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THE IMPACT OF ACCOUNTING INFORMATION SYSTEM ON ORGANIZATIONAL PERFORMANCE: EVIDENCE FROM BANGLADESHI SMALL & MEDIUM ENTERPRISES

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ABSTRACT

The study has performed an investigation to identify the impact of accounting information system (AIS) on organizational performance (profitability) for Bangladeshi small & medium enterprises (SMEs). For due purpose, three components of AIS has been selected with help of literature: accounting knowledge (AK), management support (MS) and record keeping performance (RKP). The dependent variable was measured based on the profitability reported by the owners. A structured questionnaire has been utilized to collect data from 803 respondents working as mid and top level managers at 341 Bangladeshi SMEs who were previously selected through convenience sampling method. In order to reveal the relationships, multiple correlation and regression analysis have been conducted. The findings revealed that AK and RKP have strong positive correlations with organizational performance while MS has a positive but moderate relationship with the reported profitability of those SMEs. The results are expected to be beneficial for further research in wider scope in future.

Contribution/ Originality: This study contributes to the existing literature by identifing the impact of accounting information system (AIS) on organizational performance (profitability) for Bangladeshi small & medium enterprises (SMEs).

1. INTRODUCTION

In recent times, the business environment is constantly evolving due to the faster technological changes in manufacturing systems, advancement of information systems (IS), growing market competition, growing expectations from the consumers and unprincipled manipulative actions conducted by businesses. In this scenario, the composite and impulsive business dynamics has confronted the significant role of Accounting Information System (AIS) as the key driver to the economic and business discourse, particularly due to its relationship with management effectiveness (Curtis, 1995).

AIS is a technical a tool that uses the information technology (IT) or information systems (IS) element to aid in directing the monetary and economic functions of the organizations. However, amplified improvements in IT have enabled the companies to employ such alternative for a strategic stance (Louadi, 1998). Due to this, a number of authors have pointed favoring the significance of AIS for a company (Borthwick & Clark, 1990; Curtis, 1995; Rahman & Halladay, 1988; Wilkinson, 1993; Wilkinson., Cerullo, Raval, & Wong-On-Wing, 2000) and to maintain it, irrespective of the size and nature of business (profit-seeking or non-profit seeking) (Wilkinson. et al., 2000). AIS is not merely an ordinary element for keeping data, it is a complete constituent that collects primary data and transforms those data into useful financial information for the policymakers (Salehi, Rostami, & Mogadam, 2010).

For a getting superior perception of AIS, the letters can be explained individually. The first letter "A" that stands for the word "Accounting" indicates the record keeping system of every economic or fiscal transaction (Wilkinson, 1993). "I" that stands for "information," is the processed shape of monetary transactions used by the mangers. Last of all, in accordance with Thong and Yap (1995) and Bhatt (2001) "S" indicates the "system," which is an incorporated entity focusing on the set of objectives.

The literature reports that AIS can bring about strategic competitiveness to a firm (Langfield-Smith, 1997). Bouwens and Abernethy (2000) analyzed the role of AIS in strategic management decisions as well as the attributes of AIS on different strategic priorities. They also observed the role of AIS on an organization's success by taking into account the various dimensions of AIS on the diverse strategic directions.

Chenhall (2003) reported that diverse designs of AIS hold dissimilar organizational strategic directions, increasing overall organizational performance (OP). Increased allocation of resources in AIS turn the organizational culture more streamlined and strong that helps the company to face changing business environmental circumstances (Al-Najjar, 2017). In fact, AIS is a system that utilizes the financial data of an organization blending different accounting methods and tools along with varied methods with the help of IT to track interior and exterior publishable data, financial reports and trend analysis to predict on the performance of an organization (Grande, Estébanez, & Colomina, 2011).

Furthermore, AIS can play a noteworthy role in serving firms enhance their performance. A study conducted by Ismail (2009)that the AIS has a significant role in enabling the growth of firm performance(E. Harash, 2015). Such performance can be achieved and sustained on the condition that the firms being proactive to the environmental changes, particularly to the revolution in information technology. This study argues that AIS provides a superior competitiveness, enhanced supervision of corporate record keeping and an improved recognition of changing business environments.

In recent years, IT has become a vital organ use in majority of firms in such a way that it is now almost impossible to achieve competitive advantage and to stay strong in the market without adopting it. In this context, E. Harash (2015) stated that the most expansively utilized information system in any organization is the AIS, particularly for financial reporting.

