

The Role of ERP Information to Support Decision Making Process

Field Study on Panda Retail Company (Mobile Inventory Management System)

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Abstract—The ERP is the main source of business data while store mobile inventory management is one of very important modules in ERP that cover a critical role for retail organizations such as Panda retail company. The goal of this study is to show the high correlation between information and effective decision-making process. Descriptive analysis research method was used in this study where theoretical data collected from published papers, in Jeddah city (60) employees of mobile inventory management system users participated the survey and statistical techniques such as frequency tables, Percentages, Average value, standard deviation, etc. This used survey consists of 3 companies namely the effectiveness of information to support decision making, the effectiveness of store mobile inventory management at Panda retail company, the effectiveness of ERP for organizations. The key results of this study clarifies that it's very important to have as much as possible data and the relationships between data at any point of time to identify problems, analyze them in order to make the most effective decisions and role of ERP in providing such information at any point of time. Recommendations had been provided such as the importunacy of ERP, modern business applications, and technology to improve business outcomes and provide continues learning and development culture for employees to increase their competencies to use these digital tools.

Keywords—Information, Enterprise Resource Planning (ERP), decision-making, Panda retail company, Store Inventory Management.

1 Introduction

“Who has the information, has the keys of decision making” [1], decision-making has become the essence of the administrative role and the primary task of achieving the goals of the organization; On the other hand, digital technologies has created a kind of acceleration in the economic environment, increased competition, and the time factor has become extremely important as organizations have become in need to make quick and effective decisions in order to be able to continue to compete and maintain their

market distinction, which requires providing modern, accurate and appropriate information.

Considering that the main goal for organizations is to provide the products and service in the right time with required quality and accuracy via data gathering, analyzing properly, it was essential to depend on ERP as effective business applications to support right decision making [2].

Mobile Inventory management system increases the efficiency of inventory operations, which are implemented with the ability to control the movement of items, and the application of mobile inventory management in integrated systems has the necessary flexibility that allows to implement inventory operations to serve the diverse activities of company [3].

Data are generally kept in information systems. Humans turn these data into information, knowledge, and insights and finally use them for informed decision making and problem solving. Therefore, Data driven decision making is fundamentally related to the adoption and use of IS in general and data driven decision support systems [4].

For the survival and growth of many firms in today's businesses environment, creative use of information technology information systems is essential. IT and IS together provide new opportunities to businesses to redesign their business processes and work practices, while enabling organizational change [5].

Stated that it is well known that it is possible through the methodology to accurately define the problem and it helps us to address it through study and research and allow us to put assumptions and initial expectations that help us to solve the problem. In this study, we will try to rely on the descriptive analytical methodology [6].

We will follow the case study method as a way of field study and the data will be processed using the statistical program (SPSS) to provide some graphs with the use of appropriate tools and methods such as frequency tables, Percentages, averages and standard deviation.

This questionnaire will be presented to specialists with experience in this field as arbitrators in the subject of the study, and calculating the correlation coefficient for each paragraph and its relationship to the subject of the study, which is the Pearson coefficient, and also Cronbach's Alpha coefficient to ensure the stability and reliability of the questionnaire.

This study conducted and data collected during the academic year (2019/2020), 60 employees from mobile inventory management department participated are from Panda retail company located in Jeddah city, and the study will depend on the questionnaire. The conclusions of this study are providing the necessary information creates integration and correlation between decisions and helps in identifying and analyzing the problem. The appropriate information helps to implement and follow up the decisions in a correct way, with the presence of information technology that contributes to the speed of information exchange, which leads to better decision-making. The mobile inventory management system helps to provide high-quality information to decision-makers, as it allows for optimal utilization of the company's inventory resources. The integrated information systems (ERP) provides information about any period in the company, and the information is characterized by a high degree of detail and the system provides clear reports to the decision maker.

