EVALUATION OF FACTORS INFLUENCING ADOPTION OF ACCOUNTING INFORMATION SYSTEM BY SMALL TO MEDIUM ENTERPRISES IN CHINHOYI

Gwangwava Edison
Lecturer, Department of Accounting sciences and finance Chinhoyi University of Technology Zimbabwe

Faitira Manuere
Lecturer, Department of Business Management and Entrepreneurship Chinhoyi University of Technology Zimbabwe

Mabvure Joseph
Lecturer, Department of Accounting sciences and finance Chinhoyi University of Technology Zimbabwe

Kuadakwashe Gutu
Lecturer, Department International Marketing Chinhoyi University of Technology Zimbabwe

ABSTRACT
The study investigated factors that influence non adoption of computerized accounting information system by small to medium enterprises. The descriptive survey method provided an accurate description of the variables in the problem model. A sample size of 72 SMEs was chosen from a population of 100SMEs using the stratified sampling followed by random sampling. Questionnaires and interviews were used for data collection. The research findings indicated that cost benefit analysis, lack of government support, financial constraints, complexity of AISs strongly influence non adoption of AISs by SMEs whereas ignorance about AISs as well as reluctance are weak predictors of non adoption by SMEs. Findings also reveal that AISs is not associated with company size. The researcher recommended government intervention through providing finance, subsidies as well as collateral security to SMEs through both the Ministry of Small to Medium Enterprises as well as Ministry of Information Technology for easy adoption.

Keywords: Accounting information system; Small to Medium Enterprises; Adoption; Cost Benefit Analysis

Introduction

AISs is defined as a computer-based system that processes financial information and supports decision tasks in the context of coordination and control of organizational activities (Nicolaou,2000).

In this new era of technological advancement, the role of computerised accounting information systems (AISs) such as Sage, Tally, Pastel, SAP, Smart stream, Great planes is of paramount importance in managing an organisation and implementing internal control systems. AISs allows a company to manage its business with potential benefits of improved process flow, reduced inventories, better data analysis, better customer service, and improved profit margins (Fan and Fang, 2006). Considering the benefits mentioned above, it is easy to see why AISs are accepted to be one of the most significant developments in the world and also the most accepted standard business software.

However despite all the benefits associated with the use of AIS, SMEs in Zimbabwe are still disinclined to adopt this technology. Micro, Small and Medium enterprises are defined as entities that employ up to 75 people subject to both maximum total annual turnover and maximum gross value of assets excluding immovable property (Small Enterprise Development Corporation Act Chapter 24:12).This can be illustrated diagrammatically as shown below:
Table 1.1: CLASSIFICATION OF MICRO, SMALL AND MEDIUM ENTERPRISES

<table>
<thead>
<tr>
<th>Size or Class</th>
<th>Maximum total number of full-time paid employees</th>
<th>Maximum total annual turnover $</th>
<th>Maximum gross value of assets (excluding immovable property) $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium:</td>
<td>75</td>
<td>1000000</td>
<td>500000</td>
</tr>
<tr>
<td>Small:</td>
<td>30</td>
<td>500000</td>
<td>250000</td>
</tr>
<tr>
<td>Micro:</td>
<td>5</td>
<td>30000</td>
<td>10000</td>
</tr>
</tbody>
</table>

(Source: SMEs Development policy 2002)

Background of the study
The development of SMEs has never gained so much attention in Zimbabwe before. Presently, the challenges and difficulties of adopting information technology become the bottleneck of the development of SMEs in Zimbabwe (SMEs Development Policy 2002). This is due to the fact that most AISs available on the market are beyond the reach of many SMEs in Zimbabwe, due to resource scarcity caused by lack of financial assistance. Wang (2004) further asserts that many SMEs either do not have sufficient resources or are not willing to commit a huge fraction of their resources due to the long implementation times and high fees associated with AISs. More so, lack of organisational preparation of SMEs, caused by the low extent of formalization of people’s roles and responsibilities that is expressed by with their continuous re-shuffle and consequently it becomes difficult to adopt AISs (Motwani et al., 2002). Also most AISs vendors provide complex information systems that are beyond the needs of SMEs coupled with the limited expertise in information technology and the opportunity to adopt a process-oriented view of the business tends to influence, AISs adoption by SMEs (Levy and Powell, 2000).

