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The influence of accounting information System on the company's effectiveness: A Case study of car companies in Iraq

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Abstract

The car companies in Iraq are involved in distribution and retail of cars. There are many companies are operating in Iraq such as Toyota (Asia), Nissan, General motors and Hyundai. These companies are facing a great competition as some companies bring second hand automotive in the UAE. These companies import about 85% of the market. This rises competition higher and make the country economy more depressed. The compression in great competitive automotive sector would be increased including capacity and pricing pressure.

KEYWORDS: Accounting Information Systems (AIS), process of decision making, company's effectiveness, Iraq.

Introduction

Accounting Information Systems (AIS) are an instrument used for processing, storing, communication and collecting financial data through a computer-based system. The objective of using AIS is to guide and support managers in the process of decision making. Adequate software application is required to enable of operating AIS. The AIS contributes to the operational and managerial functions of companies especially in controlling and plaining. The maintenance of AIS is essential for organizations. This is because the AIS contributes to collecting data either

ordinary data or raw data and convert them into accounting data for reporting which are used in making relevant decision. There are three components contributing in AIS which are information, nature of business and source of accounting data. Data is beneficial for processing data which can be a foundation for decision making. (Davoren, 2019).

On the other hands, the idea of effective organization is how organization can achieve its objectives. Employees experiences, skills, knowledge and motivation can be integrated into the effectiveness of organization. This would lead to organizational development and achieve its goals. There may be a strong correlation between organizational effectiveness and the AIS. This means that the AIS can strongly contribute to the effectiveness of organizations through accessing the relevant information. The advantages of AIS can be examined by its perfection and effects on the process of making decisions, quality of AIS, evaluation performance, assisting organizational transitions and internal controls. These five features are crucial for the validation of AIS in all the firms.

Research Problem

Nowadays, the cost of using information system are pledged and many companies increasingly allocating budgets in this regard. However, this would create pressures about the cost of information due to current competition and economic conditions. In general, many companies concentrate on improving AIS in order to aid their communications, decision making, management knowledge's and many other factors to.

The use of AIS in crucial for managers as well as researchers. Per my knowledge, not many studies have been undertaken in Iraq regarding the importance of the AIS on the effective managerial decisions, especially, there is no study investigating the relationship between the AIS and managerial decision regarding to automobile firms. However, (Harash, et al., 2014) studied the importance of the AIS on the performance of the SMEs in Iraq. They concluded that the AISs are used by many SMEs in order to collect information that aid them in making effective decisions and hence the SMEs' performance and profitability will be enhanced in Iraq. However, in the other places like Kenya, researcher found a strong relationship between the AIS and the performance of automotive companies. According to (PWC, 2013), many automotive companies in Kenya utilize the information generated from the AIS. The authors examined the use and application of the AIS by car companies and its influence on managerial effectiveness).

Two explanations will be investigated in this study which are how the AIS can influence the performance of automobile companies and is there insufficient use of the AIS. The study investigates the logical use of transformation of the AIS in the car companies (PWC, 2013).

The aim of the study

The aim of this study is to investigate the influence of accounting information systems on the organizational effectiveness in car companies in Iraq.

Research Ouestion

Our research question is:

Question: Are accounting information system contributing to the effectiveness of car companies in Iraq?

The importance of the study

The key importance of this study is that we select car companies and other organizations in automobile sector in order to investigate the benefits of integrating the AISs in their implementation which enables car companies improve the effectiveness of their organizations. Since, there is no potential studies investigating the impact of AIS on the automobile effective performances, this study would be beneficial to other researchers to further investigate related topics.

The primary sources and theories about the integration of the AIS in different aspects would be provided in this study. This can be a general guidance for the operation of the AIS in SMEs businesses especially automobile businesses and it would be a practical integration for companies sufficiently using the AIS in their daily operations. Moreover, hence data about obligations, activities and economic resource are provided by the AIS that can be used by managers and investors in their effective decisions. Therefore, organizations can rely on this study in order to successfully adapt the AIS in their decision makings.

Research Hypothesis

Our research hypothesis is that:

H₀: the adaption of the AIS has a significant influence on the organizational effectiveness.