This study consists of related literature, research problem, research methodology, survey, conclusion, and recommendation

2 Related Work

This section will present previous studies related to the subject with the aim of forming a conceptual framework on which the current study based on clarifying the basic aspects of the topic, and below is a presentation of previous studies:

In today's business environment companies are forced to improve transparency as well as accelerate and digitalize all steps of the order management process. Enterprise Resource Planning (ERP) systems and further information systems have become indispensable to implement an efficient order processing. Scientific papers have already summarized the main problems of these systems. For this paper, a survey was carried out showing the suitability of information systems with a focus on ERP systems for decision support in the order management process for a given product delivery strategy. The results show that particularly the support in defining solutions needs to be improved [7].

Mobile Inventory Management System is software which is helpful for the businesses operate hardware stores, where storeowner keeps the records of sales and purchase. Mismanaged inventory means disappointed customers, too much cash tied up in warehouses and slower sales. This project eliminates the paperwork, human faults, manual delay and speed up process. Mobile Inventory Management System will have the ability to track sales and available inventory, tells a storeowner when it is time to reorder and how much to purchase. Mobile Inventory Management System is a application developed focused in the area of Inventory control and generates the various required reports [8].

Data-driven decision-making (DDDM) is said to have huge benefits for organizations. Data are generally kept in IS, and humans use these data for informed decision-making. Therefore, DDDM is fundamentally related to the adoption and use of IS by individuals. IT adoption and use are influenced by personality and cognitive style, but not much is known on how personality and cognitive style influence the adoption and use of data-driven decision support systems. Our study aims to further our understanding of this influence. Through a structured literature review of IS literature, 55 papers were found and analyzed, resulting in 14 relevant topics and 7 key papers. Our findings indicate that personality and cognitive style may influence the adoption and use of data-driven decision support systems. We provide implications for future research to obtain a better understanding of DDDM, and practitioners can use our results to realize more successful DDDM [9].

This study aimed to identify the impact of the efficiency of management information systems in improving the effectiveness of the process of making and taking decisions in known economic fields that depend on information systems in institutional management. The questionnaire is a main tool for collecting data from individuals. The sample of the study consists of the bank's cadres that uses information systems for work and decision-making. It was collected and analyzed by proposing a set of statistical

methods, the study reached to the following results, The level of cooperation and coordination between the various departments within the bank regarding information aimed at achieving what the bank seeks to achieve is not sufficient. The respondents' perceptions of the high efficiency of the information systems came. There is a statistically significant effect of the efficiency of management information systems on the effectiveness of decision-making in varying degrees in all its stages. The study also concluded a set of recommendations and proposals, the most important , Organizing training programs for users of the management information system and operational and application software, and Increasing interest in material, financial and technical requirements, as they have an effective impact on the decision-making process [10].

The study aims to find the impact of management information systems and information technology on assessing the company's performance and business strategy. The sample of the study consists of 170 executives from different commercial companies. The study used the questionnaire to evaluate the company's performance and the success of the business strategy. For data analysis, the study used statistics, correlations, and multiple regression analysis. The results found that there is a positive relationship between management information systems and information technology and the company performance and business strategy. The study also found that the success of the business strategy depends on the reliability and efficiency of the technology that is being used. Information technology can also be used as a means to change and improve the efficiency and effectiveness of a company's performance, while both management information systems and information technology also improve the company's performance level to become more efficient [11].

This study aimed to demonstrate the impact of the use of modern computer systems in recording and monitoring inventory and purchases. The study concluded that to maintain an advanced level of competition that needs an integrated system that provides the information necessary for quick and timely decision-making, and that the facility needs to follow up on updated performance indicators that The results of the work are distributed at the level of the department, product or geographical location, and it also concluded that the integrated system of applications provided by Oracle is the optimal system that can provide information of updated value to the decision-making service, and that this system provides a link between the various activities to serve all users from commercial, financial and operations.