Research Objectives

The purpose of this study was:

1. To identify benefits to SMEs of adopting AISs
2. To establish factors influencing non adoption of AISs by SMEs
3. To determine the effects on SMEs of not adopting AISs
Research Hypothesis

H₀: Non adoption of AISs is not associated with company size

H₁: Non adoption of AISs is associated with company size.

Literature review

Theoretically, AISs are known to improve a firm’s effectiveness and efficiency. The current literature reveals little research evidence about accounting information systems in micro enterprises in developing countries. In support of this, Mitchell and Reid (2000) suggested that researching AISs in the micro enterprises has been almost non-existent with only a relatively few research studies. Furthermore Randall and Horsman (2001) indicated that AISs has been neglected in the small enterprise literature, despite its importance to business success. Yet, while large businesses have been using computers for some time, SMEs have been slow in adopting this technology innovation. This slow adoption is a critical issue because SMEs play a paramount role in enhancing the Zimbabwean economy.

Benefits of adopting AISs

Information technology that a few years ago was within reach of only large companies can now be employed by SMEs, thereby increasing their competitive advantage (Malone, 2001 and Porter, 2003). Competitive advantage is gained through efficient processing of customer orders thereby improving customer satisfaction. More so AISs provide an opportunity for business to improve their efficiency and effectiveness in decision making thereby allowing firms to gain competitive advantage.

Furthermore AISs, cover the fullest range of organisational activities and processes and are adopted with the aim of achieving substantial cost savings as well as improved access to tried and tested solutions as they also provide an opportunity to update procedures and align them with perceived examples of “best practice” (Pollock and Cornford, 2004). In that regard AISs encompasses a set of business applications used to carry out common business functions such as accounting, human resources management, stock management. The fundamental nature of a comprehensive AIS is to computerise business processes and most importantly, to produce real-time data (Nah et al., 2001; Themistocleous et al., 2001).

Beke J, (2010) suggested that there is an improvement in accounting quality and decision making associated with using AISs. Quality decisions occur since AISs ensures easy access to information records that are properly kept. Beke (2010) further argued that AISs tended to have standardized forms of data analysis as provided by the information system which is in support of Pollock and Cornford, (2004) who argued that AISs also provide an opportunity to update procedures and align them with perceived examples of best practice.

Although usual information systems offer managers services in transaction processing, reporting and provide information for decision-making purposes, these functions appear insufficient in the new business environment where automation, effectiveness and efficiency in operations, coupled with real-time data are considered important factors for business success (Al-Mashari, 2001; Themistocleous et al., 2001). Accounting Information systems are capable of producing real-time information for management to respond to, thus improving control and strategic
decision-making (Spathis and Constantinides, 2003). Real time information is necessitated by the fact that AISs provide fairly easy access to all the data as and when it is needed as the data will be stored in a single computer database, where the user just searches for the required information. In support of this Booth et al., (2000) said that AISs have proved to be quite effective in transaction processing but less effective in reporting and decision support. In contrast, the soundness of a decision is enhanced by well documented valid information that is obtained from AISs and thus this coupled with the expertise of an individual will guarantee sound decisions.

In support of Booth et al (2000), Granlund and Malmi (2002) further argued that a common organisation-wide information structure and integrated information system could produce significant benefits for global organisations. It has been found that AISs provide general benefits in terms of increased transaction processing efficiency, more accessible information of a higher quality and greater support for adhoc reporting. Evidence from a survey on companies who have adopted AISs and their impact on management accounting practice confirms a number of such benefits (Spathis and Constantinides, 2002). The most highly-rated perceived benefits involve increased flexibility in information generation, improved quality of reports, increased integration of accounts applications and improved decisions based on timely and reliable accounting information. More specifically, AISs are expected to: reduce costs by improving efficiency through computerisation; and enhance decision-making by providing accurate and updated organisation-wide information; both of which should then lead to improved company performance (Poston and Grabski, 2001).