A limited number studies conducted regarding the role of AIS on SME performance (Ahmad & Al-Shbiel, 2019; Al-Najjar, 2017; Budiarto & Prabowo, 2015; Grande et al., 2011; Emad Harash, Al-Timimi, & Alsaadi, 2014; Nyathi, Nyoni, Nyoni, & Bonga, 2018) while a single similar study regarding Bangladeshi context is totally absent. Therefore, this study can be regarded as one of initial efforts to explore the association between AIS on OP. The present study aims at identifying the influence of three components of AIS: accounting knowledge (AK),management support (MS) and record keeping performance (RKP) on organizational performance (OP). In this regard, the performance has been ascertained by published profitability of the firms. Keeping consistency with the objective, the study puts forwards the research questions as below:

RQ 1: What is the role of AK on OP?

RQ 2: What is the role of MS on OP?

RQ 3: What is the role of RKP on OP?

2. LITERATURE REVIEW

2.1. Organizational Performance (OP): Point of Interest

Organizational performance or firm performance can cover both financial and operational outcomes in general (Hosain, 2015). Although the theoretical proposiiton of Venkatraman and Ramanujam (1986) is extensively provided by strategic management scholars (Carton & Hofer, 2006; Richard, Devinney, Yip, & Johnson, 2009) the study of operationalization of organizational performance depicted in empirical researches showed an extensive diversity of approaches to cover the area partly and in an imbalanced method. Combs, Crook, and Shook (2005) studied all the papers online in the "Strategic Management Journal" from 1980 to 2004 and found 238 experiential studies that identified 56 diverse indicating points (Santos & Brito, 2012). In good number times, financial performance was utilized (82%) with accounting associated dealings where profitability being considered as the most frequent option (52%). Later, the finding was supported by Carton and Hofer (2006) and Richard et al. (2009) who depicted a familiar picture where both the investigations pointed the indicator rates each article that was similar to each other (Santos & Brito, 2012).

2.2. Accounting Information System (AIS)

Accounting information system refers to a compilation of data and processing methods that generates the requisite information of the user (Hall, 2012). According to Hall (2012) the basic aim behind AIS is to generate information to outer individuals and groups like management and operational personnel. Other studies like (Sačer, Žager, & Tušek, 2006) relayed that authentic accounting information are obtained from the quality AIS whereas Susanto (2008) argued that the fundamental function of the AIS is to generate qualified accounting information. Moreover, accounting information system was described as a compilation of individual and operating resources set to convert data obtained into proper information that is relayed to different decision makers. Also, Mujilan and Madiun (2012) contended that accounting information systems generates the change either manually or through the computer.

2.3. The Nature of SMEs in Bangladesh

For purpose of better realization of this paper, it is significant to know how define SMEs are being defined in Bangladesh. SMEs are currently usually defined in Bangladesh according to the definition provided by the National Industry Policy in 2010, highlighted at Table 1:

Table-1. The nature of SMEs.

Business size	Criteria
Small enterprise	**Manufacturing:** Fixed asset value* of BDT 5 million to BDT 100 million (USD 62,500 to USD 1.25 million) and 25 to 99 employees
	Service and trading: Fixed asset value* of BDT 0.5 million to BDT 10 million (USD 6,250 to USD 125,000) and 10 to 25 employees
Medium enterprise	**Manufacturing:** Fixed asset value* of BDT 100 million to BDT 300 million (USD 62,500 to USD 3.75 million) and 100 to 250 employees
	Service and trading: Fixed asset value* of BDT 10 million to BDT 150 million (USD 125,000 to USD 1.875 million) and 501 to 100 employees

Note*: Fixed asset value has been considered by deducting the value of land and building. Therefore, an SME can rent its premise or own which is not significant).
Source: Ministry of planning, GoB.

A similar definition has been reported by Bangladesh Bank (BB), the Central Bank and the guardian of financial sector of Bangladesh. However, while the above definition is currently extensively accepted, additional definitions also exist with a diversity of criteria followed in various countries or even by diverse organizations within a country. In addition to the number of staffs or physical resources, some agencies utilize the turnover or loan amount to refer SMEs. Thus, as the

World Bank Group has pointed in current reports that a primary dispute in collecting cross-country corresponding data on admission to finance by SMEs is the deficiency of uniformity across countries on how to define SMEs (International Finance Corporation (IFC), 2011).