Through the presentation of previous studies, the researcher noticed a difference between them, in terms of the approach used, the studied community, the target sample and the study tool, where he find that the current study include most of the previous studies in adopting the descriptive analytical approach and the questionnaire as a study tools, Averages and standard deviations etc... as statistical tools for conducting this study, and after reviewing previous studies of the research topic, and reviewing the results obtained by researchers and subject matter experts in this field through various studies, the role that information and integrated systems contribute in supporting decision-making for companies and institutions has become clear. The importance of information technology in improving the management of organizations and the performance, whether private or public organizations, and it is also clear from previous studies that there is an increased interest and positive directions for integrated systems, and this is

not limited to private institutions only, but includes many government institutions, and the aspects of benefiting from these previous studies, The researcher may benefit from these studies from several aspects, including enriching the theoretical framework of the study, and benefiting from the references used and books on which previous studies relied, and benefiting from them in formulating goals and putting questions, and identifying previously researched aspects in the field of information, integrated systems, information technology, mobile inventory management and decision-making, and contributing to obtaining various sources and research references to enrich the research, then developing questionnaire of the current study, and finally the use of previous studies on how to present the results, analyze them and give the necessary recommendations [12-14].

3 Research Problem

Due to the complexity of large environment, isolated legacy systems, and huge volume of data at Panda retail company recently it become difficult to have centralize, connected data, so the need for ERP, modern business applications and appropriate technologies become a critical factor to be in control with business process and provide excellent customer service, and to have 360 degree overview for products and customers, Hence, the aim of this study is to identify the role ERP to support decision-making, specifically in the mobile inventory management system and how the information contribute in highly effective decision-making.

4 Research Methodology

This section will provide a description for the used approach, the population and the study sample, as well as the used study, the method of its preparation and how to build and develop it, and to which extend it is valid and consistent, as well as a description of the procedures that the researcher used in designing the study, and the tools that the researcher used to collect data and extract the results, below is a description of these procedures.

As we mentioned earlier, we will use the questionnaire as a tool that the study depends on as a tool of collecting data, because it reduces time, effort and cost, and what it provides of data and information that helps in achieving the goals of the study. The questionnaire was divided into two sections:

The first section: It is the personal and employment data of the respondent such as (gender, age, educational level, duration of service).

The second section: It is data related to the role of ERP in supporting decision making, and it was divided into three aspects, 1st is the effectiveness of information to support decision making and it consists of 10 paragraphs, 2nd is the effectiveness of store mobile inventory management at Panda retail company and it consists of 10 paragraphs, 3rd is the effectiveness of ERP for organizations and it consists of 10 paragraphs. All phrases were phrased positively. We will use a Likert scale to measure study sample responses, shown in the following table:

Table 1. Scores for the 3-point Likert Scale

Answer pattern	Agree	Almost agree	Disagree
Statistical relative weight	3	2	1

4.1 Validity and reliability of the questionnaire

The validity of the questionnaire means that the questions of the questionnaire be measured by what was set for measuring it, and the researcher verifies the validity of the questionnaire by the following ways:

- a) The validity of the arbitrators: The questionnaire was presented to arbitrators with specialists in the Department of Information - Information Management at King Abdulaziz University, and the researcher responded to the arbitrators' opinions and made the necessary edits, modifications and additions in the light of the submitted proposals, and thus the questionnaire came out in its final form.
- b) Validity of scale: internal consistency: The internal consistency validity means the consistency of each of the questionnaire paragraphs with the field that this paragraph belongs to, by distributing the questionnaire to an exploratory sample, and it was distributed to them, where their number was (30) supervisors of the inventory management, and the correlation coefficient was calculated between the degree of each Paragraph and the overall degree of the aspect which belongs to. The results have reached the following:

It is clear from the previous results that all the paragraphs of the questionnaire are related to significant correlation coefficients with the overall degree of the aspect which belongs to, and correlation coefficients came at the significance level of 0.05 and 0.01.

