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Changes in Accountancy Costs for Tasmanian SMEs Implementing Computerised Accounting Systems

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Abstract

There have been powerful incentives for Tasmanian Small and Medium-sized Enterprises (SMEs) to adopt information technology to enable them to remain competitive and to comply with legislative regulations. This research study was undertaken to establish whether SMEs implementing computerised accounting systems have a subsequent change in their external accountancy fees. The research study employed a quantitative methodology using survey questionnaires. The study found that in less than 3% of cases SMEs reported a decrease in accountancy fees, in almost 45% of cases the organisation actually experienced a slight to substantial fee increase while 52% reported no change in accountancy fees.

Keywords

Accounting systems, Small and Medium Enterprises, System evaluation, User skills

INTRODUCTION

In order to remain competitive and meet legislative obligations, many Small and Medium Enterprises (SMEs) are implementing computerised accounting systems. Anecdotal evidence within accountancy firms suggested that one of the indirect costs resulting from this implementation is an increase in external accountancy fees. Accountants supply various services to organisations, however this study refers to those 'compliance' services performed to satisfy the requirements of the Australian Taxation Office (ATO), the Australian Securities and Investments Commission (ASIC) and Corporations Law. This work includes the preparation of annual financial statements, the income tax return for an organisation and if required, audit services. This study was conducted to ascertain whether or not there was any change in accountancy fees for Tasmanian SMEs who had implemented a computerised accounting system, and if fees had changed, in what direction was the change.

Although there is abundant research on the uptake of electronic commerce by SMEs, no specific studies examine the impact on external accountancy costs for SMEs who implement a computerised accounting system. A request was made to the two accounting bodies in Tasmania, the Institute of Chartered Accountants in Australia (ICAA) and the Certified Practising Accountants (CPA), for any information they could provide in regard to this, however they could offer no insight into this area. Although some software vendors (VolResource Trail, 2000) claim installing an accounting information system can reduce fees, no scientific research could be found to support this. The results of this study can assist SMEs make a more informed decision regarding implementing a new accounting system in consultation with their accountant.

If fees increase or decrease for organisations that have changed from a manual accounting system to a computerised accounting system, there could be other factors associated with the change. This paper also looks at what these areas are and whether or not there is any relationship between these factors and any change in accountancy fees.

Because of changes to the income tax system that commenced on 1 July 2000, this research relates only to accountancy fees for work up to the 30 June 2000. This was to ensure that any increase in accountancy fees from the implementation of accounting software was not related to the new tax system.

BACKGROUND

Small and Medium Enterprises

There is no accepted definition of an SME. Definitions vary among countries. However, they are usually based on levels of employment; an SME is considered to have fewer than 500 employees. Many countries use a lower cut-off of between 300 or 100 employees. Some countries differentiate between manufacturing and services SMEs; in this case, services SMEs are usually defined as smaller than manufacturing SMEs.

In Australia, a special report that was commissioned by The National Office for the Information Economy (NOIE), to examine technology and e-Commerce in Australian SMEs, decided to use the following criteria:

- Small businesses included up to 19 full-time employees (FTE)
- Medium-sized businesses employed between 20 and 200 FTE and had assets of less than \$200 million

Excluded from the SME category, and consequently this research study, is any enterprise that is a subsidiary, a public company, an unincorporated cooperative or an incorporated association (NOIE, 2000a). These categories align with the criteria identified by the Australian Bureau of Statistics.

SMEs form a major part of the Australian economy. According to NOIE, "*Small and medium-sized enterprises are vitally important to Australia's economic and social prosperity*" (NOIE, 2000b). The National Institute of Accountants (2001) claims SMEs provide 55% of total employment, representing 95% of total enterprise. As well as providing the majority of private sector employment growth in Australia, SMEs generate 54% of total Australian sales in goods and services, and accounts for more than half of the Gross Domestic Product (GDP) (PacificAccess, 2000; Swatman, 2000).

Tasmania has approximately 19,000 SMEs. Ninety seven percent of organisations in the Tasmanian economy are SMEs. These organisations employ 51% of all private sector employment in the state (Spencer, 2000). According to the Tasmanian Government, these industries underpin the Tasmanian economy.