Additionally, inside every standard, dissimilar cut-off policies are used by the countries. For an instance, according to World Bank's Access to Finance Studies, 150 workers are considered as the highest for a SME. Even though most of the countries consider 250 staffs as the maximum number for an SME, some countries are still using 50 staffs as the standard boundary (World Bank Group, 2010).

However, only some global or multi-country data compilation and assemblage initiatives spotlight widely on SMEs. In Bangladesh, the Bureau of Statistics (BBS) has the accountability for collecting such information. The institution gathers, in yearly basis, detailed manufacture data from a model of production enterprises that have 10 or additional workers on its Survey of Manufacturing Industries (SMI). Anyway, SMI data are not obtainable by the size of workers and data collected for fixed assets under the investigation do not necessarily replicate existing substitute expenses. As a consequence, data collected by BBS cannot be used to evaluate the production amount and performance of any specific cluster of manufacturing firms.

Due to the small amount of capital and fewer employees, most of the SMEs in Bangladesh cannot generally have sound or efficient AIS and an established accounting department. In such reality, recently a few SMEs have started using different accounting softwares with a view to keep the financial information efficient and to increase operational efficiency and operating profit (Ministry of Planning Government of Bangladesh, n.d). Unfortunately, so far, there is not a single study conducted to ascertain the role of AIS on OP.

2.4. The Role of AIS on OS: Previous Studies

According to Grande et al. (2011) the external connection of the firm (such as relationship with the buyers and suppliers), fresh trading potentials & risks and a superior stream of financial information at various hierarchical levels have fundamentally altered the character of the business. Thus, it has become imperative to transform the conventional dealing actions or methods to meet the altering nature of operations. According to the American Institute of Certified Public Accountants (AICPA), accounting is a component of information systems practicing the universal concepts of information in the region of successful economic actions and represents the principal piece of information in an algorithmic format (Al-Najjar, 2017).

Boockholdt (1999)stated that AIS consists of various operating functions that usually gather financial, process and codify financial data and report financial events. Borthwick and Clark (1990) argued that the requirement for information is the prime reason for the survival of accounting as a profession. For being relevant, accounting statistics required to respond swiftly to the necessities of decision makers and more specifically, to the requirements of external investors. Frequently, such investors do not evaluate the success of an intended organization where they put money in or intend to do so. Published Financial reports are the foundation of information for those interested groups and such reports are typically equipped by the accounting departments. The main purpose of any proper financial report is to supply key information concerning the financial status of the company, flow of cash, changes in direction of the firm and its performing outcomes.

The financial reports supply the fiscalinformation of the company to the stakeholders so that they can understand the real financial standing of a firm. In this regard, AIS plays a fundamental part in creating those financial reports by processing the monetary and non-monetary data precisely. Research studies of conducted by Gerdin and Greve (2004) and Chenhall (2003) stated that the influence of AIS is preventive in strategic management. AIS serves as an instrument to make the organizational strategy effective. A variety of methods (Miles & Snow, 1978; Porter, 1985) have been utilized for testing such strategy, but particularly, the typology suggested Miles and Snow's have been used expansively in administrative writings.

According to Chang (2001), AIS plays a considerable influence in raising the success of firms in international competitive arena. This is due to the reason that the financial reports are yet a significant source of information to outside interest groups (Doms, Jarmin, & Klimek, 2004). Despite of nonstop advancements and widespread usage, accounting practices have not been able to keep pace with incredible scientific progress and fast economic improvement that arguably

impacted the implication of accounting information. Onaolapo and Odetayo (2012) stated that enormous accounting frauds revealed in the western countries and rapid altering economic circumstances show a less importance of accounting information. However, they accomplished in their research stating that such information has not lost the value of significance.

The study selected three components of AIS for this study: accounting knowledge (AK), management support (MS) and record keeping performance (RKP) in order to investigate the relationship between AIS and OP. The following sub-sections have been utilized to highlight the literature regarding those components.

2.4.1. Accounting Knowledge (AK)

Accounting knowledge (AK) of the employees regarding AIS, consists of the awareness of computer usage, keeping records, internet usage, receiving & sending e-mail, managing databases, spreadsheet and word processing (Ismail, 2009). Ang, Davies, and Finlay (2001) and Jarvenpaa and Ives (1991) stated that AK consists of particular knowledge of IT and IS with the experience in accounting and information technology. Accordingly, they also emphasized that the managers' acquaintance is evident through their know-how, level of IT awareness, background of IS, acknowledgment of the possibilities of IT and capability to utilize IS for formulating strategies.