Table 2. Correlation coefficients between the degree of each paragraph and the total degree of the aspect

First aspect		Second aspect		Third aspect	
Paragraph number	Correlation coefficient	Paragraph number	Correlation coefficient	Paragraph number	Correlation coefficient
1	.594 **	1	.697 **	1	.633 **
2	.511 *	2	.615 **	2	.680 **
3	.530 **	3	.567 **	3	.385 *
4	.711 **	4	.873 **	4	.820 **
5	.737 **	5	.693 **	5	.739 **
6	.642 **	6	.818 **	6	.815 **
7	.799 **	7	.623 **	7	.798 **
8	.737 **	8	.731 **	8	.754 **
9	.645 **	9	.696 **	9	.591 **
10	.681 **	10	.683 **	10	.656 **

** Significance level at 0.01 * Significance level at 0.05

Table 3. Values of the Cronbach's Alpha coefficient for the questionnaire

Questionnaire aspect	Paragraphs number	Cronbach's Alpha coefficient values
The effectiveness of information to support decision making	10	.848
The effectiveness of store mobile inventory management at Panda retail company	10	.899
The effectiveness of ERP for organizations	10	.900
The questionnaire as a whole	30	.939

The achieved results indicate that all aspects of the questionnaire and the questionnaire have high stability coefficients. These results confirm the validity of the questionnaire and its suitability to achieve the objectives of the current study. The responses of the sample members were estimated on the questionnaire paragraphs according to a three-step scale as follows:

- Agree: It is valued at three degrees
- Almost agree: It is valued at two degrees
- Disagree: it is valued at one degree

The Statistical Package for the Social Sciences (SPSS) program was used, where the questionnaire data was coded and processed as the following statistical methods were followed:

- a) Pearson correlation coefficient for calculating the validity of the internal consistency of the questionnaire.
- b) Cronbach's Alpha coefficient to calculate the stability of the questionnaire.
- c) The use of percentages, Averages and Frequency tables to calculate the responses of the sample individuals on the questionnaire, and the standard deviation was used to calculate the extent of dispersion of those responses, and to determine the degree of the sample approval on the questionnaire paragraphs. The paragraphs were arranged in terms of priority as follows:

The criterion of determine the values of the averages according to the 3-point Likert Scale = Higher degree - Lower degree / the number of response categories

As the higher degree = 3 degrees, the lower degree = 1 degree, and the number of response categories = 2 degrees, and on this basis the approval degree was estimated as follows:

- Large: if the averages (mean) is Higher than 2.33
- Medium: If the averages (mean) is Higher than 1.66 and less than 2.33
- Low: If the arithmetic averages (mean) is less than 1.66

The main study was conducted to identify the size of the main sample and show the general characteristics of the sample in terms of (gender, age, educational qualification, duration of service), and to discuss and analyze independent and dependent variables.

Analysis of study data: After the data was collected from the sample through the questionnaire form, the researcher analyzed and interpreted those collected data for the two sections included in the questionnaire form.

Characteristics of the study population: In this part, we discuss the characteristics of the study sample individuals as follows:

4.2 Distribution of the sample individuals according to type (gender)

Table No. (4) Shows that all members of the sample are male, and that there is no participation of women in this study, as the percentage of males reached 100 %.

Table 4. Distribution of the Sample Individual by gender

Gender categories	Frequency	percentage
Male	60	100%
Total	60	100%

4.3 Distribution of the sample individuals according to (age)

It is noted from Table No. (5) That the age category (from 30 to less than 40 years) constitutes the highest percentage of the sample, reaching (70%), followed by the age category (less than 30 years) with (16.75%), and finally Age category (from 40 years to less than 50 years (13.3%).

Table 5. Distribution of sample individuals according to age

Age categories	Frequency	percentage
Less than 30 years	10	16.7 %
From 30 years to less than 40 years	42	70%
From 40 years to less than 50 years	8	13.3%
Total	60	100%

4.4 Distribution of sample individuals according to (educational qualification)

We notice from Table No.(6) that university graduates (bachelor's degree) constitute the highest percentage, reaching (48.3%) of the total population of the sample members, followed by holders of high school certificate or its equivalent (diploma), where the ratio is (36.7%), while With regard to those who are less than a high school certificate, their ratio was (11.7), while the lowest percentage was for holders of a master's (doctorate) degree where they did not exceed (3.3%). It is clear from the above table that most of the sample members are university graduates, and this is considered a positive indication that may reflect the sample's awareness and understanding of the questionnaire questions.

