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Accounting Information System Satisfaction and Job Satisfaction Among Malaysian Accountants

Khairul Aziz
Universiti Kebangsaan Malaysia

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Khairul Azman Aziz

Universiti Kebangsaan Malaysia

kazman@pkrisc.cc.ukm.my

Abstract

Recent studies have found job satisfaction to be positively related to user information satisfaction. Studies have also indicated that job satisfaction will influence the performance both at the individual level and the organizational level. This study concentrates on looking into accountants' satisfaction toward the computerised accounting system, and its influence on their job satisfaction. Other variables analysed include gender, type of AIS, number of tasks, frequency of computer usage, and computer literacy. The study was conducted on 43 accountants working in public listed companies in Malaysia. The results of the study indicated that job satisfaction of accountants is positive related to their AIS satisfaction. A higher job satisfaction is also related to a higher frequency of computer usage. There was no evidence of any other relationship among other variables with AIS and job satisfaction. The implication of the study is a suggestion that developers of accounting system should get the users more involved in the development of the computer-based system.

Keywords

Accounting information system, job satisfaction, user information satisfaction.

Introduction

Background

Human is one of the most important resources in organisations. Poor human resource management may endanger the effective running of organizations. If people who run the organisation are not satisfied with their jobs, the effects of their dissatisfaction may influence the smooth running of the business. Ostroff (1992) found that organisations with more satisfied employees tend to be more effective than organisations with less satisfied employees.

Job satisfaction of employees may itself be affected by some other factors. In his study, Zeffane (1994) found that job satisfaction may be affected by demographic, task related and computer related factors. However the extent of computerization had minimal effect on satisfaction.

Information technology is quite a recent resource made available to organisations. The information technology is now being used by various functions in organisations, including the accounting. This development has enabled the much tedious task of manual bookkeeping to be substantially eliminated through the implementation of computerized accounting information system. But since it is developed by non-accounting personnel, a question of

accountants' satisfaction on the computerized accounting system arises. As elements of their jobs is much reduced through the use of the system, will they be satisfied with their current duties, which may be altered due to the reduction in routine tasks? This leads to the problem that this research tries to address.

Research Problem

When they delegate the task of developing a computerized accounting information system, accountants might have less satisfaction with the system. This may occur when the developer may not exactly understand the requirement of the users. In addition to being dissatisfied with the system, the accountants may lose satisfaction on his job due to dissatisfaction on the system itself, or due to his changing tasks.

In a study conducted by Choe (1998) on Management Accounting System, the results showed that when there was high task uncertainty, high user participation in the design on the system would lead to a high performance of the system. On the other hand, when task uncertainty was low, the level of user participation was irrelevant in leading towards a high performance of the accounting system. Furthermore, Gelderman (1998) found that the relationship between user satisfaction of systems and organisational performance is significant.

Hence, if satisfaction level on the accounting system affects job satisfaction of the accountants, then it will be very important to develop a system that satisfies the users' needs. This study identifies three objectives to be pursued in order to answer this question.

Two main objectives of this study are to ascertain the relationship between satisfaction of Accounting Information System and job satisfaction of accountants, and to explore other factors that may influence satisfaction. Literatures are examined to explore any indication that may assist in pursuing the objectives.

Literature Review

Job Satisfaction

Locke (1976) defined job satisfaction "*..as a positive emotional response to the job resulting from an appraisal of the job as fulfilling or allowing the fulfilment of the individual's job values*". Vast literature explores this important attribute.

Job satisfaction theory by Herzberg, as quoted by Locke (1976), argued that job satisfaction depends on the content of the job and dissatisfaction results from the context in which the job is located, rather than the job itself. According to Blum and Naylor (1968), one of the earliest community-wide studies on job satisfaction was conducted by Hoppock. The survey, conducted in New Hope Pennsylvania in 1935, found 15 percent of the samples were dissatisfied with their jobs. In a later study, conducted by Hoppock and Robinson (1952), 18 percent of the samples were dissatisfied. The unskilled labour had the lowest satisfaction index, whereas the professionals had the highest.

