

Enterprise Resource Planning system and its impact on tourism companies' operational performance

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Abstract

Purpose: The purpose of this study was to find out the relationship between applying the Enterprise Resource Planning system and operational performance, and to develop proposed framework to achieve the requirements of the ERP system, in addition, to measure its availability within tourism companies.

Research methodology: The study design is a qualitative study. Data are presented in descriptive form, with in-depth and adaptable analysis. Sample Collection by intentional sampling, the sample chosen depends on the study objectives without regard to the ability of a generalist. The study was based on the distribution of a survey list on a random sample of employees of tourism companies in Egypt.

Results: The structural equation modeling results indicate that all the employed dimensions to gauge the impact of ERP system (represented by the components of the system), have direct influence and an indirect impact on the operational performance and then access to the quality of tourism service provided. These findings help to explain the mixed discoveries in the literature concerning the pattern of the causal relationship between ERPs with operational performance and service quality.

Limitation: The field study data were collected from survey forms from May to July 2019. Three hundred thirty questionnaire forms were distributed, 310 usable replies were received with a response rate of 93.9%.

Contribution: Enterprise Resource Planning (ERP) system has received considerable attention in the last years. Many organizations seek to integrate their IT infrastructures by implementing the Enterprise Resource Planning system (ERP). So implementing ERP system helps tourism companies in raising performance rates through reducing the time to do more business, reducing cost, increasing productivity, which leads to higher performance rates.

Keywords: *Enterprise Resource Planning system, ERP business value, ERP benefits, Operational performance*

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1. Introduction

Enterprise Resource Planning System is amongst the most popular Computer Technology software being implemented in groups globally. Such system provides tactic and operates enhancements to

firms. ERP is a system in which an enterprise-wide information system explicitly designed to organize all the resources, information and activities required to complete enterprise processes such as order processing or payment information and reports. An ERP system strengthens the firm's system that keeps a separate database for various business functions such as Operation Department, Sales Revenue Management, Financial Information, Suppliers, Human Resource Management and Client Relationship Management, Quality, Contracting and Hotel Reservation. Nowadays, ERP system is being adopted by different organizations as part of their business strategies for growth and play a significant role for the small-scale and large-sized industries to run all their main functional and processing operations ([Batada and Rahman, 2012](#)). The Enterprise resource planning (ERP) system is becoming the effective standard for big and mid-sized corporations to operate all their main functional and process operations. In fact, ERP system is comprised of a set of functional components which are integrated across traditional company processes and contains all the information and data about suppliers, clients, workers and the products. The most prevalent components for accounting, sales and marketing, supply chain management, Suppliers, Sales Revenue Management, human resources, and Operation Department ([Peslak, 2006](#)).

The key parts of an ERP system are integrated modules that allow companies process across the business operate functional areas; one huge real-time database that allows for a single entry and repository for information across business functions; and seamless business transactions across business functions ([Miller, 2003](#)). Further, [Okrent and Vokurka \(2004\)](#) note six basic processes that are simplified in ERP system: quote to cash, buy to pay, plan to execute, operations, product's life cycle and financial management. As per [McAdam and Galloway \(2005\)](#) ERP system allows standardizing business processes, ensuring reliability of data, and eliminating the quantity, sophisticated, and cost near old autonomous heritage systems. ERP system was first implemented in the 1980s and since then, some successful implementation and use of an ERP system have been reported ([Sanchez and Bernal, 2007](#)).

1.1. ERP Benefits in tourism industry

There are many features of execution an ERP system such as, simplify various processes and work processes, easily shared data across different departments within the organization, increasing efficiency and productivity levels, better monitoring and predicting, lower expenses and improving customer service ([Batada and Rahman, 2012](#)).

1.1.1. Organisation potential advantages and utilizes of Enterprise Resource Planning (ERP)

The following benefits for the realization of ERP, in accordance with the [Ghalem \(2016\)](#) are as follows

- Integration of only one source of data mutual data definition.
- A real-time system.
- Enhanced productivity.
- Decreased operating costs.
- Increased internal communication.
- The basis for future improvement.

1.1.2. External benefits

- Enhanced customer service and order processing.
- Better communication with suppliers and customers.
- Improved competitive position.
- Expanded revenue and earnings.

1.2. Operational Performance

- Performance is about implementing and managing well the elements of the causal model which leads to the appropriate time achievement of stated goals within restrictions are specific to the company and the situation.
- Effectiveness and efficiency of purposeful action

- Performance is a complicated interrelationship between seven performance standards: effectiveness, efficiency, quality, productivity, quality of work life, creativity, and value/budget-ability ([Gale et al., 2016](#)).