Table 6. Distribution of the sample individuals according to the educational qualification

Educational qualification categories	Frequency	percentage
Less than high school certificate	7	11.7%
High school certificate or equivalent (diploma)	22	36.7%
University degree (bachelor's degree)	29	48.3%
Graduate Certificate (Masters-Doctorate)	2	3.3%
Total	60	100%

4.5 Distribution of the individual sample according to (service period)

It is clear from Table 7 that the highest percentage of individuals in the study sample is the percentage of those whose service period in Panda retail company [15] ranges between (from 5 years to less than 15 years), where it reached (51.7%) of the total population of the sample members. Followed by the percentage of (less than 5 years), where it reached (23.3%), while the percentage of their service period was (from 15 years to less than 20 years), where it reached (16.7%), and in the last rank came the proportion of those whose service period reached 20 years and over, as it did not exceed (8.3%) of the total number of respondents, which is a very small percentage.

Table 7. Distribution of the individual sample according to the service period

Service period categories	Frequency	percentage
Less than 5 years	14	23.3%
From 5 years to less than 15 years	31	51.7%
From 15 years to less than 20 years	10	16.7%
20 years and over	5	8.3%
Total	60	100%

From tables 8-10, we see that Table 8 Shows the ratios and frequencies, the general average (mean), the general standard deviation, the degree of approval and the rank for the aspect of the extent of the effectiveness of the information in supporting the decision-making process in Panda retail company. Identify the effectiveness of the information in supporting the decision-making process in Panda retail company, Table No. (8) Clarifies this, in terms of the degree of approval and the rank of the paragraph. It is clear from these results that the sample members agree to a large degree on the extent of the effectiveness of the information in support of the decision-making process in Panda retail company, with an arithmetic average of (2.75), and the responses of the sample members came largely on all paragraphs. Therefore, these results showed the effectiveness of the information in Supporting the decision-making process in Panda retail company as it is placed in the above ranks.

On other hand, table 9 Shows the ratios and frequencies, the general arithmetic average, the general standard deviation, the degree of approval and the rank for the aspect of the effectiveness of the mobile inventory management system in Panda retail company under competition. Identify the effectiveness of the mobile inventory management system in Panda retail company under competition; Table No. (9) clarifies this in terms of the degree of approval and the rank of the paragraph. It is clear from these results

that the sample members agree to a large degree on the effectiveness of the mobile inventory management system in Panda retail company under competition, with an average mathematical average of (2.73), and the responses of the sample members came largely on all paragraphs, and these results showed the effectiveness of the mobile inventory management system in Panda retail company under competition, as it is placed in the above ranks.

Finally, table 10 Shows the ratios and frequencies, the general arithmetic average, the general standard deviation, the degree of approval and the rank for an aspect of the effectiveness of the integrated information systems (ERP) in supporting the decision-making process in Panda retail company. . Identify the extent of the effectiveness of integrated information systems (ERP) in supporting the decision-making process in Panda retail company, Table No. (10) Illustrates this, in terms of the degree of approval and the rank of the paragraph.

Table 8. Percentages, Frequency, Arithmetic Average (mean), and Standard Deviation of the Effectiveness of Information in Supporting Decision Making in Panda retail company