AIS plays a significant role in SMEs startegic process. Thus, AK about AIS is an important indicator in ascertaining the victory or breakdown of AIS implementation in SMEs (Hussin, King, & Cragg, 2002; Seyal, Rahim, & Rahman, 2000; Thong, 2001). The employers should be well informed about the goals of the organization; and thereby the effective team that is aware of new technology would select the appropriate software for the business (Hussin et al., 2002). An accounting team with proper accounting and IT knowledge would be in a better position to deploy the IT system as per the requirements of the organization that best suits the organization needs.

Pertinent facts and skills are possibly to be more conductive, proactive and creative to IS and IT that in turn, aids to build a positive attitude towards IS and IT (Jarvenpaa & Ives, 1991). The study of Ang et al. (2001) was limited to testing the AIS alignment and compared the AK in AIS aligned companies and AIS non-aligned companies (Al-Najjar, 2017). However, there is paucity in recent literature discussing the influence of accounting knowledge on the implementation of AIS in SMEs' newly adapting technology. Therefore, it is necessary to investigate the impact of AK on AIS implementation in SMEs.

H_1: AK has a strong positive influence on OP.

2.4.2. Management Support (MS)

Apart from AK, management support (MS) is a fundamental issue in the successful execution of AIS in SMEs, thus increasing operational performance and profit (Igbaria, Zinatelli, Cragg, & Cavaye, 1997; Lertwongsatien & Wongpinunwatana, 2003; Seyal & Rahman, 2003; Thomas & Kleiner, 1995). Managers, particularly top and mid level managers have a dominant role in connecting the IT with firm's strategies and objectives (Jarvenpaa & Ives, 1991). Management support would also bring about an optimistic outlook regarding the utilization of AIS in the organization which most likely results in the successful execution of AIS in SMEs. In addition, higher management has the right to make sure the distribution of adequate wealth for the IT projects (De Guinea, Kelley, & Hunter, 2005).

As reported by the Sheth (2010) management support ensures on the rotating point between the tentative failure and success of the any scheme, while formulating and executing such schemes. MS consists of the direction, support and commitment in supplying the essential funds. Dedication, contribution and right are the diverse magnitudes of MS (De Guinea et al., 2005; Ismail, 2009; Jarvenpaa & Ives, 1991).

According to Jarvenpaa and Ives (1991) and Igbaria, Parasuraman, and Baroudi (1996) MS is the contribution and participation of top-level manages or executives of the company in the information related activities. It can also be regarded as the contribution of managers in formulating and implementing the IS strategies for any organization. Taking into consideration the relevant opinions of Jarvenpaa and Ives (1991) and Igbaria et al. (1996) this paper considers MS as one of the variable indicating AIS. There is a lack of literature investigating the role of MS in

AIS implementation in SMEs of a developing country. Therefore, this study investigates the impact of MS on OP in Bangladeshi SMEs.

H_2: MS has a strong positive influence on OP.

2.4.3. Record Keeping Performance (RKP)

Performance of a company indicates the capability to mitigate the necessary standards, increase market split, develop amenities, making sure proper returns on investments and decrease of waste and inefficiency and once those requirements are fulfilled, an organization is supposed to be operating successfully (Brignall, Fitzgerald, Johnston, & Silvestro, 1991). Performance in general refers to an ongoing process involving the managerial and non-managerial conditions for an organization, group or scheme can be held responsible. Characteristically, such conditions can be presented as constituent elements of an interior system and indicate organization's ability to control operational expenses, motivating the employees, drive well-timed executions and react to aimed group reactions (Nyathi et al., 2018).

Brignall et al. (1991) further stated that organizations must develop production if they supposed to successfully race in this era of rapid monetary and technological change. Enhanced output requires both financial resources and a skilled work group that has the adaptability to obtain new skills resultant from rapid developments in the economic systems. Bititci, Suwignjo, and Carrie (2001) further declare that successful performance is the ultimate outcome of employees' contribution as they offer the toughest connection to tactical goals of the firm, customer pleasure and economic contribution that impact the organizations. Therefore, addressing the manner in which an action is conducted specially and the height of standards to that a job is done inside the boundary of the working surroundings can be called performance. Therefore, keeping proper records is a fundamental pre-condition for the victorious performance of a firm.