Small business accounting packages

In a review of small business accounting software by ZDNet in the United Kingdom, five software products were tested for productivity, intuitiveness, satisfaction and usability. The testers were small business owners who had not used the software previously. The users spent three to four hours working with each package and working through tutorial materials for them to get familiar with the software. The test listed QuickBooks as number one and MYOB as number three (ZDNet, 1997). The study did not incorporate the relationship between the type of software used and subsequent accountancy fees, which is the focus of this study.

The software packages examined in this study are primarily MYOB and Quicken/QuickBooks, which had the greatest number of users in this survey. The 'other' category of software in this study had eleven different accounting software programs.

SME Computer Skills

According to NOIE (2000a), 60% of small businesses are now connected to the Internet, and 54% of small businesses use email. The Australian Government is committed to taking advantage of the information economy by encouraging and facilitating the uptake of electronic commerce within Australia. The Information Technology Online (ITOL) Program is a Commonwealth Government grants program administered by NOIE. ITOL encourages adoption of business-to-business (B2B) e-Commerce solutions, especially by SMEs (NOIE, 2000b).

Governments dealing electronically through their suppliers with e-Procurement are encouraging SMEs to register for these business opportunities. Another advantage for SMEs is the significant savings available through the use of online banking and savings by reducing client interaction costs (NOIE, 2000b).

The importance to SMEs of training in accounting principles does not seem to be apparent in the literature. According to NOIE (2000b), 61% of business owners and employees reported they would benefit from training in the Internet and e-Commerce. 40% of business owners and 39% of the employees said they needed more training in general computer skills, followed by Internet skills (24% and 22%). The Fourth R, an IT training organisation and accredited trainer in Quicken and MYOB, advertise “the importance of computer training to increase productivity, reduce costs and stay competitive”.

Accountancy Software Issues by VolResource (2000:2), lists the following benefits of changing from a manual system to accountancy software:

- Improved reporting, and therefore financial management
- Banish arithmetical errors
- Make record keeping more consistent
- Reduce audit (accounting) fees

Research Design

In examining the conversion from manual to computerised accounting systems and how this impacts on the organisation’s external accountancy fees, this paper tests the null hypothesis that investing in a computerised system does not save accountancy fees.

The questionnaire survey research technique allowed for an initial sample size of 300 to be randomly selected, from which 60 potential respondents who fell within the parameters for the research question could be identified through initial telephone contact. The response rate for this survey was 62%, with a useable response rate of 60%.

The random sample of 300 businesses was obtained from Australia On Line CD-ROM, which lists businesses by name and includes contact details, industry sector and demographic location. Clover and Balsley (1984) recognise random sampling as the most valuable technique for achieving validity and reliability, and this gives confidence when generalising from the random sample. To eliminate ineligible respondents, the businesses were telephoned to determine their size and if they fell into the SME category, they were also asked if they had changed from a manual accounting system to a computerised accounting system. The table below shows a breakdown of the businesses randomly selected.

Large Businesses	47
Accountants	3
Phone Disconnected	28
Phone Unanswered (3 attempts)	53
Still Use Manual System	57
Always Computerised	26
Government Departments	24
Declined to Participate	2
Agreed to Participate	60
Total	300

Table 1: Breakdown of Businesses Randomly Selected for Survey

A preliminary interview was carried out with a Tasmanian SME operating in Hobart. The interview followed the form of a semi-structured questionnaire containing questions relevant to the research topic.

Based on information gleaned from current literature, theories and hypotheses were established as a base for designing questions to enable the collection of valid and reliable data. To assist participants complete the questionnaire in the quickest time and with the least amount of effort, questions were grouped in a logical order and instructions for completion of the survey were clear and concise.

The completed questionnaire was peer reviewed prior to being reviewed by academic experts. To ensure the participants would understand the questions, the questionnaire was piloted on four SMEs, who were not included in the random sample surveyed.

There were no question design flaws detected from the pilot survey that required correction to ensure data could be coded in an accurate, valid and reliable method. The questionnaire was again reviewed both by academic experts in this field, and by accountants in Hobart. The questionnaires were sent out in May 2001 to enable data to be collected for accountancy fees for work done up to the year ending 30 June 2000.

In this study, to assist validation of findings on increases in accountancy fees, a mini-questionnaire of five questions was constructed and distributed to four Chartered Accountants practising in Hobart. The results of this questionnaire were used to compare findings from the survey data concerning the increase in accountancy fees for SMEs who implement computerised accounting systems.