H₁: the adaption of the AIS has not have a significant influence on the organizational effectiveness.

Literature review

Nowadays, the contemporary businesses environments are needed to be expanded, developed and grown. This makes managers to think more about advanced strategies for management in order to develop making decisions in company. FDI is also the essential ingredient to the growth and development of most economies / (Othman, Al-kake, Lizam, Diah, Othman, et al., 2019). This study details the importance of public sector audit activity to effective governance and seeks to define the key elements needed to maximize the value the public sector audit provides to all levels of the public sector (shezad, hamawandy, 2020). Corporate governance systems aim to achieve economic efficiency, with a strong emphasis on increasing shareholders' wealth (Alkake, Harun, Othman, & Hasan, 2019). Based on the results of this study investors and policy makers may see a reason to improve the financial system in an attempt to achieve higher levels of return and less risks (Hasan et al., 2019). One of the major motive behind changes in internal control is surrounded with vast activities of gross corporate misconducts (Mahmood, Hamawandy, Sedeeq, Abdul, & Ali, 2020). This market is closely related to the country's economic structure, strengths, and weaknesses that could indicate the economic situation of the country (MIR, hamawandy et all., 2020). These strategies are needed to increase awareness, challenging demands from customers and having sustainable business using advanced technologies. The market opening in economic growth is due mostly to the accumulation of natural capital and the technology transfer (AL .Bewani, Hasan et al., 2020). Given this, it is fundamental to assume that the management of knowledge and information technology within the manufacturing industry remains a challenge that these entities encounter in their efforts to retain their positions in the market and achieve their competitive advantage (Othman, Al-kake, Lizam,

Diah, & Hasan, 2019). Financial markets are always responsive to economic and financial crises across the globe (Abdul et al., 2020). Linking people and different world is the work of modern technology is the carrier of globalization all over the world (Othman, Hamawandy, & Aziz, 2020). One of the strategies is using information systems in the organization (Davoren, 2019), 2019. The idea of capital competence The idea of capital competence is a newly developed concept that is being explored in research (Gardi et al., 2020). The theory of constraints is based on the assertion that firms thrive to make profits both presently and in the foreseeable future (Omar & Hasan, 2020). AIS play an important role in the management of daily implementation in organization and it is a crucial information system that aids managements in organizing, controlling, decision-making and planning for the best utilization available information (Samer, 2016). To determine the fair value of investments and to know the companies' performance by users of accounting information, many companies have disclosed all their information in various fields (Abdullah, Jaff, Al-kake, & hamawandy, 2021). Strategic management is an important tool for the success or failure of any company and because of the inability of other types of auditing to provide a comprehensive assessment of the strategic management process and the performance provided, the need arises to find a new type of audit that helps decision makers in decisionmaking through identifying the strengths and weaknesses of companies and the opportunities and threats surrounding it and providing the necessary information in a timely manner, this type of audit has been called the Strategic Audit (Al-shatnawi, Jaf, & Hamawandy, 2020). According to the recent study by (Borhan & Bader, 2018), AIS is the system of observing, preparing, analyzing accumulating, communicating and explaining accounting data about a specific entity to a specific group. Based on the above definition, AIS is a computer-based system which observes information, analysis and process data and prepares outcomes. Theuse of accounting techniques to generate financial reports, which shows an overly positive view of the business activities and financial position of the company (Hamawandy, Sulaiman et all., 2020). Moreover, (Kashif, 2018) has illustrated that AIS is a collection of equipment, procedure, policies and people which aims to make data collection and data transformation into beneficial information. Relevant data and information are provided by a system of AIS to aid people in the organizational implementation and also to help employees, customers, business owners and stockholders in their decision makings.(Chenhall, 2003) stated four components of the AIS that recognize the usefulness of information which are scope, integration, aggregation level and time. The meaning of scope is to use measures to expansion of in space and time. And, information can concentrate on internal against external events or events of historical against future. The information can be also measured according to non-mandatory or mandatory expressions. The second component time can be mentioned as speed of reporting, orientation of the data and frequency of the data. The duration of data aggregation procedure, functions can be referred as aggregation component. The last component is integration which refers to the necessity of supplying data to consider the cooperation and interaction impacts of many functions in the company. (Gordon & Miller, 1976) have analyzed these components to contrast strategies of organization and its performance. Some studies started to investigate whether organizations differ the design of the AIS systematically to assist their selected effective strategy, identifying that the Ais has crucial impact on the strategy of organization and improve performance. The study of (Hunton, 2002) examined the correlation between automated AIS and the effectiveness of organization. They illustrated that there is a robust correlation between the AIS and organizational effectiveness. This means that access to the