A complete and efficient record keeping performance (RKP) helps it promising for enterprises to expand precise and suitable financial reports that depict the development and existing state of the organization. Taking the help of proper financial reports derived from a good record keeping system, performance of one period (month, quarter or year) with another one can be compared. A precise record of the enterprise's financial performance is a tool to check performance in a particular area and definite time period. Accounting records offer a preliminary position for absolute and precise income tax calculation, a foundation for resonance preparation for the future and a root for conversation with associates, possible investors and loan providers (Nyathi et al., 2018). All such aspects are crucial to enhance performance of a business. Managers further depend on correct accounting records to make correct financial and strategic decisions. Therefore, proper record keeping performance (RKP) will assist competent, appropriate and timely decision making that can improve the overall performance (OP) of small enterprises.

H_3: RKP has a strong positive influence on OP.

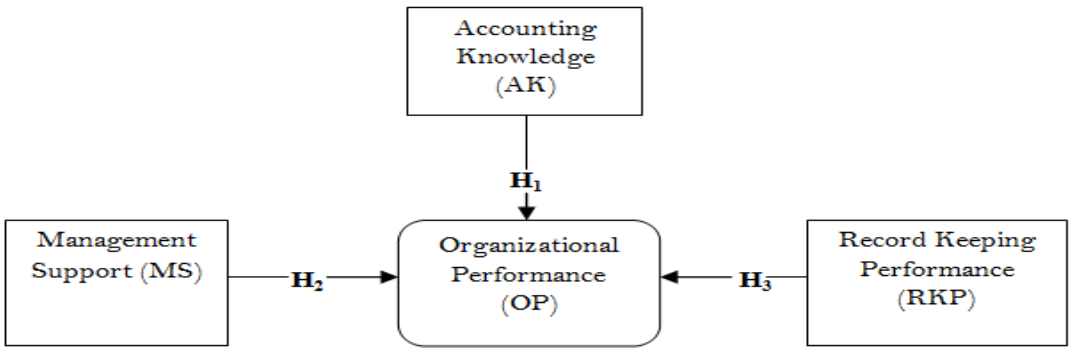

Figure-1. Theoretical framework.

Source: Own elaboration.

2.5. Development of Theoretical Framework

For investigating the role of accounting information system on organizational performance, a theoretical framework has been developed on the basis of above literative discussions using the three independent variables (accounting knowledge, management support and record keeping performance) and dependent variable (profitability). The framework has been depicted through Figure 1.

3. RESEARCH METHODS

The aim of this investigation is to learn the role of AIS on organizational performance. The study is quantitative and deductive in nature. A descriptive evaluation has been adopted to explain the characteristics of the respondents. To reveal the relationships between the independent and dependent variables, Pearson's correlation coefficient technique; and for testing the validity of hypotheses, linear regression analysis has been used.

3.1. Collection of Data

Primary data have been collected for this research as the secondary data are not suitable to measure in this case i. e. regarding the extent of use of AIS. A detailed survey questionnaire was used to take the interview of each participant from one organization. The respondents have been chosen using convenience sampling method from four major districts of Bangladesh: Dhaka, Chittagong, Khulna and Rajshahi.

3.2. Sample Size

The study population included the top and mid level managers working at different SMEs located in the city of Dhaka, Chittagong, Khulna and Rajshahi. The questionnaire was distributed to 850 employees working at 341 different SMEs. Among the returned questionnaires, 47 questionnaires were found incomplete and faulty. Those questionnaires have been rejected from the study sample. Therefore, the final sample size stood to 803.

3.3. Questionnaire Design

The questionnaire survey method is the accepted and widespread strategy for management research that includes questionnaire and interviews techniques formed for precise inquiry connected to the research objectives (Saunders, Lewis, & Thornhill, 2009). A survey questionnaire is a catalog of statements utilized to gather truthful individual beliefs or attitudes regarding a subject matter, an object or an opinion (Burns & Grove, 1993) and the statements that are incorporated in the questionnaire can be either open or closed or a blend of both (Polit & Hungler, 1991). For this study, there were two different parts on the questionnaire. The first part included demographic information of the employers like gender, educational level, working area, length of service etc. The other part included the statements related to the variables of AIS and OP.