To ensure methodological rigor, this study adheres to the ideal Survey Methodological Attributes (SMA) in Table 2, recommended by Grover, Lee and Durand (1993).

1. Report the approach used to randomise or select samples.	A random sample of organisations operating within Tasmania was generated from Australia On Line CD-ROM.
2. Report a profile of the sample frame.	The sample included organisations from all industry sectors and demographic locations within Tasmania.
3. Report characteristics of respondents.	From the random sample, all organisations were telephoned to determine which organisations fell into the category of SME as defined by NOIE and in alignment with the criteria used by the Australian Bureau of Statistics (ABS). It was also determined whether or not the SMEs fulfilled the other required criteria for this survey, that is, if they had implemented a computerised accounting system.
4. Use a combination of personal, telephone and mail data collection.	A preliminary interview was carried out prior to the construction of the questionnaire. After the questionnaire was formatted a pilot survey was conducted personally with four SMEs. The research study was discussed by telephone with all organisations surveyed. Questionnaire and covering letter were mailed to organisations.
5. Append the whole or part of the questionnaire.	The covering letter mailed with the questionnaire and an exact copy of the questionnaire is available by emailing the writer at schaplin@utas.edu.au.
6. Adopt a validated instrument or perform a validity or reliability analysis.	Reliability was achieved by ensuring clear and precise questions that would result in the same answers one week as the next. Due to the structured design of the questionnaire, some construct questions were not necessary to ensure equivalence reliability (Trochim, 1997). Validity is defined by Trochim (1997:1) as "the strength of our conclusions, inferences or propositions." Face validity was achieved through the process of having the questionnaire reviewed by academic experts and from information assessed from the pilot survey. Content validity was achieved by industry experts with accounting background, who ensured the content of the questionnaire endorsed the research question. The data collected by this survey is verifiable by referring to the completed questionnaires.
7. Perform an instrument pretest.	A pilot survey was carried out on four SMEs in help refine the instrument. Only minor modifications were necessary to the original survey document which was constructed after interviewing a SME in Hobart.
8. Report on response rate.	The total response rate and useable response rate are discussed above.
9. Perform a statistical test to justify the loss of data from non-respondents.	According to the Readex Learning Centre (2001), The Advertising Research Foundation suggests a 60% response rate or better minimises non-response bias, ensuring that the survey truly represents the population of interest. This survey had a useable response rate of 60%.

Table 2: Survey Methodological Attributes (SMA)

RESULTS

The respondents to this survey were spread throughout metropolitan and country areas of Tasmania. Hobart and Launceston, which were identified as the metropolitan areas, were evenly represented.

There were five main industry sectors plus an 'other' category. The distribution of industry sectors was fairly even apart from an over-representation of Retail. This sector made up 32% of respondents, although based on ABS statistics, the expected size of this sector (in 1997) was 20%. This increase could be due to recent pressure to make the transition to computerised accounting with the introduction of the new tax system. Industry sectors were Retail 32%; Hospitality/ Tourism 14%; Business/ Financial Services 17%; Construction 14%; Manufacturing 6% and other 17%.

The general perception by SMEs is that if they computerise their accounts system, this will make the preparation of the financial statements by their accountant easier and quicker, thereby saving on accountancy fees. Advertising from organisations such as Intuit reinforces this perception. Intuit is a company that distributes both Quicken and QuickBooks accounting software. The Intuit website advertises the following user story from their client, One Stop Property Group. On Intuit's website, One Stop Property Group claim "*The company has saved 75% on accountancy fees since using QuickBooks....*".

Although SMEs expect implementing a computerised accounting system will save in accountancy fees, anecdotal evidence suggests otherwise. In contrast to the above claim, Results for Business say Quicken "*Gives the impression of being very easy to correct mistakes by deleting the wrong entry but in doing so can cause enormous problems for your accountant*". Expecting that any change in accountancy fees would be an upward change, the following hypothesis was formulated for this research.

Main Hypothesis

The main hypothesis (H_1) being tested by this research study was:

An increase in accountancy fees is related to the change from a manual accounting system to a computerised accounting system.