Hulin and Smith (1964) found that female workers of plants are significantly less satisfied with their jobs as compared to their male counterpart. Ward, Mosley and Ward (1986) found that female accountants in all regions of the United States of America are highly satisfied with the nature of work, supervision and coworkers. This study will examine whether there are any difference in job satisfaction between male and female accountants. However the researcher believes that at current times, there should not be any noticeable difference.

In a meta-analytic review of literatures, Miller and Monge (1986) found that participation in decision-making has some positive effects on satisfaction and productivity. Zeffane (1994) discovered task variety to be the strongest predictor of job satisfaction. His study however, found that the extent of computerization had minimal effect on satisfaction. To a limited extent, it had a negative effect on satisfaction of non-managerial employees.

The implication of job satisfaction is numerous, and studies in the area revealed more and more of the effects of job satisfaction. Job satisfaction affects worker turnover, absenteeism, accidents, performance, and life satisfaction, as quoted by Vroom (1964).

Most studies which examined the relationship between job satisfaction and performance were done on individual basis. Ostroff (1992), on the other hand, found a significant relationship between the two at the organizational level. He found that organizational performance of schools, in terms of academic achievement, administrative performance and student attendance, were significantly positively correlated with job satisfaction of teachers.

Judge and Watanabe (1993) found that job satisfaction and life satisfaction to be positively and reciprocally related. However, based on their causal study, they discovered that the effect of life satisfaction on job satisfaction is stronger than the other way around.

Accounting Information System Satisfaction

Although information system may be considered as a technical area, evaluating it is rather subjective. It is rather difficult to ascertain whether an information system is performing to expectation or not. Vast literature had studied on the surrogate measures of IS performance. One of the most widely acceptable measures of IS performance is the user information satisfaction. However, measuring user satisfaction itself is rather problematic. The author found several studies that developed a number of alternative instruments to measure user satisfaction.

Bailey and Pearson (1983) developed a UIS questionnaire that involved 39 items, in seven-point scales. Ives, Olson and Baroudi (1983) reduced the factors into a short-form questionnaire consisting of only 4 questions. Their study found that system satisfaction increases frequency of usage. Kim (1988) used a seven-item UIS questionnaire to measure users' satisfaction in his study on hospitals' AIS. However, Galetta and Lederer (1989) provided some reservations on the UIS scale. Torkzadeh and Doll (1991) developed, tested and retested a 12-item end-user computing satisfaction instrument. Gelderman (1998) used this instrument, with some deletions of the original items, and inclusion of new items to improve the construct validity, which had already been very high.

Various studies have found some factors which contributed to the level of user satisfaction towards the information system. Igbaria and Nachman (1990) found that leadership style, hardware/software accessibility and availability, computer background of users, user attitudes

towards end user computing and system utilization are significantly positively correlated with user satisfaction. On the other hand, computer anxiety and user age are negatively correlated with user satisfaction. Choe (1996), in his survey of MIS development and management in Korean business firms, discovered that user involvement and organisation size were significantly positively correlated with user satisfaction. This study believes that computer literacy of accountants may have a hand in ensuring their satisfaction towards accounting systems. This study also believes that the greater the accountants' satisfaction towards accounting systems, the more frequent will they use the systems.

Since user involvement in the design of IS leads to high user satisfaction, it is expected that user involvement will lead to high performance. Kasper and Cerveny (1985), in their laboratory study on MBA students using a simulated business setting, found that when users themselves are involved in the programming, they performed better as compared to command-level users.

Several studies explored the effects of user satisfaction on other attributes. Gelderman (1998) found that user satisfaction is significantly related to performance.

Yaverbaum (1988) argued that those factors that lead to high user satisfaction would also lead to high job satisfaction. Cheney and Dickson (1982) found that user information satisfaction and job satisfaction increased with the introduction of a new computer-based information.

Ang and Koh (1997)'s study on 144 employees of a company operating in Singapore found that job satisfaction and user satisfaction were highly correlated. They included age, educational level, job tenure and organizational position as the demographic variables; frequency of use, user training and computer literacy as computer background/experience. Abdullah (1998) replicated the study on 157 subjects from 7 organisations in Malaysia and found similar results. This study believes there is no significant relationships job satisfaction with either between frequency of use or computer literacy, as was found be Ang and Koh (1997). However, this belief will be tested as their might be some differences as the subjects under study are accountants, as oppose to Ang and Koh's which included users from various organizational levels.

