

## **Utilization of Accounting Information System in Small Medium Enterprises in line with Food Industry in San Pablo, Laguna**

John Andrae Brila, Christopher Dennis Catapang  
*Bachelor of Science in Accountancy*

### **ABSTRACT**

*An Accounting Information System (AIS) is by and large a PC based technique for following bookkeeping action related to data innovation assets. AIS is in charge of the gathering, stockpiling and handling of monetary and bookkeeping information that is utilized for interior administration basic leadership, including nonfinancial exchanges that specifically influence the preparing of money related exchanges. Without a doubt Accounting Information System (AIS) is imperative for all organizations, it is more critical for medium-sized and little ones which require this data to manage a higher degree of vulnerability in the aggressive market (Grande, Estebanes, and Colomina 2011).*

**Keywords:** *Accounting information system, medium enterprises*

### **INTRODUCTION**

Success in the execution of the Accounting Information System (AIS) is critical to businesses. It is essential to study about the important factors that affect systems usage, and also the connections to quantifiable business results. As information and communications technologies cover a wide range and include all the areas in which a firm acts, this research will show that computerized accounting tools are directly related to the economic and financial results and productivity in small and medium-sized business organizations (Cramm, 2008).

As information and communications technologies cover a wide range and include all the areas in which a firm acts, this research will show that computerized accounting tools are directly related to the economic and financial results and productivity in small and medium-sized business organizations (Cramm, 2008). This research will also help its readers that are future business employees to understand how accounting information system today are being utilized to help the business in different kinds of ways.

All organizations are seeking to increase their profit ability and revenues through the utilization of available resources and make quick decisions based on correct and accurate information in a timely manner, which in this matter has increased the importance of accounting information systems (Abdallah 2013). This study is to identify the impact of using accounting information systems on the quality of financial statements that are submitted to the income tax and sales department in Jordan and whether they have an impact on decision-making and accelerate the completion of the work of the department.

### **Conceptual Framework**

Figure 1 shows the conceptual framework of the research. This study was to measure the utilization of accounting information system depending on the demographic profile of the businesses who belongs to the category of small and medium industry in with food industry in San Pablo, Laguna which includes business line, number of years in operation, type of business ownership and number of employees. Next the researchers determines what type of accounting information system are used by the business. Lastly, the researchers measures the utilization of accounting information system with its different variables that includes bookkeeping, security, decision making, and compliance for BIR requirements.

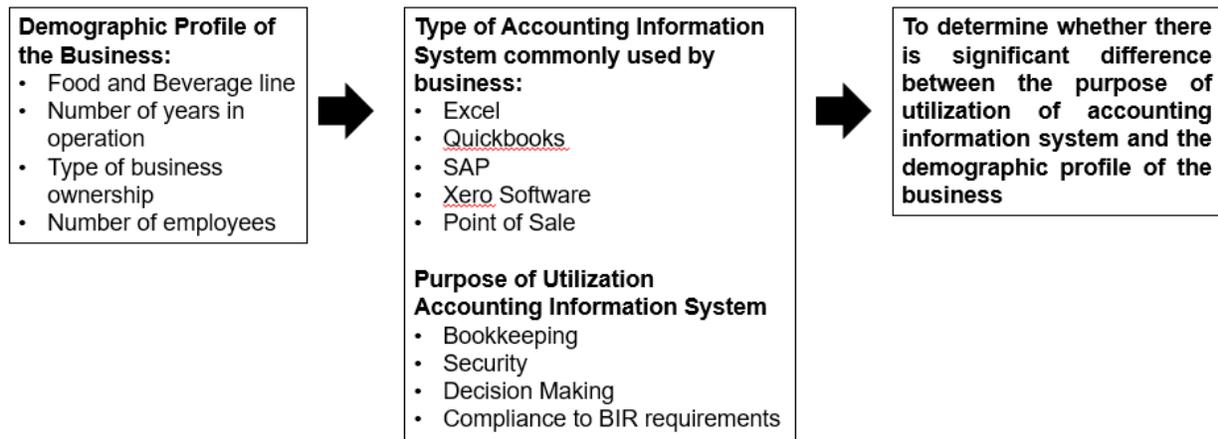


Figure 1. Conceptual Framework of the Study

### **Objectives of the Study**

The overall study is to know utilization of Accounting Information System towards Small-Medium enterprises in line with food and beverages in San Pablo City, Laguna.

### **METHODOLOGY**

The researchers used a quantitative design with 43 owners and operators of Accounting Information Systems as the respondents. The survey questionnaire was used to determine the demographic profile of the respondents and perception. The questionnaire has four parts. The first part determines the demographic profile, the second part is to determine the type of accounting information system being used by the business, the third part determines the utilization of accounting information system in terms of bookkeeping, security, and decision making, the last part determines how accounting information system helps the business in its compliance to BIR requirements.