Respondents were asked to indicate on a five point ordinal scale ranging from substantial decrease (1) to substantial increase (5), no change in fees was the mid-point on the scale, "*When you first used computerised accounting systems, did accountancy fees for the preparation of financial statements and tax returns increase or decrease? (Up to year ended 30.6.2000 only, please **do not** include costs for 2001 work, BAS or GST compliance work)*". Forty five percent reported a fee increase when they changed from a manual accounting system to a computerised accounting system. For the participants in this survey

3% reported a slight decrease

52% reported no change

28% reported slight increase

17% reported substantial increase

Micro organisations had increases of up to 60%-80%, with half of the increases being in the 40%-60% category. Small organisations reported increases of more than 100%, with one-third of their increases being in the 0-20% category and one-third being in the 20%-40% category. Medium-sized organisations increases were in the 0-20% category.

Accountancy fees can increase for a myriad of reasons. The respondents of this survey were advised in the covering letter, in the questionnaire and by telephone, not to include any increase in costs associated with GST compliance. The data collected in this survey suggests there is a significant deviation from non-change in accounting fees for SMEs who implement accounting information systems.

The higher the reported in-house costs, the more likely the organisation was to have an increase in accountancy fees. This area of investigation could be included in further research recommended by this study.

While this research study has concentrated on an indirect *cost* to the organisation of implementing computerised accounting software, there may also be indirect *benefits* to the organisation. The indirect benefits categories used for this study were:

- Budget Planning
- Inventory Control
- E-Commerce
- Strategic Planning
- Other

In the 'other' category, organisations listed time savings and improved internal controls as indirect benefits from their present computerised accounting system.

While micro and small organisations both reported budget planning as the most common indirect benefit, medium organisations ranked inventory control, e-Commerce and strategic planning as equal first importance. It was interesting to note that while micro and medium organisations ranked inventory control, e-Commerce and strategic planning as equal in the indirect benefits received, small organisations indicated they were three times more likely to receive benefits from strategic planning than e-Commerce.

Accounting software is recommended by vendors, consultants and accountants as essential to the operation of a modern office/business environment. Operators of SMEs may see a chance to save money and continue to operate efficiently. It is becoming apparent, however, that monetary savings - either in accounting fees or new efficiencies - are becoming hard to realise.

In order to establish a relationship between fee increases and variables, a model was developed to assist in formulating other hypotheses for this research.

Areas that may influence a change in fees were identified as:

- SME's knowledge of accounting principles
- Type of software package used
- Training received by the user
- Previous computer experience of the user

In order to assist testing the above model, a second phase of data collection was developed. A mini-questionnaire was completed by four Hobart Chartered Accountants. Data collected from the mini-questionnaire suggested computer-prepared accounts are presented in a worse mess than what the accountants previously worked on out of shoe boxes. Anecdotal evidence suggests a lack of knowledge of accounting principles and the type of software used as reasons for fee increases. However, Curtis (1996) suggests many old-style accountants are intimidated by computers and accounting software and feel threatened they will lose both revenue and control. This insecurity could contribute to the increase in accountancy fees for some SMEs but this suggestion has not been researched for this paper. The following hypotheses were based on the above model to determine why a large number of SMEs have fee increases after implementing accounting software.

Hypothesis 2

To examine the model for the increase in fees, further hypotheses about the influence of other factors were tested in the survey data. The second hypothesis was:

The training received is related to the change in accountancy costs.

Originally, the questionnaire was designed to ascertain whether who supplied the training was related to a change in costs. The three response categories were for training provided by the accountant, the software supplier, some 'other' entity. However, as almost 28% of respondents had no training, the remaining numbers were too small to test separately. Therefore, rather than testing who supplied the training, a Chi-Squared test was done on whether or not the users had training. This resulted in a χ^2 of .289. For significance at the 0.05 level, chi-square should be greater than or equal to 3.84, therefore the null hypothesis cannot be rejected. That is, whether or not the SME received training makes no difference

as to whether or not they had an increase in accountancy fees. Of the users who received training 50% had an increase in fees and of the users who did not receive any training 40% had an increase in fees.

The survey responses showed that one-half of the training was supplied by the accountant, and in the small and medium enterprises the accountants mainly trained data entry operators. For organisations trained by accountants, 46% had an increase in accountancy fees. With the results of the mini-questionnaire completed by accountants indicating the most likely cause for fee increases was a lack of knowledge of accounting principles, perhaps accountants may need to look at which users require the training, and the type of training to be delivered by accountants.