Sr.	Phrases Percent-ages, Frequency, mean; standard deviation, ap-proval degree, and rank.	Agree		Almost agree		Disagree		Arithme-tic Aver-age (mean)	Standard Deviation	Ap-proval degree	Rank
		F	%	F	%	F	%				
01	Having the necessary information helps to understand the problem and the positions that require decision-making.	47	78,0	12	20,0	1	1,7	2,76	0,46	High	6
02	Panda retail company uses a database to access the necessary information at a high speed, which helps in taking the appropriate decision.	47	78,0	12	20,0	1	1,7	2,76	0,46	High	5
03	Availability of the necessary information creates integration and correlation between decisions.	51	85,0	9	15,0	0	0	2,85	0,36	High	1
04	Information contributes to reduce and saves effort and expenses.	45	75,0	14	23,3	1	1,7	2,73	0,48	High	8
05	Appropriate information helps to correctly implement	48	80,0	12	20,0	0	0	2,80	0,40	High	3

	and follow up the decisions.										
06	The appropriate information suggests possible alternatives to tackle problems at the right time.	42	70,0	18	30,0	0	0	2,70	0,46	High	9
07	Availability of appropriate information will achieve the desired goals as efficiently as possible.	46	76,7	14	23,3	0	0	2,76	0,42	High	7
08	Information helps to identify and analyze the problem.	48	80,0	12	20,0	0	0	2,80	0,40	High	2
09	Information technology helps in the rapid exchange of information, which leads to better decision-making.	47	78,0	13	21,7	0	0	2,78	0,41	High	4
10	The information helps subordinates understand the content of the decisions issued to them to implement it.	37	61,7	22	36,7	1	1,7	2,60	0,52	High	10
	General Arithmetic Average (mean)							2,75			
	General standard deviation								0,33		
	Total degree									High	

Table 9. Percentages, Frequencies, Arithmetic Average, and Standard Deviation of the effectiveness of the mobile inventory management system in Panda retail company under competition

Sr.	Phrases Percentages, Frequency, mean; standard deviation, approval degree, and rank.	Agree		Almost agree		Disagree		Arithmetic Average (mean)	Standard Deviation	Approval degree	Rank
		F	%	F	%	F	%				
01	The mobile inventory management system helps in quickly responding to market requirements.	41	68,3	18	30,0	1	1,7	2,66	0,50	High	9
02	The mobile inventory management system helps in improve supplier relationships.	40	66,7	17	28,3	3	5,0	2,61	0,58	High	10

03	The mobile inventory management system helps to facilitate the completion of tasks and reduce the time required to perform them.	45	75,0	15	25,0	0	0	2,75	0,43	High	4
04	The mobile inventory management system helps to provide high quality information to decision makers.	45	75,0	14	23,3	1	1,7	2,73	0,48	High	5
05	The senior management of Panda retail company understands the importance and benefits of the mobile inventory management system.	51	85,0	9	15,0	0	0	2,85	0,36	High	1
06	The mobile inventory management system helps in achieving the market needs of different materials with the Highest possible efficiency.	42	70,0	18	30,0	0	0	2,70	0,46	High	7
07	The mobile inventory management system contributes to controlling the company's inventory, which contributes to achieving competitive advantage in the markets.	48	80,0	12	20,0	0	0	2,80	0,40	High	3
08	The mobile inventory management system helps to protect against risks which contribute to attracting new suppliers and opening new competition markets.	42	70,0	17	28,3	1	1,7	2,68	0,50	High	8
09	The mobile inventory management system reports help to preserve the size of the company's financial investments.	48	80,0	12	20,0	0	0	2,80	0,40	High	2

10	The mobile inventory management system helps to optimize the use of the company's inventory resources.	43	71,7	17	28,3	0	0	2,71	0,45	High	6	
	General Arithmetic Average (mean)								2,73			
	General standard deviation									0,35		
	Total degree										High	

Table 10. Percentages, Frequencies, Arithmetic Average, and Standard Deviation of the effectiveness of the mobile inventory management system in Panda retail company under competition