The survey questionnaire included a total 22 elements (15 for independent variables and 7 for dependent variable) Table 1. A five point Likert scale will be used to rank the responses from "Extremely disagree" (1) to "Extremely agree" (5).

Table-2. Number of elements of under each variable in the survey questionnaire.

Variables	No. of elements
Organizational performance	7
Record keeping performance	5
Accounting knowledge	5
Management support	5
Total	22

Source: Survey questionnaire of the study.

3.4. Validity and Reliability of the Questionnaire

If a number of items (factors) are utilized to calculate a single construct, the factor's convergent validity needs to be the sole subject-matter of thought for the investigator i. e. the

degree to which several factors ascertaining the similar idea are in accord (MacKinnon, 2008). Hair, Anderson, Tatham, and Black (1998) noted that the convergent validity can be measured with the help of composite reliability. The outcome of the measurement model Table 3 shows that the loadings for each and every items are well above the suggested value of 0.70 (Hair et al., 1998). Composite reliability (CR) values ranging from 0.86 to 0.95 that have crossed the suggested value of 0.70 (Hair et al., 1998). On the other hand, in order to study the reliability (internal consistency) of the variables, this paper utilized Cronbach's alpha coefficient and composite reliability (CR) value. Table 3 further indicates all Cronbach's alpha values have exceeded the cutoff value (0.60) as recommended by Nunnally and Bernstein (1994).

Table-3. Reliability and validly of the questionnaire.

Variables	Composite reliability	Cronbach's alpha
Organizational performance (Profitability)	0.913	0.892
Accounting knowledge	0.936	0.914
Management support	0.878	0.824
Record keeping performance	0.937	0.816

Note: Composite Reliability> 0.70 (Hair et al., 1998)Cronbach's alpha> 0.60 (Nunnally & Bernstein, 1994).
Source: Reliability and validity measurement.

4. INTERPRETATION OF RESULTS

This investigation utilized simple descriptive explanations to portray the respondents' characteristics. For examining the relationship in-between the independent variables and dependent variable, Pearson's correlation coefficient has been utilized. Finally, multiple regression analysis has been used to confirm whether the assumed hypotheses are valid or not. The next sections of the paper have been used to highlight the study results step by step.

4.1. Demographic Characteristics of the Respondents

Table 4 represents the demographic features of the participants in this study, according to the first part of the questionnaire.

Table-4. Demographic characteristics of the respondents.

Demographic variable	Category	Arithmetic number	Percentage
Gender	Male	611	76.09
	Female	192	23.91
	Total (N)	803	100
Age range (Years)	20-29	309	38.48
	30-39	318	39.60
	40+	176	21.92
	Total (N)	803	100
Educational level	Undergraduate	411	51.18
	Graduate	372	46.33
	PhD	20	2.49
	Total (N)	803	100
Length of service (Years)	5 or less	82	10.21
	6-10	111	13.82
	11-15	412	51.31
	16 or more	198	24.66
	Total (N)	803	100

Source: Demographic components of the questionnaire.

The table indicates that more than three fourth participants are male while majority of them are middle aged. More than half of the respondents are undergraduate degree holders while there are a handful of PhD degree holders. Majority (51.31) of the participants has the experience range from 11 to 15 years while 10% have job experience for 5 years or less.

4.2. Pearson's Correlation Coefficient

According to Table 5, Pearson's correlation coefficient indicates that all of the three selected components of AIS are positively correlated with the dependent variable. But the relationship is strongest in case of record keeping performance (0.79) followed by accounting knowledge (0.71). Such relationship is positive but moderate in case of management support (0.51). The results are consistent with the results reported by Grande et al. (2011); Al-Najjar (2017) and Ahmad and Al-Shbiel (2019)where it was reported that AIS has influential impact on firms' financial performance (profitability).

Table-5. Pearson's correlation coefficient for selected independent variables and organizational performance.

Independent variables	Organizational performance (Constant)
Accounting knowledge	0.71
Management support	0.51
Record keeping performance	0.79

Source: Pearson's correlation analysis.

4.3. Results of Regression Analysis

On the basis of the objective and hypotheses of the study, the author has adopted multiple regression analysis to identify the validity of the hypotheses presumed. The results of regression analysis of three selected independent variables alongside the dependent variable are depicted on Table 6.