Hypothesis 3

A further issue in containing costs could be the particular packages used by the SMEs. This was expressed as a third hypothesis:

The type of accounting package installed is related to the change in accountancy costs.

Because the majority of respondents (56%) had installed MYOB software, the responses for the different types of software were too small for significance testing to show categories. The data was therefore divided into MYOB or Not MYOB. Based on this a Chi-Square test produced a χ^2 value of 1.626 with 1 degree of freedom, corresponding to a P-value of .202. As this is greater than 0.05 the null hypotheses cannot be rejected.

From the data collected, 35% of MYOB users had an increase in accountancy fees, 80% of Quicken/Quickbooks had an increase in fees and 50% of 'other' brand software had an increase. To further test this hypothesis, a Kruskal-Wallis test, applied to a random sample of values for one independent discrete variable and one dependent continuous variable (Page and Meyer, 2000), was used to test for the software package and the percentage of change in fees. This gave a P-value of .290, thus providing no evidence for rejecting the null hypothesis even though Quicken/ QuickBooks has a higher ranking of the percentage change.

To gain further insight into this area, the mini-questionnaire completed by four Hobart Chartered Accountants was referred to. After knowledge of accounting principles being most closely related to accountancy fees, most accountants indicated the type of software as being a likely reason for fee increases.

Two accountants specifically mentioned easy-to-use accounting software as being an area of concern for clients. Both referred to a package as being very easy to use with little or no knowledge of basic bookkeeping. This very fact however, also meant that because the package users did not understand the accounting process of posting debits and credits, they often produced inaccurate accounts. One accountant noted that MYOB did require a basic level of understanding of the accounting information system process, and therefore the final accounts were more meaningful. Intuit promote Quicken/ QuickBooks as "*extremely easy to learn and use for users without any accountancy knowledge ...*" while MYOB say "*we refuse to allow our goal of ease of use to interfere with our goal of accounting power*".

It was noted from the survey questionnaire, one micro organisation based in Launceston with state-wide operations and classified in the \$500,001 to \$2 million turnover group, changed from Quickbooks to MYOB in 1999. Although the respondent indicated the organisation would continue with MYOB the following comment was made "*Too much hassle to change back to Quickbooks (preferred system)*". This organisation did not have any change in accountancy fees. Furthermore, they did not indicate any indirect benefits received from the present system.

Hypothesis 4

The second aspect of user characteristics tested related to the confidence and competence of the SME operators in more general computer use. The 4th hypothesis was:

Users' prior computer knowledge is related to the change in accountancy costs.

This was a parametric test, since the users' knowledge and the magnitude of the change both satisfied the requirements for an interval scale of measurement. The Pearson's correlation coefficient (r) value for this test was $-.042$ with a P -value of $.810$. As this P -value is > 0.05 the null hypothesis cannot be rejected. This means there is no demonstrated relationship between the level of prior computer knowledge and the organisation's change in accountancy fees. Sixty four percent of respondents had moderate to extensive computer knowledge and 36% had little or no prior computer knowledge. Out of the 64% with moderate or above prior knowledge, almost one-half had an increase in fees. Likewise, of the 36% who had little or no prior computer knowledge, one-half had an increase in fees.

Hypothesis 5

If users cannot be separated on prior computer knowledge it is likely that the cause of the fee increase is not simply technical difficulty. Other areas of knowledge, such as accounting principles, are likely to be more important:

The level of users' knowledge in accounting principles is related to an increase in accountancy fees.

Due to the overall small size of SMEs in Tasmania (in this survey 50% of SMEs were in the micro organisation category), most do not have the services of an in-house accountant. In this study less than 17% of SMEs had either tertiary-trained staff or qualified accountants working in their organisation. For organisations that had these trained staff, 67% reported no change in their accounting fees. Of the respondents who had no formal training, 50% had a change in fees and 50% had no change. Of the remaining respondents who did have formal qualifications, 34% had a change in fees and 66% had no change.

It is possible that accounting knowledge is important, but that the variable has not been measured in a sufficiently fine-grained way. For example, there are large numbers of staff with 'in-house' training, and the quality and effectiveness of that training is open to debate.

In future research the level of knowledge of accounting, rather than just the amount and type of training received, should be determined. It is possible that users and operators have had significant experience with accounting information systems but have little idea of the principles on which they operate. An extended design would evaluate knowledge of accounting principles as directly as possible, rather than indirectly through the type of background training received.