In contradiction AISs benefits are only feasible if the costs of adopting AISs do not outweigh the benefits. Where the costs are higher than the benefits then no benefits are realized from using such a system by SMEs. In line with this, Sajady, et al, (2008) argued that the although information generated from AISs can be effective in decision-making process, purchase, installation and usage of such a system is beneficial when the benefits exceed its costs. In support, Corner (2000) in support argued that benefits of AISs can be evaluated by its impacts on improvement of decision-making process, quality of accounting information, performance evaluation, internal controls and facilitating company’s transactions.

However, a counter argument argues that determining the benefits derived from the adoption of accounting information systems has been an elusive goal for academics and practitioners alike. Irani and Love (2001) proposed a framework for the challenges associated with categorising benefits. As one moves from strategically-oriented information system projects through tactical to operationally-oriented projects, the benefits accrued go from those that are generally intangible and non-quantitative in nature to more tangible and quantitative ones. This is in agreement with (Murphy and Simon, 2002) who argued that when benefits derived from an accounting information system become quantitative in nature the whole idea of AISs benefits becomes a misty hill which is difficult to clear. Once benefits derived from AISs become quantitative, it is most likely that the concept of cost benefit analysis will come into play and, for SMEs once the costs of using an AISs are greater than the benefits, then there will be no need to continue using such a system as it is costly. This contradicts with Shang and Seddon (2000, 2002) who
argue that the types of benefit that organisations can gain by using AISs can be classified along five dimensions: operational, managerial, strategic, information technology infrastructure and organisational.

However in order for SMEs to reap the benefits of using AISs, there is need for full capacity utilization of AISs by probably employing highly skilled personnel. In support of this Flynn (2002) argued that for these benefits to accrue AISs adopted need to be effective hence the effectiveness of AISs is evaluated using evaluation models according to the purpose of usage.

**Factors influencing non adoption of AISs**

AISs adoption among SMEs is very low. This is largely due to a variety of reasons that are beyond the control of SMEs. In line with this Wang (2004), established that accounting information technology adoption by the SMEs in West China has a relatively low success rate due to various reasons, such as the relatively low development degree of the marketisation, economically backwardness, apart from the characteristics of SMEs, including small-size, poor credit reputation, and weak innovation capability. Furthermore small equity capital, also contribute to non adoption of AISs by SMEs. Small equity capital is caused by failure to secure loans from banks and other lenders due to lack of collateral security and high probability of failure. In ropes with this, Lu et al., (2005) argued that subject to undeveloped capital market, low income of the residents, the comparatively low open-up degree and the lack of financing service agencies for SMEs generally results in relatively low equity capital.

However, human behaviour based on perceived ease of use and perceived usefulness play a paramount role in influencing the adoption of AISs by SMEs. Users that perceive AISs to be useful and easy to use are more likely to adopt the technology than those that do not. In support of this, Legrisa (2003) suggested that perceived ease of use and perceived usefulness are the two most important factors in explaining accounting information technology adoption. Thus the behavioral intention of chief executive officer of SMEs to adopt accounting information technologies is influenced by their perception of the characteristics of electronic means. Therefore, chief finance officers who perceive accounting information technologies to be superior, compatible and easy to understand, are more willing to adopt electronic means.

Complexity of AISs also affects the adoption of AISs by SMEs. Where SMEs owners perceive AISs to be too complicated and beyond their needs, they are less likely to adopt the technology. (Gibson et al., 2000) suggested how AISs adoption and implementation could be a highly complex task in which strong managerial and strategic competences are required to achieve the best fit between the business peculiarities and the system itself and to deal with the unavoidable organizational impact induced by an AIS implementation. Both strong managerial and strategic competencies are a deficiency in SMEs and thus it results in failure to adopt AISs. In support of Gibson et al (2002) a research conducted by Duxbury et al (2002) found that the main perceived barriers to implementation computer technologies among Canadian small business were the lack financial resource and skilled personal. Other studies however, outlined different adoption patterns depending on company size and also observed that smaller companies face only subset of the needs and opportunities of larger organizations.
Cost benefits perceptions tend to influence non adoption of AISs. The basic and common assumption in examining consumer behavior is value maximisation. The principles of cost–benefit analyses are exemplified in the concept of value, which is broadly defined as the trade-off between total benefits received and total sacrifices. Perceived net benefit is the belief that the technology will provide benefit of greater value than its costs. The potential benefits of accounting information technologies include cost savings, improving performance. Guo and Feng (2008) argued that Chief Executive Officer (CEO) who perceived the potential net benefits of using accounting information technologies is more likely to adopt them than a CEO who does not perceive the net benefit of the technology. It is expected that perceived usefulness directly affects cost–benefit perception.