Research Objectives and Hypotheses

Developing the Conceptual Framework and Hypotheses

Based on the review of the literature this study identifies, and be limited to, gender as the demographic variable, frequency of use and computer literacy as computer experience, to be studied as variables probable of having certain relationships with AIS satisfaction and job satisfaction. In addition, this study believes that there is a missing variable which links user satisfaction and job satisfaction.

The missing link may be the specific tasks performed by accountants, which use the information or output from the accounting information system. The research believes that when accountants are satisfied with these tasks, they will also be satisfied with their jobs. However, this study will be limited to identifying those tasks that require output from the computerized accounting system, and examining whether the number of tasks correlates with job satisfaction. The study believes that there will be no significant relationships. In further

researches, the identified tasks may be used as moderating variables in exploring the relationship between user satisfaction and job satisfaction.

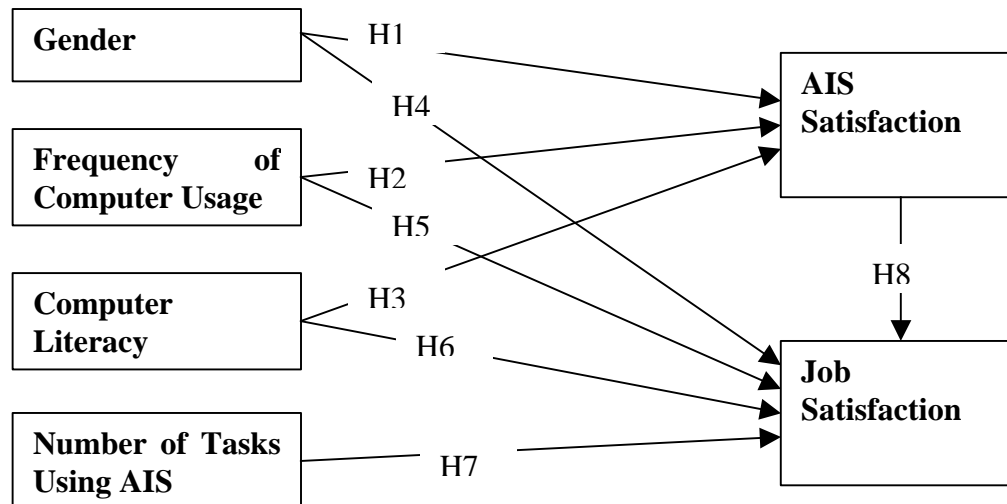In particular, this study tests the relationships of the relevant variables, as pictured in Figure 1 below.

Figure 1: Conceptual Framework for Explaining the Relationships
Among AIS Satisfaction, Job Satisfaction and Other Relevant Variables

The conceptual framework summarises the relationships among the variables, which are tested to answer the following specific objectives.

- To explain the relationship between computer experience (frequency of use and computer literacy), gender, type of accounting system and number of tasks with AIS satisfaction. This research believes that an accountant who uses the computer more, and is more computer literate, is more satisfied with the computerized accounting system, regardless of his or her gender.

- To explain the relationship between computer experience (frequency of use and computer literacy), gender, number of tasks and AIS satisfaction with job satisfaction. This research believes that an accountant who is satisfied with the computerized accounting system is more satisfied with his or her job, regardless of his or her gender, computer experience, frequency of use and the number of tasks which the system is used for.

- To identify the tasks which uses the output from the computerized accounting system.

Gathering feedbacks from a sample of accountants, inferences about the above objectives will be made on the whole population of accountants in Malaysia. To achieve the objectives, the following beliefs, as expressed in hypothesis form, will be tested.

- Hypothesis One: There are no significant differences in AIS satisfaction between male and female accountants.

- Hypothesis Two: There is a significant positive relationship between frequency of computer usage and AIS satisfaction of accountants.

- Hypothesis Three: There is a significant positive relationship between computer literacy and AIS satisfaction of accountants.

- Hypothesis Four: There are no significant differences in job satisfaction between male and female accountants.

- Hypothesis Five: There is no significant relationship between frequency of computer usage and job satisfaction of accountants.

- Hypothesis Six: There is no significant relationship between computer literacy and job satisfaction of accountants.