Frequency Distribution and Percentage was used for the researchers to determine the respondents' demographic profile (food and beverage line, number of employees, type of business ownership, number of employees, and type of accounting information system being used). Weighted Mean was used to determine average responses of the respondents of different options and factors under the questionnaire. Analysis of variance was used in order to measure more than two means, thus, also used in order to test the equality of means. This tool was very flexible for it also tested and overall significance of a variable.

### **RESULTS AND DISCUSSIONS**

Table 1 shows the demographic profile of the respondents. Majority of the respondents were a restaurant (30.2%) while coffee shop came up second (18.6%). The table also shows food kiosk (16.3%) with bakery and convenience store each have (14%) respectively while catering services got the least number of respondents (7%). Restaurants have always played an essential role in the business, social, intellectual and artistic life of a thriving society. The major events of life, personal and professional, are celebrated in restaurants. Acquaintances become friends around a table in the safe and controlled environment of a restaurant. (Fieldman, 2015).

Majority of the respondents expressed that have been operating for 1 to 5 years (83.7%) while 5 of the respondents answered that they have been in operation for 6-10 years (11.6%). The table also shows that only 1 respondent answered that they have been operating for 11 to 15 years and 21 to 25 years (2.3%). The statistics indicate the first four to five years are the "survival years." Each year, one out of 12 businesses in the United States closes its doors, but this rate is one in six in the first four to five years (Paul and Sarah Edwards, 2003).

Most of the respondents said that they had sole proprietorship of their business (44.2%. While, and equal number of 12 respondents per ownership type said that are part of a corporation and that they are in a partnership (27.9%). Sole proprietor ownership provides a lot of benefits for the sole owner. Advantages of being a sole proprietor are having a complete control and decision-making power over the business, sale or transfer can take place at the discretion of the sole proprietor, no corporate tax payments, minimal legal costs to forming a sole proprietorship, and few formal business requirements (AllBusiness, 2007).

More than half of the respondents said that they have about 5 to 15 employees (86.0%). Five participants answered that they have 16 to 25 employees (11.6%). While, only 1 participant said that they have 36 and above number of employees (2.3%). Miscalculating your staffing needs can have a crippling effect on the growth of your home care business. While your company may be able to carry the weight of extra employees for a while, over time the company will sink under the unnecessary weight (Marcum, 2016).

Table 1. Demographic profile of respondents

Category	Frequency	Percent
<b>Business Line</b>		
Coffee Shop	8	18.60
Catering Services	3	7.00
Bakery	6	14.00
Restaurant	13	30.2
Convenience Store	6	14.0
Food Kiosk	7	16.30
<b>Years in Operation</b>		
1-5 years	36	83.70
6-10 years	5	11.60
11-15 years	1	2.30
21-25 years	1	2.30
<b>Business Ownership</b>		
Sole Proprietorship	19	44.20
Corporation	12	27.90
Partnership	12	27.90
<b>Number of Employees</b>		
5-15	37	86.00
16-25	5	11.60
36 and above	1	2.30
<b>Type of AIS</b>		
Programmed Excel	17	39.50
Xero Software	0	0
Point of Sale	26	60.5
Quickbooks	0	0
SAP Software	0	0

Majority of the respondents or 26 of them in total said that they use Point of Sale as their AIS (60.5%). While 17 respondents answered that they prefer to use Programmed Excel as their AIS (39.5%). Generally, SMEs already use the Point of Sales (POS) in the form of a cash register. The cash register is the most widely used for restaurant payment service as well as the recording of transactions (Lana Sularto, Wardoyo, Tristyanti Yunitasari, 2014). Being developed based on Microsoft Excel platform, our system has a further advantage of being cost-effective (NI Bakti, 2017). As most hospitals and trusts already possess licenses for Microsoft Office products, this key feature ensures that trust does not have to purchase and install any additional software in order to have this system running in all their networked computers. This cost factor may help encourage more departments and trusts to migrate to an electronic-based system from a paper-based system. All problems will be solved if both the restaurant do the accounting records by making use of an application program designed specifically for restaurants. Accounting software that is easy to use, will help in the management of their businesses, the need for fund management and financial reporting will be easily obtained.

The results in Table 2 showed that the usefulness of AIS in business operations in terms of decision making is highest when it is used on “planning well ahead of time when it comes to business” with a mean of 3.36 which means that SMEs find it more useful to plan ahead of time, or make a goal that the business will rely on as they go about their day. The reliance on “gut feeling” when making decisions as the lowest mean with 2.65.

The overall results show that businesses prefer to plan ahead and work out the pros and cons before making a decision and relies less on taking advice from others and relying on “gut feelings” when they have to make decisions. They also find AIS least useful in terms of decision making with a computed mean of 2.91.