1.3 Role of ERP system on company performance in the tourism industry

Procedure improvements and services performance are vital to the success of any enterprises in today's market. It is important for any firms to duly identify the procedures which need an improvement program ([Majumdar, 2008](#)). Recently, service providers have invested tremendous capital in implementing Enterprise Resource Planning System to increase cost-effectiveness, performance and service quality and provide the enterprise-wide approach to provide many benefits such as reduced operating costs, improved customer satisfaction, enhanced business operations and improved tourism processes. An ERP system allows the organization to incorporate all the company's core business processes in order to improve efficiency, maintain a highly competitive stance, and play a significant role in the operational performance in the tourism industry. [Beldona et al., \(2001\)](#) present a set of proposals concerning the impact of real time information streams allowed by an ERP system in a hotel. ERP software system has arisen to automate routine processes and provide administrators with a more detailed and timely view of their operations, [Law and Ngai \(2007\)](#) find that user satisfaction and business process development positively impacts the business performance of travel and tourism industry, The organizational context is influencing the actual information quality ([Abugabah and sanzogn, 2010](#)), while the user satisfaction will be influenced by the quality of the information that the ERP system produces ([DecLone and McLean, 2003](#)). The quality of information will be evaluated in terms of accuracy, timeliness, completeness, relationship and consistency, using an ERP system, order cycle times will be reduced, leading to improved efficiency, customer response times and delivery speeds in the tourism and hospitality industry ([Cotteleer and Bendoly, 2006](#); [McAfee, 2009](#)) India is the largest online travel agency in India, such as Makemytrip.com, Yatra.com and Cleartrip.com. It aimed at offering a variety of high quality products and services, with state-of-the-art technology and committed customer support, airline services and products like air tickets, personalized tour packages, hotels, train tickets, bus tickets, autosshopping and smoothing access to travel insurance, introduction of ERP system and other technologically enhanced platforms, However, we needed flexibility in our operations. That is why we opted for an ERP solution for Microsoft Dynamics. With ease of customization, and simplicity of usage, employee productivity has increased by 15% in post-sales and fulfillment ([Magow, 2019](#)). Such online travel agencies incorporate the various aspects of their rapidly growing business operations, streamline business processes and incorporate headquarters, middle office and back office with ERP system. An integrated approach allows for strong financial management and decreased losses due to inadequate arbitration, duplication of research and potential delays. ([Singh and Singh, 2013](#)).

2. Literature review hypotheses development

Enterprise Resource Planning system is being implemented through the different industries around the world both in manufacturing and service territories. Newly, service groups have been investing significant resources in the application of Enterprise Resource Planning (ERP) system to improve the efficiency, quality of service business activities and cost efficiency of the different service industries. Tourism industry is dependent upon an integrated information network that plays a key role in improving the business success relationship. The tourism industry has developed and renovated considerably. An important characteristic of an ERP is that it works from a single broad-based database for the whole organization, with a real-time connection between the various functions and complete integration of front, mid and back headquarters in the Tourism Industry ([Singh and Singh, 2013](#)).

2.1 ERP system concept and need and business value model

There are different definitions of ERP. An ERP system is an effort to combine all the functions around a company to an individual computerized system that can provide all those functions" the specific requirements. "Assimilation" is the operative word for ERP implementation. It may also integrate key customers and suppliers as part of the enterprise's operation. It provides an integrated database and custom-designed report systems. It is adopting a set of "best practices" for carrying out

all business processes. A large number of companies forcing them to change their enterprise processes, structures and even business strategies with implementation of ERP systems (Nawaz & Channakeshavalu, 2013). IT business value is the impact of IT investments on organizational abilities through the different levels of the organization (Schryen, 2013) and hence organizational performance (Melville et al., 2004). Thus, if it is applied, integrated, used, absorbed and incorporated correctly (Stratman and Roth 2002), it can be a source of a competitive edge (Romero et al. 2010). Therefore, the ERP business value can be defined as the impact of ERP on organizational abilities that affects the organization's financial and non- financial performance (Badewi & Zeng, 2017).