- Hypothesis Seven: There is no significant relationship between number of tasks using AIS and job satisfaction of accountants.

- Hypothesis Eight: There is a positive relationship between AIS satisfaction and job satisfaction of accountants.

Scope and Limitation

The research is a correlational study done on accountants in their natural environment, instead of a controlled environment. Hence, the result is limited to concluding whether there is any relationship between user satisfaction and job satisfaction; and is not sufficient to conclude causal effect, i.e. whether user satisfaction affects job satisfaction of accountants, vice versa.

The result of this study will only infer on accountants of profit-making organizations in Malaysia. Personnel from different organizational level may have different satisfaction because of differing tasks and responsibility. Likewise, accountants from different forms of organisation may have different satisfaction, because of different organizational climate.

The result of this study only relates to a narrow definition of job satisfaction. This study limits the definition of job satisfaction to satisfaction towards job which involves direct or indirect use of computerized accounting information system. Therefore, job satisfaction does not cover satisfaction towards job that do not involve use of computerized accounting system. However a substantial portion of an accountant's job involves use of the accounting system since nowadays most financial information are processed using the computerized AIS.

Research Methodology

Job Satisfaction Definition

Locke's (1976) definition of job satisfaction is quoted earlier. The operational definition of job satisfaction in this study is limited to the level of emotional response of an individual towards his part of job that involves direct or indirect use of computerized accounting information system. A person is a direct user of the system when he himself interacts with a computer terminal to access the system. On the other hand, he is an indirect user when he uses the accounting information provided by other persons who directly access the system.

This study used a widely used instrument, the Job Descriptive Index (JDI) developed by Smith et al. (1969), as quoted by Miller and Monge (1986), and revised by Roznowski

(1989). The JDI measures five dimensions of job satisfaction, work, supervision, pay, promotion and co-workers. This study only used the work dimension, and modified it so that it specifically relates to work involving direct or indirect use of computerized system.

The scale involves 18 items. Hanisch (1992) described how the JDI is used. For each item, there will be 3 possible answers: 'Yes', 'No', and '?'. For a 'Yes' answer on a positive item, or a 'No' answer for a negative item; 3 points will be given. For a 'No' answer on a positive item, or a 'Yes' answer for a negative item; 0 points will be given. For a '?' answer, 1 point will be given. The job satisfaction scale will be an average of the 18 items' scores, which will range between 0 and 3.

Information System Satisfaction Definition

Information System Satisfaction construct is popularly referred to as User Information Satisfaction. Ives, Olson and Baroudi (1983) defined UIS as "*..the extent to which users believe the information system available to them meets their information requirements*". This study will use that definition as the operational definition.

The study used the 12-item end-user computing satisfaction instrument, developed and tested by Torkzadeh and Doll (1991). The items were grouped into 5 information system characteristics, namely content, accuracy, format, ease of use, timeliness. These attributes address the effectiveness of a system, as opposed to the short-form UIS instrument. Each item will be measured using 5-point Likert scale, with 1 representing 'almost never' and 5 representing 'almost always'. The final AIS satisfaction scale is computed by averaging the scores of all the 12 items.

Other Variables' Definitions

Computer experience variables are represented as ratio scales. Frequency of use is measured by the hours a week of computer contact by the personnel, which also includes the frequency their assistant spend to get results from the information system for them, as used by Gelderman (1998). But the variable is represented as categorical in the questionnaire.

Computer literacy is measured by the number of years the personnel has used computers on his job. This definition is adopted from Ang and Koh (1997). The terms 'computer literacy' and 'number of years using computers in job' are used interchangeably in this text. This variable is also represented in the questionnaire as categorical. Gender is represented by a nominal scale, which is self-explanatory.

This research defines type of system, whether the system is an accounting package available in the market, or if the system was developed specifically (either by developing it internally or subcontracted to outside consultants), or a combination of both (may be using a package as a subsystem of specifically developed large system). Type of system is also represented by nominal scale.

Number of tasks refers to the number of tasks the accountants use AIS for. This is a ratio scale.

Sampling Design and Data Collection

The population of the study is accountants of companies listed in the Kuala Lumpur Stock Exchange. From the sampling frame, 150 companies were selected using simple random sampling technique. Mailed questionnaires were sent to obtain the needed data.