Table 2. Utilization of AIS in business operations in terms of decision making

	Weighted Mean	Verbal Interpretation
I plan well ahead of time when it comes to business.	3.36	Strongly Agree
I find it difficult to think clearly when I have to decide something in a hurry.	2.86	Agree
I avoid taking advice over decision.	2.65	Agree
I rely on “gut feelings” when I am making decisions.	2.63	Agree
I work out all the pros and cons before making a decision	3.07	Agree
Composite Mean	2.91	Agree

*Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 -1.49 = Strongly Disagree.*

Table 3 shows that usefulness of AIS in business operations in terms of bookkeeping is highest when it is used on the business with a mean of 3.33 which means that SMEs find AIS more useful to with their businesses. Using AIS as bookkeeping to keep data intact is seen as the lowest with a mean of 3.07. The overall results show that businesses highly prefer using AIS with their businesses for it is helpful and more useful but will not highly prefer AIS when bookkeeping to keep data intact. They also find AIS as moderately useful with a computed mean of 3.18.

**Table 3. Utilization of AIS in business operations in terms of bookkeeping**

	Weighted Mean	Verbal Interpretation
Obtaining timely and accurate data from the customers.	3.09	Agree
The data are intact.	3.07	Agree
AIS keeping up-to-date with industry changes.	3.14	Agree
The system is useful in the business.	3.33	Strongly Agree
The Accounting information system is more reliable than the manual system.	3.26	Strongly Agree
Composite Mean	3.18	Agree

*Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 -1.49 = Strongly Disagree.*

The results gathered from 43 respondents showed that the usefulness of AIS in business operations in terms of security is highest when passwords in files or data are used with a mean of 3.51 in Table 4. This means that SMEs find it more useful to apply passwords to protect their data and keep them secure. The reliance on restricting the access to computers restricted is seen as the lowest mean with 3.16.

The overall results show that using of passwords on files and data, and keeping backups of files of the daily operations of the business to be the most useful application of AIS for security of SMEs. While making computer access restricted and only having operators allowed to use the system to be the least useful. They also find AIS to be the most useful for security with a computed mean of 3.32.

**Table 4. Utilization of AIS in business operations in terms of security**

	Weighted Mean	Verbal Interpretation
Access to computer are restricted.	3.16	Agree
Operators are the only one that who is allowed to use the system.	3.19	Agree
Use of password in the files or data.	3.51	Strongly Agree
Use of data backup in daily operation of the business.	3.37	Agree
Unauthorized personnel should be prohibited while conducting the data.	3.35	Agree
Composite Mean	3.32	Agree

*Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 -1.49 = Strongly Disagree.*

Table 5 shows the usefulness of AIS in business operations in terms of compliance with BIR requirements. The usefulness is highest when the AIS helps to properly compute the deduction on VAT of all sales with a mean of 3.33 which means that SMEs find it more helpful to use AIS to automatically deduct the VAT deductions with all sales to hasten the pace of transactions and lessen human errors. The use of AIS to help compute the employee contribution for SSS, PhilHealth, and HDMF to be the lowest with a mean of 3.14.

The overall results show that using of AIS for automatic VAT deduction and recording and storing of proper data for to be the most useful application of AIS for BIR compliance of SMEs. While using the AIS to compute for SSS, PhilHealth, and HDMF, and overall usefulness of AIS for BIR completion to be the least useful. They also find AIS to be the moderately useful for BIR completion with a computed mean of 3.24.

**Table 5. Utilization of AIS in business operations in terms of compliance with BIR requirements**

	Weighted Mean	Verbal Interpretation
The use of AIS helps the business to comply BIR requirements on time.	3.19	Agree
AIS helps to compute employees contribution to SSS, Philhealth, & HDMF.	3.14	Agree
The AIS helps to properly compute the deduction on VAT sales.	3.33	Agree
AIS helps to record and store proper data that can help with its tax compliance.	3.28	Agree
The AIS can help the business with its transparency with its compliance to BIR requirements.	3.26	Agree
Composite Mean	3.24	Agree

*Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 -1.49 = Strongly Disagree.*

Table 6 presents that there is no significant difference in a quantitative characteristics of utilization of accounting information system in Small-medium Enterprises in terms of bookkeeping, security, decision making and compliance to BIR compliance since the compute p values are greater than 0.05 level of significance. This implies that quantitative characteristics of utilization of accounting information system in Small-Medium Enterprises terms of food and beverage line is not affected by bookkeeping, security, decision making and compliance to BIR compliance.