Sr.	Phrases Percentages, Frequency, mean; standard deviation, approval degree, and rank.	Agree		Almost agree		Disagree		Arithmetic Average (mean)		Standard Deviation	Approval degree	Rank
		F	%	F	%	F	%					
01	ERP integrated information systems help in facilitating tasks and making decisions.	46	76,7	14	23,3	0	0	2,76	0,42	High	5	
02	ERP integrated information systems help in provide an appropriate amount of information for decision-making.	46	76,7	14	23,3	0	0	2,76	0,42	High	4	
03	With ERP integrated information systems, clear and	47	78,3	13	21,7	0	0	2,78	0,41	High	3	

	understandable reports can be obtained.										
04	ERP integrated information systems is accurate and reliable.	43	71,7	17	28,3	0	0	2,71	0,45	High	7
05	The information provided by ERP integrated information systems is highly detailed that the decision maker needs.	48	80,0	12	20,0	0	0	2,80	0,40	High	2
06	ERP integrated information systems help in adequate decision making within clear strategic dimensions.	41	68,3	17	28,3	2	3,3	2,65	0,54	High	10
07	ERP Integrated Information Systems help in provide previous predictive information to help decision-makers.	43	71,7	16	26,7	1	1,7	2,70	0,49	High	8
08	Integrated Information Systems (ERP) help in planning and setting goals and drawing appropriate company strategies.	40	66,7	19	31,7	1	1,7	2,65	0,51	High	9

09	Integrated Information Systems (ERP) provides information on any period of time in the company.	50	83,3	10	16,7	0	0	2,83	0,37	High	1
10	ERP integrated information systems help to arrange the required information according to the user's desire.	44	73,3	16	26,7	0	0	2,73	0,44	High	6
	General Arithmetic Average (mean)							2,74			
	General standard deviation								0,35		
	Total degree									High	

5 Conclusion

The current study aimed to identify the role of integrated information systems (ERP) in supporting decision-making on the mobile inventory management system in Panda retail company, and the results of the study showed the following:

- a) Providing the necessary information creates integration and correlation between decisions and helps in identifying and analyzing the problem.
- b) The appropriate information helps to implement and follow up the decisions in a correct way, with the presence of information technology that contributes to the speed of information exchange, which leads to better decision-making, as there is one database to access the information.
- c) The availability of the necessary information helps to understand the problem and the attitudes of which, thus enabling it to achieve the desired goals as efficiently as possible, reduce time, effort and expenses, and proposing possible alternatives to face the problems in a timely manner.
- d) And that the senior management of Panda retail company is aware of the importance and benefits of the mobile inventory management system, and that the mobile inventory management system provides reports to preserve the size of the company's financial investments, control inventory, which contributes to achieving competitive

advantage in the markets, facilitating the completion of tasks and reducing the time required to perform it.

- e) The mobile inventory management system helps to provide high-quality information to decision-makers, as it allows for optimal utilization of the company's inventory resources, and to meet the market needs of different materials, by quickly responding to market requirements, and improving relationships with suppliers.
- f) The integrated information systems (ERP) provides information about any period of time in the company, and the information is characterized by a high degree of detail and the system provides clear reports to the decision maker, which helps in predicting, planning, setting goals and drawing appropriate strategies for the company.

The below recommendations are concluded based on the field study and the results of the research:

- a) It is necessary to keep pace with the development in the systems and information technology, through the development of the company's current information systems. we have started to exploit the untapped capabilities in the current system and through providing the company with more advanced equipment and programs to take advantage of these systems and technology in producing high-effective decisions.
- b) Intensify training courses and make them periodically to increase the efficiency of systems users in dealing with computer-based technology and systems, which are experiencing rapid and continuous developments. In addition, to help in producing more effective decisions. In other words, it is necessary to link and coordinate between the humanitarian and technological aspects to ensure that the information systems perform the functions in the best way to achieve the goals for which they were designed.
- c) Developing the company's strategic vision in light of new information technologies, which reflects the impact of the company's performance.
- d) Developing the company's strategic vision based on Data, ERP and information technologies which reflects on improving the company's overall performance.
- e) Bringing experts in the field of integrated information systems (ERP) to benefit from them through proper use and preservation, and to educate the members of the company on their optimal use.
- f) Encourage and push senior management to increase support and provision of special requirements that make sure that the programs are constantly evaluated by employees, which has a high impact on the company's success and achieving its goals.

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