The questionnaire asked respondents on the their gender, computerised accounting system being used, the tasks involved, their computer background, and their satisfaction towards AIS and job.

Research Results & Discussions

Descriptive Statistics

A total of 150 questionnaires were sent to accountants or similar personnel of 150 different companies. 43 responded, representing a response rate of 28.7 percent. It took between 4 to 42 working days for the responses to arrive after the questionnaires were posted. The median number of days is 12. The respondents consisted of 23 males and 20 females.

All respondents use some form of computerized accounting in their organisation. Table 1 shows the type of accounting system being used by the sample respondents.

	Frequency	Percent
Package	33	76.7
Specialised	4	9.3
Combination	6	14.0
Total	43	100.0

Table 1: Type of Computerised AIS Being Used

Table 2 shows the list of some popular accounting packages and the number of respondents who use them. It seems that Accpac is the most popular accounting software among the respondents.

Accounting Package	Number of Users	Percentage
Accpac	15	34.9
UBS	3	7.0
FACT	3	7.0
SAP	3	7.0
Hipersof	2	4.7
JD Edwards	2	4.7
Oracle	2	4.7

Table 2: Accounting System and Number of Users

The study asked the respondents the tasks they perform which use the computerized accounting system or its output. Table 3 shows the number of respondents indicating each specific task they perform using the accounting system.

Task	Number of Respondents	Percentage
Financial Reporting	43	100.0
Divisional Reporting	20	46.5
Budgeting	20	46.5
Performance Measurement	17	39.5
Asset Maintenance	11	25.6
Capital Expenditure Decision	4	9.3
Investment or Project Appraisal	0	0.0

Table 3: Tasks and Number of Respondents

All respondents indicated that they performed financial reporting using computerized accounting system. Almost half of the respondents (46.5 percent) use accounting system for divisional reporting and budgeting. Other tasks, in the order of number of responses, are performance measurement, asset maintenance and capital expenditure decision. There are no responses for investment or project appraisal.

Besides the seven tasks, the respondents have suggested other tasks, The ones considered by the study are costing and payroll. Only one respondent each suggests these tasks. Summarising the respondents' answers regarding the tasks, Table 4 shows the number of respondents with their number of tasks where they used computerized AIS.

Number of Tasks	Frequency	Percentage
1	14	32.6
2	7	16.3
3	5	11.6
4	11	25.6
5	6	14.0
Total	43	100.0

Table 4: Frequency Distribution of Number of Tasks

The mean of AIS satisfaction score for the 43 respondents is 3.70. Therefore on average, the sample accountants are satisfied with their computerized AIS roughly most of the time. The respondents' AIS satisfaction score lies between 2.25 and 5.00. The standard deviation of the AIS satisfaction score 0.62.

The reliability coefficient (Cronbach's Alpha) of the end-user computing satisfaction instrument to measure the AIS satisfaction is 0.9355. Hence the instrument is appropriate for use in the study. Torkzadeh and Doll (1991) and Geldermen (1998) reported alphas of 0.92 and 0.96 respectively.

The mean job satisfaction of the sample of 43 accountants is 1.9406 as measured using the JDI. The highest and lowest job satisfaction score among the respondents are 3.00 and 0.22 respectively. The standard deviation of job satisfaction for the sample is 0.6995.

The reliability test reveals an alpha of 0.9034 for the job satisfaction instrument. Hence the JDI will be used as an appropriate measure of job satisfaction.

Inferential Statistics

Tests for normality and non-response are performed to ensure a valid inference on the population based on the data of the sampled accountants. An inspection on the histograms of AIS satisfaction and job. Hence, it is not unreasonable to assume a normal distribution of satisfaction scores for the population of accountants.

A t-test reveals a non-significant difference between the mean AIS satisfaction of early respondents and late respondents, since the P-value is 0.264. The same table also reveals a non-significant difference of job satisfaction between early and late respondents at 5 percent significance level, since the P-value is 0.069. Hence no non-response bias is prevalent in the sample.

Based from the two tests conducted, the study is confident that the sample can be analysed, and the results be inferred on the population.

The following is hypothesized on differences in AIS satisfaction and job satisfaction between male and female accountants.