accounting information can make organization more effective. Many studies have been undertaken about accounting information value for price share, profit prediction and equity valuation which they examined reporting of the financial model throughout the world. Some researchers wanted to investigate whether they agree or disagree about the results from previous studies. For example, (Chenhall, 2003) stated that the AIS plays an important role in the managerial strategy. (Boulianne, 2007) made an assumption that the performance of organization is a function of the economic performance, AIS and management performance. He reviewed the AIS design and commercial performance of units by analyzing strategic which demonstrates that a wide range of the AISs are relied the commercial performance of units. In general, there are two categories of the AIS as it has been shown in the study of (Mahdi & Abdoreza, 2011) which are making effective decision for information which are extensively used for organizational control and information facilitation which are utilized for coordination in making decision. The system integration is increased by the effectiveness of the AIS to enhance communications internally. Senior managements with having different planning and information system improves organizational effectiveness (Huber, 1990).

Moreover, measurements that have been used to assess the information systems are reviewed by (Kristi & Martha , 1995). They examined whether satisfaction and utilizing are suitable replacement for the performance of decisions. They stated that there are three direct measures which are usage, decisions performance and satisfaction user satisfaction and system utilization can be used as observation for performance of decisions in the practice, they drew a conclusion about the AIS effectiveness on the usage and satisfaction measures for making decision however, it should be explained with some caution.

Research Methodology

We have used quantitative research approach for collecting data using a questionnaire. We designed a questionnaire to investigate the influence of AIS on effectiveness of automotive companies. We have developed an online link of kobo toolbox to be used by accountant, managers and auditors and to those companies using AIS. We have asked the questions from 10 different industries and the majority of participants agreed to answer the questions. All participants have either BSc, MSc or PhD, mostly in finance, banking, business administration and economic. For some questions, we have used the five Likert scale 1 for "Strongly disagree", 2 for "disagree", 3 for "natural", 4 for "agree" and 5 for "strongly agree".

The research design is appropriate because it answers our study aims and our research question as proposed. The participants were randomly selected in order to obtain primary data through inline questionnaire. The reliability and validity of data collection approach were supported by an expert (a statistician) to review the questions and include them in online KOBO toolbox.

The collected data were coded and analyzed after data collection using statistical package STATA. Descriptive statistics and content analysis were obtained using frequencies, mean and standard deviation. We have also constructed tables and graphics such as pie chart in order to explain the questions clearly.

Results

We have sent the questionnaire to 75 participants in 10 different car companies in Iraq such as SAN Yong car company, Toyota Iraq, SAS Iraq ..., etc. out of 70, 63 participants answered the questions. We have translated the questionnaire into original language and the response rate of 90% was achieved. We have designed semi-structure questions in order to make it easy to be filled, we have done face to face interviews in order to get the quality and consistency of data and high response rate. Thus, we have obtained reliable results in this study.

The gender, experience and department of responders

Table shows the number and percentages of responders from different departments in these companies. 38% of responders were working from marking and sales department while 23.8% of responders were from finance and administration department. Moreover, more than 25% of them were from information management including ITC and more than 12% were others.

Table 1 responders from different departments in the companies

Department of companies	Frequency	percent
Finance and administration	15	23.81
Information management	16	25.4
Marketing and Sales	24	38.1
Other	8	12.7
Total	63	100

The percentage of male was 77.8% (49 participants) while the percentage of female participated in the study was 22.2% (14 participants). It can be noted that the percentage of females participated in the study is considerably less than males. This is because females working in the car companies are less common in some places.