**Table 6. Significant difference on utilization of AIS in terms of food business line**

	f-value	p-value	Interpretation
Bookkeeping	0.6812	0.439	Not Significant
Security	0.6952	0.4292	Not Significant
Decision Making	0.8292	0.4162	Not Significant
Compliance to BIR Requirements	2.5846	0.196	Not Significant

It can be noted in Table 7 that there is no significant difference in a quantitative characteristics of utilization of accounting information system in Small-medium Enterprises in terms of bookkeeping, security, decision making and compliance to BIR compliance since the compute p values are greater than 0.05 level of significance. This implies that quantitative characteristics of utilization of accounting information system in Small-Medium Enterprises terms of number of years in operation is not affected by bookkeeping, security, decision making and compliance to BIR compliance.

**Table 7. Significant difference on utilization of AIS in terms of years in operation**

	f-value	p-value	Interpretation
Bookkeeping	0.9462	0.554	Not Significant
Security	1.403	0.339	Not Significant
Decision Making	2.6952	0.144	Not Significant
Compliance to BIR Requirements	1.5448	0.3628	Not Significant

Table 8 shows that there is no significant difference in a quantitative characteristics of utilization of accounting information system in Small-medium Enterprises in terms of bookkeeping, security, decision making and compliance to BIR compliance since the compute p values are greater than 0.05 level of significance. This implies that quantitative characteristics of utilization of accounting information system in Small-Medium Enterprises terms of business ownership is not affected by bookkeeping, security, decision making and compliance to BIR compliance.

Table 8. Significant difference on utilization of AIS in terms of business ownership

	f-value	p-value	Interpretation
Bookkeeping	0.8958	0.3022	Not Significant
Security	0.803	0.3842	Not Significant
Decision Making	0.6256	0.4124	Not Significant
Compliance to BIR Requirements	2.1962	0.1418	Not Significant

It can be seen from Table 9 that there is no significant difference in a quantitative characteristics of utilization of accounting information system in Small-medium Enterprises in terms of bookkeeping, security, decision making and compliance to BIR compliance since the compute p values are greater than 0.05 level of significance. This implies that quantitative characteristics of utilization of accounting information system in Small-Medium Enterprises terms of number of employees is not affected by bookkeeping, security, decision making and compliance to BIR compliance.

Table 9. Significant difference on utilization of AIS in terms of business ownership

	f-value	p-value	Interpretation
Bookkeeping	1.2132	0.3204	Not Significant
Security	0.4941	0.5126	Not Significant
Decision Making	0.3322	0.556	Not Significant
Compliance to BIR Requirements	1.1514	0.307	Not Significant

## CONCLUSIONS

Every business has their own daily transactions which leads to the creation and use of AIS to help them handle the information (Shubair, 2011). Their preferred AIS used in their business was either programmed excel or point of sale.

The results for the usefulness of AIS in business operations for decision making showed that they mostly prefer to plan ahead of time when it comes to business matters. Which is actually the main function of AIS, better decisions are made when accounting information is fully understand (Nicolaou 2009).

When it comes to the usefulness of AIS in business operations for bookkeeping, AIS is mostly useful for the overall system of the business. The study of Hakim in 2007 investigated the effect of the usage databases on bookkeeping data systems controlling in the general population division. He meant to distinguish shortcomings in controlling capacity in the framework investigation organize. He found that using databases in outlining bookkeeping data frameworks and activities enhances accounting data frameworks' controlling.

For the usefulness of AIS in business operations for security expressed that the use of passwords to keep files or data safe is the most commonly used feature for AIS. Accounting Information System is thus vital to all organizations (Ogah, 2013).

There is significant relationship between AIS and bookkeeping and no significance at all for decision making and security. In the study of Ogah in 2013, AIS in bookkeeping is a vital tool of management that provides an orderly method of gathering and organizing information about the various business transactions so that it may be used as an aid to management in operating the business.

Lastly, the AIS usefulness for business in terms of compliance with BIR requirements proved to be most helpful for computing for VAT sales deductions. With VAT having different effects on business, and is especially stronger for SMEs (Anna Azmi, Noor Sharoja Sapiei, Mohd Zulkhairi Mustapha, Mazni Abdullah, 2016), makes the highest usefulness for AIS to address this for the businesses very competent and highly compliant with BIR requirements. The use of the AIS system will lessen human error and will automatically show the deductions whenever a transaction is done, which is beneficial not only for the business but for also the consumers as well.

### **Recommendations**

The results of this study is highly beneficial to all SMEs and business alike. For these business, may they study and analyze the purpose of AIS and how they are used to maximize the usage of this program to help them with decision making, bookkeeping, security, and compliance with BIR requirements.

For future researchers, may you apply the concept of the study with different variables, instead of SMEs other enterprise options could be used. May you gather more data in different locations and not only focus on one city. Also, differentiating the demographic profiles and usefulness of AIS for both urban and rural areas is possible. Choosing businesses that are not food-based such apparel, beauty products, bags and shoes, school supplies, etc. could also be a new variable to explore on. Lastly, future researchers may also include an interview or focus group discussions to get a more comprehensive application of AIS in different enterprises.

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