> H1: There are no differences in AIS satisfaction between male and female accountants.

The P-value of the difference in AIS satisfaction between male and female respondents is 0.282. Therefore, null hypothesis is not rejected and it is concluded that there is no significant difference in AIS satisfaction between male and female accountants.

The following hypothesis is tested for job satisfaction.

> H4: There are no differences in job satisfaction between male and female accountants.

The P-value of the difference in AIS satisfaction between male and female respondents is 0.856. Therefore, null hypothesis is not rejected and it is concluded that there is no significant difference in job satisfaction between male and female accountants.

The study hypothesized that there is a relationship between computer experience (frequency of computer usage, number of years using computer in job) and AIS satisfaction. With regard to this, two hypotheses are tested using Two-factor ANOVA, with frequency of computer usage as the first factor and number of years using computer in job as the second. The first:

> H2: There is a positive relationship between frequency of computer usage and AIS satisfaction of accountants.

The F-value is 0.673. Null hypothesis is not rejected at 5 percent significant level; therefore there is no significant relationship between frequency of computer usage and AIS satisfaction of accountants.

Next:

> H3: There is a positive relationship between computer literacy and AIS satisfaction of accountants.

The output showed an F-value of 0.585. Null hypothesis is not rejected, hence there are no differences in AIS satisfaction among accountants belonging to the four categories of number

of years using computer in job. Therefore it is found that there is no relationship between computer literacy and AIS satisfaction.

A test for interaction, with F-value of 0.904, concluded there is no interaction between the two to influence AIS satisfaction.

A similar ANOVA test is conducted to assess the relationships of frequency of computer usage and number of years using computer in job with job satisfaction. For relationship between frequency of computer usage and job satisfaction, the following hypothesis is tested:

> H5: There is no significant relationship between frequency of computer usage and job satisfaction of accountants.

The ANOVA output shows an F-value of 0.027. Null hypothesis is rejected, hence there is a significant relationship between frequency of computer usage and job satisfaction of accountants.

An inter-group one tailed t-tests were performed to determine which pairs of groups have differing mean job satisfaction. Table 3 summarises and describes the significant differences in job satisfaction among the groups.

Group	Relationship	Group
Between 10 to 20 hours	higher mean than	Less than 10 hours
Between 20 to 30 hours	higher mean than	Less than 10 hours
More than 30 hours	higher mean than	Less than 10 hours
More than 30 hours	higher mean than	Between 20 to 30 hours

Table 3: Significant Relationships between Groups of Frequency of Computer Usage in Terms of Job Satisfaction

A broad view of the relationships suggests a pattern where the higher the frequency of computer usage, the higher the job satisfaction of the accountant.

Next, the relationship between number of years using computer in job and job satisfaction is examined. The following hypothesis is tested.

> H6: There is a positive relationship between computer literacy and job satisfaction of accountants.

F-value of 0.602. Hence the null hypothesis is not rejected, concluding a lack of significant relationship between number of years using computer in job and job satisfaction.

A multiple-regression equation, $Y_1 = a_0 + a_1 X_1 + a_2 X_2$, is tested to answer hypotheses involving job satisfaction. The equation is defined as follows:

Y_1 = job satisfaction
a_0 = constant term
a_1, a_2 = regression coefficients
X_1 = number of tasks
X_2 = AIS satisfaction

From the stepwise-regression output, the final regression model only included AIS satisfaction as the independent variable. The R^2 of 0.098 shows that only 9.8 percent of the

variation in job satisfaction of accountants can be explained by the variation in the regression model which includes AIS satisfaction. The F-value for the model is 0.041, therefore the null hypothesis is rejected and a valid model is concluded.

The correlation coefficient between AIS satisfaction and job satisfaction is 0.314. The coefficient implies that for every unit increase in AIS satisfaction score, job satisfaction score increases by 0.314. The P-value for the AIS satisfaction coefficient is 0.041. This finding answers the following hypothesis.

> H8: There is a positive relationship between AIS satisfaction and job satisfaction of accountants.

The null hypothesis is rejected, hence there is a significant positive relationship between AIS satisfaction and job satisfaction of accountants. The relationship between job satisfaction with number of tasks was hypothesized as the following.