CONCLUSIONS

The study has endeavoured to find a relationship between the increase in costs and variables that may be responsible for the change in fees. Although there is some suggestion that lack of accounting knowledge, and possibly the encouragement of easy-to-use packages to carry out the work without understanding its content, contribute to the increased costs, these hypotheses require more specific testing in larger samples and with improved measures of the underlying variables.

For this study, mostly non-parametric tests were used, as the scales used for measuring values were in the main nominal or ordinal scales. Chi-squared tests were used as appropriate to the specific hypotheses.

In answer to the research question, "How has the implementation of accounting software in Tasmanian SMEs impacted on accountancy costs?" it is noted that almost one-half of organisations, 45% in fact, had an increase in fees ranging from a slight increase to a substantial increase of over 100%. Other factors that may relate to this change in fees were also tested.

The results of data collected were analysed using SPSS and Excel. Evidence provided in this research study indicates there is no statistically significant relationship between a change in fees.

Variables that may influence a change in accountancy fees	Results of data analysis
<ul style="list-style-type: none"> Whether or not users had computer training on implementation 	<ul style="list-style-type: none"> Received training – 50% had a fee increase No training – 40% had a fee increase
<ul style="list-style-type: none"> The type of accounting package installed 	<ul style="list-style-type: none"> MYOB – 35% had an increase in fees Quicken – 80% had an increase in fees Other – 50% had an increase in fees
<ul style="list-style-type: none"> Users prior computer knowledge 	<ul style="list-style-type: none"> No prior knowledge – 50% had an increase None to Moderate – 40% had an increase Moderate – 56% had an increase Moderate to Extensive – 25% had an increase Extensive – no change in fees (only one firm)
<ul style="list-style-type: none"> The turnover of the organisation 	<ul style="list-style-type: none"> <\$50,000 – 67% had an increase in fees \$50,000-\$200,000 – 40% had an increase in fees \$200,001-\$500,000 – 50% had an increase in fees \$500,001 - \$2million – 40% had an increase in fees >\$2million – 43% had an increase in fees
<ul style="list-style-type: none"> The industry sector in which the SME operates 	<ul style="list-style-type: none"> Retail – 50% had an increase in fees Hospitality – 80% had an increase Business/ Finance – 33% had an increase Construction – 50% had an increase Manufacturing – no change Other – 33% had an increase
<ul style="list-style-type: none"> Whether software was installed by the accountant, software supplier or in-house 	<ul style="list-style-type: none"> Accountant – 45% had an increase Supplier – 33% had an increase In-house – 53% had an increase
<ul style="list-style-type: none"> Whether information was supplied to the accountant by floppy disk or hard copy printout of account balances 	<ul style="list-style-type: none"> Disk only – 40% had an increase Hard copy only – 47% had an increase Both disk and hard copy – 60% had an increase
<ul style="list-style-type: none"> The number of subsequent queries the accountant had 	<ul style="list-style-type: none"> Queries – 50% had an increase No Queries – 33% had an increase
<ul style="list-style-type: none"> Who prepared the adjusting entries to bring the organisation's accounts in line with the accountant's accounts 	<ul style="list-style-type: none"> Prepared by accountant – 50% had an increase Prepared by organisation – 33% had an increase
<ul style="list-style-type: none"> Any change in in-house costs 	<ul style="list-style-type: none"> Slight decrease – 33% had an increase Same – 35% had an increase Slight increase – 55% had an increase Substantial increase – 75% had an increase
<ul style="list-style-type: none"> Indirect benefits received by the organisation were identified as: <ul style="list-style-type: none"> 39% budget planning 31% inventory control 19% electronic commerce 25% strategic planning 17% other 20% no indirect benefits 	<ul style="list-style-type: none"> Indirect benefits – 46 % had an increase No indirect benefits – 43% had an increase
<ul style="list-style-type: none"> How the SMEs felt the software fulfilled 	<ul style="list-style-type: none"> Not at all to moderately well - one firm with no fee

Variables that may influence a change in accountancy fees	Results of data analysis
their requirements	change <ul style="list-style-type: none"> • Moderately well – 72% had an increase • Moderately to extremely well – 44% had an increase • Extremely well – 22% had an increase
<ul style="list-style-type: none"> • Whether or not any users had formal training in book-keeping or accounting 	<ul style="list-style-type: none"> • No formal training – 58% had an increase • On-the-job training – 41% had an increase • Tertiary/ Qualified – 33% had an increase

Table 3: Results of Data Analysis

So what does cause accountancy fees to increase for 45% of Tasmanian SMEs who implement accounting software? Qualitative data obtained from a mini-survey of four Tasmanian accountants to try to answer this question, indicated that a lack of understanding of accounting principles was the main cause for fee increases for organisations implementing accounting software.