Similarly firm size of SMEs also influences the intention to adopt AISs. The size of a firm provides the financial resources to acquire a new technology and enables spending on innovative activities. Larger firms are more likely to be able to invest large amounts of capital, time and learning in order to use the technologies than smaller firms.

Complexity of the business tends to affect adoption of AISs by organisations both small and large. Large organisations have a high probability of adopting AISs due to the complex nature of their business and voluminous transactions compared with small firms whose transactions are not that complex. Markus and Tanis (2000), argued that adoption of AISs by SMEs is largely limited by their simple size in nature which is easy to manage. In dispute to this, Buonanno et al, (2005), suggested that business complexity, as a composed factor, is a weak predictor of AISs adoption, whereas just company size turns out to be a very good one. In support, Guo and Feng (2008) argued that firm size also directly affected the intention to adopt accounting information technologies. They further established that SMEs disregard financial constraints as the main cause for AISs non-adoption, suggesting structural and organizational reasons as major ones. This pattern is partially different from what was observed in large organizations where the first reason for not adopting an AIS is organizational. This is in contrast with (Wang, 2004) who argued that many SMEs either do not have sufficient resources or are not willing to commit a huge fraction of their resources due to the long implementation times and high fees associated with AISs implementation.

Effects of not adopting AISs

Non adoption of AISs has negatively affected SMEs as they cannot enjoy those benefits inherent with the use of AISs. This has negatively affected the operations of SMEs to such an extent that some of them have even failed to survive. Randall and Horsman (2004) found that the lack of AISs use contributed to small enterprise failure.

Furthermore lack of AISs usage results in poor decision making by SMEs as information from their records is mainly in form of incomplete records. Incomplete records makes it even harder for sound decisions to be made as they require a expert in accounting to interpret them into information, a deficient which often lacks in SMEs. In tangent with this, Mia and Chenhall (2003) argued that failure to adopt and implement AISs is the reason why most companies fail to make sound decisions as their information keeping tend to be haphazard as the firm grows.
Raymond et al, (2001) however argues that failure to do adopt AISs by organisations resulted in shoddy accounting reports and information. He further noted that AISs do computerise most if not all standard accounting reports such as financial statements, accounting ratios and failure to adopt this technology means that SMEs have to produce these records manually, coupled with lack of proper accounting expertise results in shoddy accounting reports. In support, Holmes (2003), stressed that lack of AISs use is a barrier that prevented external accountants from providing sound management accounts reports.

In support of Mia and Chenhall (2003) as well as Randall and Horsman (2004), Hall and Young (2005) established that lack of AISs use was the major reason why most small enterprises made unsound decisions. Furthermore they showed that AISs was an important deficiency in 38 per cent of the 241 failed small enterprises surveyed in China.

However non adoption of AISs by SMEs can only negatively affect their business operations only if the benefits of adopting significantly outweigh the effects of non adoption. Where both adoption and non adoption results in neutral consequences that is neither positive nor negative consequences, then there is no need to adopt the technology in the first instance as there is no value addition. In support, Nejad et al (2008) highlighted that adoption of AISs is only beneficial where costs of adoption are outweighed by the benefits. They established that when the costs of adopting and implementing AISs are greater than the benefits then firms that do not adopt such systems will not have any disadvantage.