> H7: There is no relationship between number of tasks using AIS and job satisfaction of accountants.

The model excluded number of tasks and as an independent variable. The P-value of correlation coefficient with job satisfaction are 0.965. Null hypothesis is not rejected, therefore there is lack of significant relationships number of tasks and job satisfaction.

Discussions

The results confirmed five beliefs and rejected three. This study found the existence of a significant positive relationship between AIS satisfaction and job satisfaction. In simpler words, the higher the accountant's satisfaction towards the computerized AIS, the more likely will he be satisfied with his job. This finding confirms the researcher's belief, and supports the studies of Ang and Koh (1997) and Abdullah (1998).

Implication of this result should be useful for managers to effectively run their organizations. Firstly, to ensure accountants are satisfied with their job, managers should seriously consider the current or potential accounting systems. Accurate, bug-free, powerful, but easy-to-use systems would help accountants to retrieve, produce, interpret and present financial information in a timely manner. When accountants achieve what they are expected of, they will feel more secured in their job and promotion prospects. This will enhance their job satisfaction. Involving accountants in development or selection of accounting systems may improve the acceptability of the systems.

Another variable that is found to be significantly positively correlated with job satisfaction is the frequency of computer usage. This contradicts the study's belief of lack of significant relationship. Yaverbaum (1988) reported an opposite finding, whereas Ang and Koh (1997) found a non-significant relationship. Yaverbaum (1988) found that users who perform routine clerical tasks experience boredom from lack of interpersonal relationship. Ang and Koh's (1997) study was on much broader organizational levels of employees.

A possible explanation of the difference is this study was conducted on accountants (a particular organisational position) whose tasks are less routine, and more towards using the system to process and extract information for less-structured decisions. Zeffane (1994) had already stated an explanation to this, where his study found computer usage in research related functions (high task variety) increases job satisfaction. Managers may find this result

encouraging, as it may become a good justification for end-user computing; i.e. supplying accountants with computers and let themselves process their own informational needs.

In contrast to its relationship with job satisfaction, frequency of computer usage was not found to have any significant relationship with AIS satisfaction. This finding is inconsistent with Ives, Olson and Baroudi's (1983) study, and this study's belief. They stated that in cases where use is mandatory, systems are used more extensively when they are perceived as useful. The higher user satisfaction, the more frequently will the system be used. A probable explanation for the inconsistency is accountants use systems mainly to extract information. Their main task of interpreting financial results and presenting them to interested parties are performed off-line. Hence, if they can obtain needed information in a short time, they will be satisfied with the system, and spend less substantial time using the computer. A simple way for managers to utilise this finding is by supplying computers and encouraging accountants to use them.

Gender was found to have no significant relationship with AIS satisfaction and job satisfaction. These findings confirm the researcher's belief that there are no obvious differences in satisfaction, either towards accounting systems or job, between male and female accountants. There are several explanations on the inconsistency on the results with the study by Hulin and Smith (1964) on female plant workers. Firstly, job conditions and rewards differ substantially between accountants and plant workers. Ward, Mosley and Ward (1986) had earlier found that female accountants in the USA are highly satisfied with their jobs. Secondly, this study was conducted almost 40 years later, in which time organizations that fight for women's rights appear as mushrooms.

Computer literacy was found to have no significant relationship with AIS satisfaction and job satisfaction. This confirms one belief, but contradicts another. Ang and Koh (1997) had also found a lack of significant relationship between computer literacy and job. An accountant without computer knowledge can still effectively execute his job. He may use lower-level, computer-proficient personnel to perform data-processing tasks. And hence, the accountant's job satisfaction will not be affected.

On the other hand, the lack of significant relationship between computer literacy and AIS satisfaction is quite a surprise. Kasper and Cerveny (1985) had stated that greater end-user experience increases the likelihood of end-user computing success. Similarly, this study had expected accountants with more computer experience would be more satisfied with the system. A probable explanation to this contradiction is that computer programs in the new millennium have become much more easier to use, as compared to programs available in the 1980s. Windows-based accounting systems, utilizing Graphical-user-interfaces, are developed with the end-user in mind. A person with adequate accounting knowledge but limited computing experience should be able to use accounting software without much difficulty.