Table-6. Results of multiple linear regressions.

Accounting knowledge	R^2	Adjusted R^2	F value	Significance
Management support	0.560	0.39	26.817	0.003a
Record keeping performance	0.410	0.35	24.528	0.001a
Accounting knowledge	0.610	0.54	27.939	0.001a

Source: Multiple regression analysis.

F-test has been utilized to check the validity of the hypotheses as depicted in Table 6, where it was discovered that estimated F value equals to 26.817 where the significance level of the F value is 0.003 that is below ($\alpha \leq 0.05$) compared to calculated F value that equals to 2.43. This provides evidence of completely accept the first hypothesis: AK has a strong positive influence on OP. Here, R^2 value for the model is 0.560 indicating AK determines or explains about 56% variances on OE for the SMEs in Bangladesh. Regarding management support, F-test has been utilized to examine the validity of hypothesis 2 as depicted in Table 6 where it was revealed that estimated F value equals to 24.528 having the significance level of F is 0.001 not exceeding the established level ($\alpha \leq 0.05$) compared to calculated F value equals to 1.98. Such results provide the evidence to partly accept the second hypothesis: MS has a strong positive influence on OP although the relationship is moderate (not strong). R^2 value for the model is 0.410 indicating MS can explain about 41% variances on OP for the SMEs in Bangladesh. Finally, in case of record keeping performance, it has been revealed that the calculated F value equals to 27.939 and the significance level of F value is 0.001 which also below ($\alpha \leq 0.05$) compared to the calculated F value which is as much as 2.56 providing the evidence to completely accept the third hypothesis: RKP has a strong positive influence on OP. R^2 value in this case is 0.610 which indicates that RKP can well explain about 61% on OP for the SMEs in Bangladesh.

4.4. Test of Hypotheses

From the previous tables, it can be summarized that all the three independent variables has got positive F values indicating that all of those variables has positive relationships with the dependent variable, organizational performance (OP). The summarized validity of the hypotheses has been presented on the following Table 7 and Figure 2.

Table-7. Test of validity of hypotheses.

Hypothesis	Content of the hypothesis	Verified/Not verified
H_1	AK has a strong positive influence on OP	Verified and accepted
H_2	MS has a moderate positive influence on OP	Verified and partly accepted
H_3	RKP has a strong positive influence on OP	Verified and accepted

Source: Multiple regression analysis.

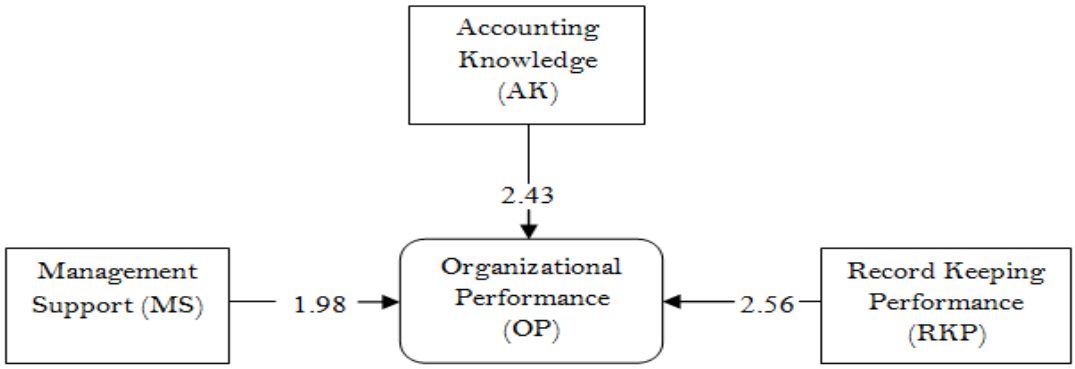

Figure-2. Test of validly of hypotheses.

Source: Multiple regression analysis.

The tested results of this are consistent with the previous literatures. The positive attitudes towards AIS have been reflected by the beliefs of the sample respondents. To encourage improvement in the operations of firms, proper AIS should be adopted and implemented as it provides a transparent picture of operational performance and might be simultaneously used with additional automated applications to enhance the performance.

5. THEORETICAL AND PRACTICAL IMPLICATIONS

This research is expected to contribute for further realization of the AIS applications and firm performance in the future literature. It narrates about the incorporation of AIS applications in organizational functions to achieve further success. There is still not adequate research in existence regarding the role of ASI on performance. This study is expected to fill that gap to some extent.