Table 2 experience of participants in years

Work experience	Frequency	percent
Less than 5 years	21	33.33
5 to 9 years	20	31.75
10 to 14 years	17	26.98
15 and more	5	7.94
Total	63	100

The majority of participants have less that 10 years of experience in working in automobile companies. About 33% of participants have less that 5 years of experience working in car companies while about 8% of participants have extensive experiences in automobile business which was 15 years and more. This means most of the participants have clear ideas about their company's vision.

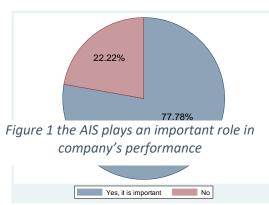
The main results

We have asked some questions about how the AIS can influence the organizational effectiveness. For some questions, we have used the five Likert scale 1 for "Strongly disagree", 2 for "disagree", 3 for "natural", 4 for "agree" and 5 for "strongly agree".

Providing AIS	Frequency	percent
Yes	33	52.38
No	30	47.62
Total	63	100

Table 3
using AIS by
companies

It can be
noted from
figure 1
that the



majority of participants stated that the AIS is very important for the effectiveness of the company's performance. Over 52 % of responders

have said that their organizations are using the AIS. This means that more than the half of automobile companies are using the AIS to obtain effective performances.

Table 4 company's effectiveness is improved using the AIS

Providing AIS	Frequency	percent
Yes	23	69.7
No	10	30.3
Total	33	100

We have asked a question how your company's effectiveness has been improved using the AIS. From table 4, we can see that approximately 70% of responders have stated that the effectiveness of their companies has been improved. This can be an indication that using the AIS can improve their financial reports and managerial performances. One the other hand, 30% of them stated using AIS has not improved company's effectiveness. This means that those companies are using the AIS insufficiency.

Table 5 rating the AIS towards company's effectiveness

The importance of the AIS	Frequency	percent
Not important	5	15.15
Natural	11	33.33
Important	11	33.33

Very important	6	18.18
Total	33	100

Table 5 shows the rating of the AIS across company's effectiveness. Over 33%, 33% and 18 5 of participants rated the importance of the AIS as natural, important and very important respectively while only 15% of them rated unimportant. This means using AIS can assist automobile industries in achieving organizational goals and aid their managerial decisions effectively.

Table 6 shows the important indicators toward automobile company's effectiveness

Indicators	Number	Mean	Std. Dev.
AIS quality			
It is easy to understand and learn the AIS features	63	4.46	1.23
The AIS is fast	63	3.27	1.11
The AIS is flexible and reliable	63	3.98	0.67
Quality of information			
Reliable reports provided by managements	63	3.54	0.93
The company's website is reliable and frequently updated	63	4.51	0.50
We usually get support from IT	63	4.84	0.37
Using AIS System			
Staffs are capable to use information	63	4.06	0.80
AIS enhances making decision	63	4.43	0.73
Marketing and profits are developed using AIS	63	3.89	1.18
Implementation costs are reduced since using the AIS	63	3.73	0.45
AIS increases job opportunities	63	4.30	0.46
Measuring Performance			
Service quality are observed by teams	63	4.25	0.98
Organizational effectiveness is observed and improved	63	4.27	0.72
Financial reports are shred and reviewed by teams	63	4.46	0.82
Company's objectives are set by managers	63	3.87	1.07
company's effectiveness and performance			
Profits and revenues are increased using AIS	63	4.02	0.85
The market share is increased using AIS	63	3.75	1.03

In our study, we have used the scale 1 for "Strongly disagree", 2 for "disagree", 3 for "natural", 4 for "agree" and 5 for "strongly agree" for answering some of the most important indicators in order to investigate the influence of the AIS on the company's effectiveness in Iraq. We have

presented mean and standard deviation of participant's perspective. For the AIS quality, it can be noted from above table that the average of answers was "important" for the indicator that participants can easily learn and understand the features of the AIS. For the question of how fast the AIS is, the average answer was also "important". This indicate that car companies that use the AIS thought the quality of the AIS in important toward the company's effectiveness.