Research methodology

Descriptive Research Design

The researcher made use of descriptive surveys as they were used by Buonanno et al (2005) in their study ‘Factors affecting ERP system adoption: A comparative analysis between SMEs and large companies’. This is so because the research is descriptive in nature as it seeks to explore factors contributing to non adoption of AISs by SMEs.

Descriptive research design was used since it provides an accurate description of the variables in the problem model. Also descriptive surveys’ purpose is to identify those factors under study that influence the non adoption of AISs by SMEs. Ghauri (2005) concur that descriptive research is useful for exploratory studies and are well suited for producing information about particular characteristics in a finite population.

Population

100 SMEs both formal and informal regardless of sectors of production was used. The population was chosen on the basis of number of employees, the minimum being 5 employees and therefore any SMEs that employed less than 5 employees was not considered.
Sampling

Considering the size of the population it was not possible to study all SMEs and hence stratified sampling was used to group SMEs into micro, small and medium, all giving a sample of 72. Micro companies constituted 28% of the sample, small 16% and medium 28% both formal and informal. This was done by putting the names of all 100 SMEs in a bucket and then 80 names were pulled out randomly by an independent person.

Simple random sampling was chosen because every member of the population had an equal chance of being selected with the probability of each SME being selected oscillating around 0.8. It also improves the quality of information and is efficient and gives true presentation of the population.

Research Instruments

For the purpose of this study the researcher made use of questionnaires and personal interviews as they were used by Buonanno et al (2005), in their study ‘Factors affecting ERP system adoption: A comparative analysis between SMEs and large companies’

Discussion of results and findings.

Table 4.1 Indicating AISs use by SMEs

<table>
<thead>
<tr>
<th>AISs usage</th>
<th>Micro</th>
<th>Small</th>
<th>Medium</th>
<th>Total</th>
<th>% Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users</td>
<td>4</td>
<td>4</td>
<td>12</td>
<td>20</td>
<td>28</td>
</tr>
<tr>
<td>Non Users</td>
<td>24</td>
<td>12</td>
<td>16</td>
<td>52</td>
<td>72</td>
</tr>
</tbody>
</table>

The table above indicates that there is little AISs usage by SMEs as shown by a mere 28% usage.
Table 4.2 Indicating Benefits of AISs to SMEs

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total SMEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved accounting quality</td>
<td>12</td>
<td>36</td>
<td>24</td>
<td>72</td>
</tr>
<tr>
<td>Improved quality of reports</td>
<td>16</td>
<td>44</td>
<td>12</td>
<td>72</td>
</tr>
<tr>
<td>Flexibility in information generation</td>
<td>8</td>
<td>36</td>
<td>28</td>
<td>72</td>
</tr>
<tr>
<td>Reduced costs</td>
<td>32</td>
<td>40</td>
<td>0</td>
<td>72</td>
</tr>
<tr>
<td>Eliminates duplication of efforts</td>
<td>16</td>
<td>40</td>
<td>16</td>
<td>72</td>
</tr>
<tr>
<td>Effectiveness &amp; efficiency in decision making</td>
<td>28</td>
<td>36</td>
<td>8</td>
<td>72</td>
</tr>
<tr>
<td><strong>% of total</strong></td>
<td></td>
<td><strong>54%</strong></td>
<td><strong>20%</strong></td>
<td><strong>72</strong></td>
</tr>
</tbody>
</table>

Use of AISs by SMEs is beneficial. According to sample results, 54% of the participants agree that adoption of AISs is beneficial to SMEs with 20% strongly agreeing beyond reproach that AISs is beneficial to them. This is in line with Poston and Grabski, (2001) who highlighted that adoption of ERP systems is expected to reduce costs by improving efficiency through computerisation, and enhances decision-making by providing accurate and updated information leading to improved company performance. However, 26% of the participants disagreed arguing that adoption of AISs is not beneficial to SMEs.

