests that audit firms are chosen so as to achieve the most efficient economic alignment between the auditee and auditor.

The results also show that there was no association between service quality and the intended use of additional services which would be provided by the audit firm. This result may be due to queries about other aspects of quality delivery such as technical quality, or as a result of a desire not to be too dependent on one supplier for a range of services. This result can also be explained by the fatc that many audit clients have a policy of not buying other services from their auditor, because of the potential for the impairment to the appearance of auditor independence. In addition, audit service quality may not transfer to service quality of other services since these would be delivered by different individuals.

There is an association between audit service quality and the intention to recommend the audit firm to other potential clients. This is an important finding and indicates that in the case of audit firms, *word of mouth* recommendation is a very important promotional tool. This would appear to be the principle way in which managers of audit firms can effectively *use* their clients' perceptions of audit service quality to further develop their practices.

Auditor switching has been extensively studied, but not from the services quality perspective. As far the authors are aware, this study represents the first attempt to link studies of auditor switching based on the economics of auditing to models of quality found in the services marketing literature. Further research is warranted as both disciplines are concerned with the quality of a professional service and switching behaviour of clients.

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