For the quality of information, participants stated that it is important to provide reliable financial reports, reliable websites should be frequently updated and getting support from IT. The average answers for the above three indicators are mostly important. The majority of responders were stated that utilizing the AIS is crucial as that stated that staffs are capable to use information (average is "important"), AIS enhances making effective decisions ("natural"), Marketing and profits are enhanced (average is "important"), operational costs are reduced (average is "important") and job opportunities are increased (average is "important").

Moreover, measuring company's performance are important using the AIS, as participants stated that service quality is observed by teams, the effectiveness of automobile companies is improved, financial reports of automobile industries are reviewed, and the company's objectives are set by managers. Responders rated these four indicators as important for measuring performances of automobile industries. Finally, company's effectiveness and performances are developed as participants stated that profits and revenues are increased using the AIS (average is "important") and the market share is also increased using the AIS (average is "important").

From the above results, we can see that using AIS will influence automobile industries in terms of effectiveness, performance and better decision making. These indicators are very crucial to observe organizational effectiveness and its performance.

Discussion and conclusion

Summary of findings

The aim of this study was to investigate the influence of accounting information systems on the organizational effectiveness in car companies in Iraq. We have observed the impact of the AIS using various indicators such as the AIS quality, the quality of information, effectiveness of using the AIS, measuring performance and automobile company's effectiveness and performance. We have measured the age, years of experience, whether automobile firms using the AIS and how to rate the effectiveness of the AIS. Out of 70% questionnaires, 63 of participants agreed to take part to the study. We have selected different car companies in Iraq

Our findings showed that that using AIS will influence automobile industries in terms of effectiveness, performance and better decision making. These indicators are very crucial to observe organizational effectiveness and its performance. We analyzed different characteristics of the AIS such as reliability, flexibility of the AIS, the feature of the system, response time and complexity of the AIS. We have shown that results from the AIS were accurate and staffs were able to use the AIS.

Moreover, we have illustrated that the information provided by web sites should be updated regularly with precise information. we have presented that most of the participants stated that the effectiveness of their companies has been improved. This can be an indication that using the AIS can improve their financial reports and managerial performances for automobile businesses in Iraq. The study investigated how using appropriate AIS can enhance decision making, customer satisfaction, increasing market share and productivity, reducing costs, financial development and increasing job opportunities.

Furthermore, some automobile companies stated that using the AIS has not improved their organizational effectiveness. This is because they may utilize the AIS inappropriately as illustrated in the main findings. Our study indicates that using the AIS is crucial for automobile companies in order to make effective managerial decisions and controlling their companies. It is highly important for automobile companies to utilize the AIS effectively as we have found that there is a high link between company's performance and the AIS. This is because senior managements in the automobile companies are increasingly integrating the use of the AIS in their planning, communication and effective decision-making processes. This would lead to obtain organizational effectiveness and performances. Our results were agreed with both studies done by (Huber, 1990) (Borhan & Bader, 2018) and (Rehab, 2018).

Conclusion

The AIS is highly important to obtain appropriate information on time and utilize this information in organizational effectiveness. There is an evidence in the literature that there is correlation between company's effectiveness and the AIS. Thus, it is essential to investigate other factors that may influence this correlation. The AIS will provide this information to be used by automobile companies to make effective decision and making effective investment.

Accounting and financial date are essential for managers to monitor and evaluate previous performances and plan for the future. Our research indicated that there is a positive link between company's effectiveness and the AIS. This means that using the AIS contribute to the company's effectiveness. Thus, we can conclude that accounting information systems influence the effectiveness of automobile firms in Iraq.

limitations and recommendations

This study was limited to the complexity to observe the level of effectiveness in the automobile companies in Iraq. We were relied on the questionnaire to observe this effectiveness. We could have used other data collection approach including secondary data collection. Since we have undertaken this study in the time of COVID-19 pandemic, we could not do face-to-face interviews because of the curfew. We would have more precise data collection if we would have done interviews. We have conducted this study on the automobile companies in Iraq, thus this study may not be generalized to other sectors because of each sector has its own feature. Moreover, we would recommend further research collecting data from more companies with advance statistical analysis.

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