4.1.3 Factors Influencing Non Adoption of AISs by SMEs

Column Bar Graph Indicating Factors Affecting AISs Adoption

![Figure 1](image-url)
The above factors were cited as having an influence towards the adoption of AISs by SMEs. About 56% of the respondents strongly agreed that cost benefit analysis plays a paramount role in non adoption of AISs with 33% simply agreeing that it plays a role in the adoption of AISs where as about 11% of the participants argued that cost benefit analysis does not affect SMEs’ adoption of AISs. This implies that cost benefit is strongly behind non adoption of AISs by SMEs. This is in support of Guo and Feng (2008) who highlighted that it is expected that perceived usefulness directly affects cost–benefit perception and thus where SMEs owners perceive AISs to be useful in relation to cost; they are likely to adopt it rather than those that perceive costs as outweighing the usefulness of AISs. Financial constraints as well as expensive nature of AISs directly affect adoption of AISs by SMEs as indicated by a high agreeing participant rate of 56% and 72% respectively. 39% and 18% strongly agree that financial constraints and expensive nature of AISs highly affects the adoption of AISs by SMEs whilst 5% and 6% disagree respectively. Wang (2004) confirmed that SMEs either do not have sufficient resources or are not willing to commit a huge fraction of their resources due to the long implementation times and high fees associated with AISs implementation. 67% of the participants strongly argued that lack of government support is greatly behind non adoption of AISs by SMEs whilst an equilibrium number of participants of 16.5% each do agree as well as disagree about the effect of lack of government support. Reluctance as well as ignorance about AISs does not affect non adoption of AISs by SMEs as was indicated by a high disagreeing response rate of 78% and 67% respectively. However only 28% agreed that ignorance about AISs was a contributory factor in non adoption of AISs by SMEs as well as 5% strongly agreed to that. Only 5% agree that reluctance is behind non adoption of AISs whereas 17% strongly agree that SMEs are just reluctant to adopt AISs. Complexity of AISs also greatly affects adoption of AISs by SMEs as indicated by a high strongly agreeing response rate of 39%. 33% simply agree that complexity of AISs contributes to non adoption of AISs whereas 28% disagree that complexity of AISs does not hinder adoption of AISs by SMEs. This was supported by Gibson et al., 2000 who highlighted that ERP adoption and implementation could be a highly complex task in which strong managerial and strategic competences are required to achieve the best fit between the business peculiarities and the system itself. Strong managerial competences are a major deficiency in SMEs which further complicates adoption of AISs by SMEs.

4.1.4 Effects of Non Adoption of AISs on SMEs

Graph Indicating Effects on SMEs of not adopting AISs

Figure 2
Failure to adopt AISs greatly affects SMEs as records keeping tend to be haphazard as was indicated by a high strongly agreeing response rate of 56%. 39% of the respondents also agree that without AISs information tends to be chaotic with only 5% arguing that lack of AISs does not affect information keeping.

SMEs also tend to produce poor accounting reports as shown by 56% agreeing response rate. 39% strongly agree that non adoption of AISs to a large extent affects the quality accounting reports. In support of this Raymond et al, (2001) however argued that failure to do adopt AISs by organisations resulted in shoddy accounting reports and information. In contrast only 5% argue that failure to adopt AISs does not affect quality of accounting reports.

50% of the respondents agree that non adoption of AISs results in duplication of efforts with a corresponding 11% strongly agreeing that there is high duplication of efforts. However, 39% argue that non adoption of AISs does not result in duplication of labour. Non adoption of AISs therefore results in duplication of efforts.

Non adoption of AISs does not leave an audit trail in SMEs as indicated by a high strongly agreeing response rate of 44%. 33% simply agree that non adoption of AISs leaves no audit trail in SMEs whilst 23% of the respondents argue that non adoption of AISs does not in any way affect the audit trail of SMEs.

Non adoption of AISs does not result in failure by SMEs to process customer orders. This was indicated by a 50% disagreeing respondents rate. 28% of the respondents argue that non adoption of AISs results in failure to process customer orders on time whilst 22% strongly agree that there is high rate of failing to produce customer orders timely.

Non adoption of AISs has no effect on the competitive advantage of SMEs. This was indicated by a split opinion as 50% of the respondents argued that non adoption of AISs does not reduce the competitive advantage of SMEs whilst a corresponding 50% argued that non adoption of AISs reduces the competitive advantage of SMEs. In contrast Mia and Chenhall (2003) highlighted that failure to adopt AISs results in reduced competitive advantage of SMEs.