The study tried to explore any significant relationship between number of tasks which uses AIS and job satisfaction, but found none. The study suspects that the amount of tasks an accountant executes which uses the computer may influence his job satisfaction. But the mere counting of tasks and ignoring the complexity of tasks is a much distorted method of identifying a relevant variable. Future studies may consider complexity of tasks as a possible moderator in AIS satisfaction and job satisfaction relationship.

Regarding the tasks which uses the system, all respondents indicated financial reporting as one of the tasks. It is obvious that the main reason companies acquire accounting systems is

to assist accountants in financial reporting. Almost half of the respondents use accounting system for divisional reporting. Similar to financial reporting, this becomes a main objective using computerized accounting system in organization with several divisions. The same percentage use accounting system for budgeting. Accountants may be more comfortable using ordinary spreadsheets to produce budgets as spreadsheets are more versatile.

Just over a third of respondents (39.5 percent) use accounting system for performance management. Performance measurement requires information on variances between actual and standard figures, where accountants may find easily manually calculated. This situation may be more prevalent in asset maintenance where only a quarterof the respondents use the accounting system to perform the task. This is probably due to either the lack of the module in the accounting package or the ignorance of accountants of the availability of the module, or lack of confidence in automation of such task.

As for capital expenditure decision and investment or project appraisal, less portion of the sample use computerised accounting system for those purposes. The main reason may be because the tasks involve more of future data than historical data. Future data is not available from accounting packages which receives totally current or historical data as input.

Other responses are costing and payroll. The task are suggested by only one respondent each. Although there are some accounting packages which have payroll functions, specialized payroll software are more often used by organizations because they are programmed to conform with local labour laws and pay system.

Conclusion

Summary and Conclusion

Accountants play an important role in organizations. Since previous studies show that performance of organizations relates to their employees' satisfaction, it is important to ensure job satisfaction of accountants whom are vital members in organizations.

In this age of information communication technology, accountants are relieved from the burden of manual preparation of financial reports. Computerised accounting systems that are made available to them have changed their routine and tedious tasks. They can now concentrate more on providing useful information to managers for decision making.

However accounting systems are imperfect and prone to have deficiencies. This research surveyed 43 corporate accountants with the aim of identifying whether accountants' satisfaction towards the accounting system will increase their job satisfaction.

The first research objective was to explain the relationship between gender and computer experience on AIS satisfaction. None of the independent variables influences AIS satisfaction of accountants. It is quite surprising to find that AIS satisfaction is not affected by computer experience.

The second research objective was to explain the relationship between gender, computer experience, number of tasks and AIS satisfaction on job satisfaction. It was found the more frequent an accountant uses the computer, the more likely will he be satisfied with his job.

This is an interesting finding and may give some justification of the on-going campaign made in Malaysia, which is encouraging people from all walks of life to make more use of the computer.

The number of years an accountant has been using computers in his job is irrelevant, which is contrary to what has been hypothesized. Accounting systems kept getting user-friendlier, thus allowing users with minimum computer experience to reap their benefits. Type of AIS and number of tasks are not significantly related to job satisfaction, a finding which is anticipated. Gender is irrelevant, although some studies suggest that female workers are less satisfied with their job. Finally, AIS satisfaction is positively related to job satisfaction. An accountant who is satisfied with the computerized accounting system, is likely to be satisfied with his job.

The third objective was to identify the major tasks the accountants perform which require the accounting system. The list includes, in the order of popularity; financial reporting, divisional reporting, budgeting, performance measurement, asset maintenance, capital expenditure decision, costing and payroll. The sample accountants did not include investment or project appraisal, which was initially included.

Considering that AIS satisfaction has some influence on job satisfaction of accountants, it is important for the developers to design accounting systems that are accurate, user friendly and bug-free. User involvement in the design of accounting systems may help to reduce this difficulty and increase overall satisfaction, as indicated by numerous studies.

Suggestion for Future Research

This study has introduced tasks as possible moderator in AIS satisfaction and job satisfaction relationship. However this study has not tested this framework. The only variable regarding tasks, which is the number of tasks, was found to be insignificant in the relationship. Complexity of tasks, which may be more relevant, was not included in the study. Further studies might pursue to include this variable as a possible moderator in AIS satisfaction and job satisfaction relationship.

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