On the other hand, these conclusions will drop some guided results for the owners/mangers empowering them to amplify concentration to the AIS applications due to its significance in increasing the organization performance.

6. LIMITATIONS AND FURTHER SCOPE

The study was limited to, the influence of AIS practices on the company performance for only Bangladeshi SMEs. This has capped the scope of such study to one particular culture and particular industry. Further studies with wide dimensions of multiple cultural or comparative analyses taking more variables considering several industries can yield diverse and boarder conclusions. Therefore, the study has is a research gap that could be fulfilled with conducting further analysis on this important area of management.

7. CONCLUSIONS

Information has a considerable authority on modern organizations and there is superior requirement from the organizational perspective to grab benefits from it. Even though, the research in this particular area has not been finished yet, majority of them are settled to the consensus that information cannot be unnoticed as the part of technological imperative. Indeed, AIS has become an unavoidable organ for many organizations. Even though having some limitations, the benefits of utilizing AIS are enormous.

For achieving a better quality of working environment, rapid and successful sharing of information and most prominently, to hold the potential organizational requirements, executives ought to discover out ways on integrating with this gift of science and technology; and make the

best out of it in order to attain competitive benefits through the optimum use of resources. This paper is an attempt to build a further overall structure of the forces that manipulate the organization performance.

The highlighted roles of AIS can influence greatly on achieving organizational performance. But it should also be noted that AIS can provide only information that are necessary, it is the managers or executives who should decide whether to use these information efficiently or not.

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APPENDIX

Survey questionnaire
Segment-1 (Demographic information)

Please tick (√) at the appropriate box

- **Name of the participant:**
- **Sex (Please choose a category):** ☐ Male ☐ Female ☐ Other
- **Age (Please choose a category):** ☐ 20-29 ☐ 30-39 ☐ 40+
- **Education level (Please choose a category):** ☐ Undergraduate ☐ Graduate ☐ PhD
- **Length of service (Years):** ☐ 5 or less ☐ 6-10 ☐ 11-15 ☐ 16 or more

Segment-2 (Elements of variables with scaling)

This questionnaire has been prepared using 5 point Likert Scale for investigating the relationship between three selected elements of AIS and organizational performance. Score 1 represents strongly disagree, 2 represents disagree, 3 represents neutral, 4 represents agree and 5 represents strongly agree. Please tick (√) at the appropriate box.

Accounting knowledge (AK)

S. No.	Statements	Scale				
		1(SD)	2(D)	3(N)	4(A)	5(SA)
1	I have proper accounting knowledge					
2	Accounting knowledge is necessary for proper record of transactions and processing					
3	My organization provides training to impart up-to-date accounting knowledge					
4	Accounting knowledge is a significant element to implement AIS					
5	I believe that accounting knowledge can increase organizational performance					

Management support (OR)

S. No.	Statements	Scale				
		1(SD)	2(D)	3(N)	4(A)	5(SA)
1	Management support is a pre-condition to implement AIS					
2	As a manager, I always support to implement proper AIS in my enterprise					
3	I believe that accounting information need to be updated and recorded properly					
4	I am willing to invest to implement and operate a proper AIS in my enterprise					
5	As a manager, I believe that a proper and effective accounting system can reduce inefficiency and increase performance					

Record keeping performance (RKP)

S. No.	Statements	Scale				
		1(SD)	2(D)	3(N)	4(A)	5(SA)
1	It is imperative to keep accounting record properly and timely					
2	AIS is good platform to keep proper accounting track records					
3	Maintaining proper records can increase efficiency and reduce cost					
4	I always encourage my employees to keep proper transaction records systematically and scientifically					
5	Accounting records need to be cross checked and validated					

Organizational performance (OP)

S. No.	Statements	Scale				
		1(SD)	2(D)	3(N)	4(A)	5(SA)
1	Organizational performance is a common contribution from all employees					
2	AIS can contribute a lot in achieving organizational performance					
3	There is a positive relationship between AIS implementation and organizational performance					
4	Accounting department is an important department for my organization					
5	Accounting records are needed to updated and integrated scientifically					
6	A proper information system can increase enterprise productivity and reduce lead time					
7	The conventional accounting system should be modernized with information technology					

Note: The information will be solely used for the purpose of above mentioned study and will be kept confidential.