While there is much research on the implementation of software and the subsequent implications such as time scheduling or budget blow-out on the project, software producers or distributors are reluctant to advertise increased indirect costs such as accountancy fees.

Software vendors promote aspects of the packages and their support to encourage SMEs to install them. But the issue to be addressed is wider and must involve accountants and business principles as well. The software cannot substitute for at least a basic understanding of the task it is being used for. To complete the accounting activities operators must have some contextual training as well as purely operational training.

It is important for SMEs to have access to the type of information presented in this study. Although the cost of installing a computerised system (both hardware and software) has never been more affordable, some SMEs, particularly in a lower populated state such as Tasmania, have difficulty in justifying this expense. This is understandable with nine percent of micro organisations in this study recording an annual turnover of less than \$50,000.

Therefore, to assist with their financial planning, if SMEs are aware they have a 45% chance of increased accountancy fees after implementing computerised accounting software, they will have the opportunity to liaise with their accountant prior to implementation for the best method available for them to ensure their fees remain unchanged. Similar considerations arise in relation to in-house cost changes, and for longer-term benefits the way in which the organisation realises the potential indirect benefits will be crucially important.

This study has not found any of the factors commonly reported in information systems literature to be significant determinants of whether computerised accounting information systems assist in restraining costs.

However, the study highlights the importance of finding effective measures of the factors suspected to drive the costs. For example, the level of accounting knowledge was tested through the type of training in accounting principles. The knowledge level for most of the sample was so low that there was little discrimination and little opportunity to confirm the effects of this knowledge. Accountants who have to deal with the outputs from businesses are concerned about accounting knowledge. The measures need to be both more closely aligned with the underlying hypotheses being tested (i.e. test against knowledge not training) and the levels of knowledge need to be identified in pilots and adapted for use in the final survey instrument.

This research was undertaken as a result of previous contact with Tasmanian SMEs, where there was a general perception that if they changed from a manual accounting system to a computerised accounting system they would save on their annual accountancy fees. The data collected in this study shows that almost one-half of Tasmanian SMEs who implement a computerised accounting system have a subsequent increase in their accountancy costs.

At best the costs remain unchanged following the introduction of the new system. No savings on in-house costs are realised, and indirect benefits are marginal.

Does this mean arguing for minimal computerisation of accounting systems? There is some justification if the business owner takes a purely mechanistic, deterministic and short-term financial view of the world. However, it is possible that other business objectives can be realised, and that by organising the accounting functions the business owner may be freed up to take a more strategic approach to managing the business. The significance of indirect benefits can be explored more thoroughly in future research. Having determined the relationship between existing accounting systems and accountancy fees, the results of this study will enable further study to establish whether accountancy costs will rise, and if so, to what extent, when organisations and accountants are required to account for Goods and Services Tax (GST).

There is scope to further test the relationship between the type of software used and any change in accountancy fees. For this study, the problem is that with the small, highly skewed samples generated in this area powerful statistical techniques are not available. Until a preliminary study of this type was completed, the problems inherent in more detailed analysis were not apparent. It is suggested that this area of research requires further investigation. Specifically the sample size or sampling methodology needs to address the problem of obtaining sufficient users of each software package to properly test the hypothesis of an effect of the package.

This study relates to fee changes up to the 30 June 2000, which is prior to the introduction of GST, however, many of the SMEs spoken to in this study raised the subject of increased in-house and external fees due to GST compliance. There was some data collected in this survey regarding GST compliance. This related to in-house costs after 1 July 2000, who completes the BAS, BAS frequency and whether or not their software accounts for their GST obligations. All respondents indicated they were registered for GST and that their software did account for the GST obligations. There is scope for further research regarding increases in costs for SMEs who have installed software to meet their GST compliance obligations and a comparison of accountancy fees pre-GST and post-GST.

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