Non adoption of AISs does not result in poor decision making as shown by a 72% disagreeing response rate. 28% of the participants argued that non adoption of AISs does result in poor decision making. In contrast Holmes (2003) stressed that lack of AISs use is a barrier that prevented external accountants from providing sound management accounts reports that resulted in poor decision making.

Failure to adopt AISs does not result in failure of SMEs. This was indicated by a high disagreeing response rate of 61% whereas 28% argued that non adoption does result in failure of SMEs. Only 11% strongly agreed that lack of AISs greatly resulted in SMEs failure. However, Randall and Horsman (2004) found that the lack of AISs use contributed to small enterprise failure.

### 4.1.5 Hypothesis Evaluation

H1: Non adoption of AISs is not associated with company

#### Table 4.3 AISs use by SMEs

<table>
<thead>
<tr>
<th>SMEs</th>
<th>AISs usage</th>
<th>Micro</th>
<th>Small</th>
<th>Medium</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users</td>
<td>4</td>
<td>7.77778</td>
<td>4</td>
<td>4.4444</td>
<td>12</td>
</tr>
<tr>
<td>Non Users</td>
<td>24</td>
<td>20.2222</td>
<td>12</td>
<td>11.556</td>
<td>16</td>
</tr>
</tbody>
</table>

| | 28 | 16 | 28 | 72 |
\(X^2 \sim X^2(2)\)

\[\text{df} = (c-1) (r-1)\]
\[= (3-1) (2-1)\]
\[= 2\]

Test at 5% level of significance:

Reject \(H_0\) if \(X^2_{\text{calc}} \geq X^2(5\%)\)

That is \(X^2_{\text{calc}} \geq 5.991\)

Where \(X^2_{\text{calc}} = \sum (fo-fe)^2/fe\)

Where \(fo = \) observed frequency

\(fe = \) expected frequency

\[
\begin{array}{cccccc}
fo & fe & fo-fe & (fo-fe)^2 & (fo-fe)^2/fe \\
4 & 7.778 & -3.778 & 14.27328 & 1.8350841 \\
4 & 4.444 & -0.444 & 0.197136 & 0.04436 \\
12 & 7.778 & 4.222 & 17.82528 & 2.2917567 \\
24 & 20.222 & 3.778 & 14.27328 & 0.7058295 \\
12 & 11.556 & 0.444 & 0.197136 & 0.0170592 \\
16 & 20.222 & -4.222 & 17.82528 & 0.8814798 \\
\end{array}
\]

\(X^2_{\text{calc}} = 5.776\)

Since \(X^2_{\text{calc}} < 5.991\) the researcher accepted \(H_0\) and concluded that at 5% level of significance, there is no association between company size and non adoption of AISs.

Small to Medium Enterprises’ small size does not contribute to non adoption of AISs as was proved by the hypothesis testing and hence company size is a weak predictor of non adoption of AISs by SMEs.

**Recommendations**

AISs vendors should strive to provide custom made AISs packages that suit the needs and requirements of SMEs. Also the packages should be easy to use and affordable. More so AISs vendors should hold workshops with SMEs in order to educate them fully on the benefits of adopting AISs.

Government through the ministry of information and communication technology, should ensure that it provide easy access to computerised AISs through financing the purchasing of computerised AISs by SMEs by providing subsidies on those SMEs that purchase AISs.

More so government through the Ministry of Small to Medium Enterprise should provide collateral security to SMEs through providing financing of purchasing of initial assets of SMEs so that they may in turn use the assets as collateral assets to access loans from banks.

Also SMEs should strive to employ qualified human resource personnel that are competent to use computerised AISs. This will make it easy to adopt AISs.
References


Micro Small to Medium Enterprise Policy (2002), Ministry of Micro Small to Medium Enterprise, Print flow

Small Enterprise Development Corporation Act Chapter 24:12, 4th schedule section 2, Zimbabwe.