ERP Model:

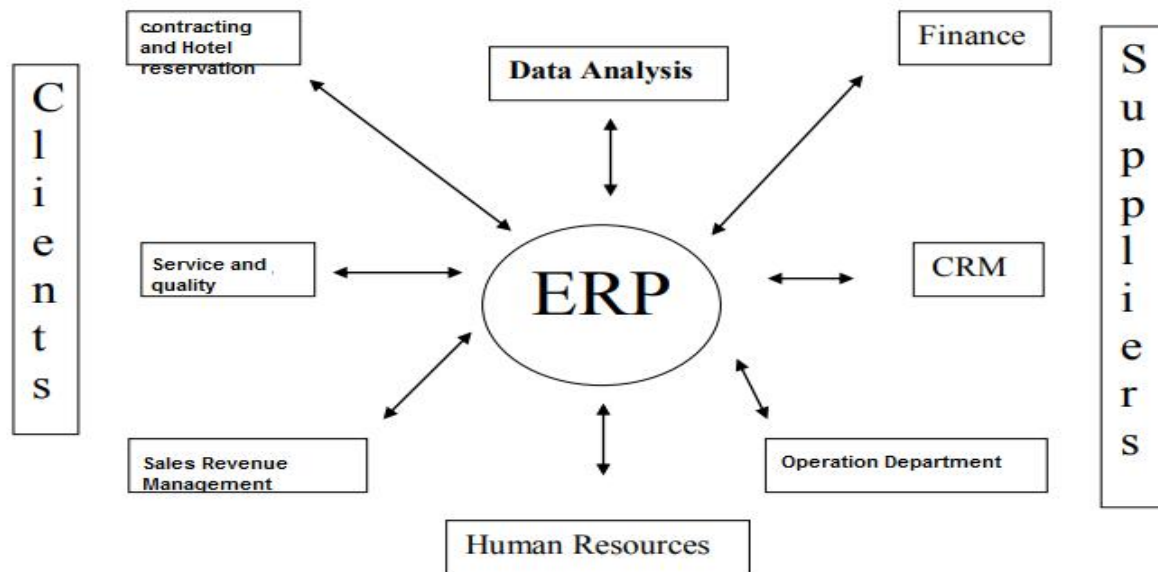


Figure 1: ERP Model

Source: (Holloway, 2010).

Therefore, **H1:** There are significant differences between the application of Enterprise Resource Planning system and the level of the operational performance of the tourism companies working relationship and characterize

3. Research methodology

The research aims to measure the impact of the application of the ERP system on the operational performance of employees, in addition, the quality of workflow of tourism companies. The study was based on the distribution of a survey list on a random sample of employees of tourism companies in Egypt.

3.1 Study sample and data collection

Three hundred thirty questionnaire forms were distributed randomly to employees in travel agencies, who apply to the ERP system. Three hundred twenty-one forms were collected, wherever only 310 were valid and analyzed. Besides, interviews have been done with a number of travel agents in order to understand the effect of the ERP system, the performance of employees and the quality of service, and then analyze the data and interpret the results.

3.2 Statistical methods used

There are many statistical methods used represented in statistical packages SPSS.23, statistical program AMOS.23. in addition to a group of statistical methods represented in: alpha Cronbach's method of testing the reliability and internal validity for responses of the research sample, descriptive statistical methods to indicate the order of the respondents' answers in terms of the statistical value of t,

repeated distribution of general answers to the questionnaire, empirical factor analysis of structural validity test for a scale, method of path analysis using the AMOS statistical program and structural modeling equation to test the direct and indirect impact of each model of the putative models.

3.3 Variables of the study

The study includes six variables, which are: operational performance of tourism companies, human resources and ERP facilities, profitability, productivity and corporate vision reports, quality of services provided by tourism companies, quality of information, quality of the system.

4. Results and discussion

This section aims to deal with descriptive and inferential statistical analysis of the respondents' answers in order to verify the validity of the assumptions and analyze the results of the study towards the structure of the proposed framework of the research and study the extent of its significance, This section deals with the following :

First: Demographic analysis of the respondents' answers.

Demographic analysis of the respondents' answers: The researchers use the frequency distribution of the respondents' demographic analysis as follows:

The following table shows the frequency distribution of the respondents' responses according to the sex variables of the respondents:

Table 1: Demographic analysis of the respondents

Population analysis	Frequency	Percent (%)
Gender		
Males	277	89.4
Females	31	10.0
Age		
Greater than 35-45	140	45.2
26-35	145	46.8
Less than 26	16	5.2
Greater than 45	9	2.9
Years of experience		
More than 10-15 years	144	46.5
5-10 years	120	38.7
Less than 5 years	23	7.4
More than 20 years	23	7.4
Educational Level		
Postgraduate	33	4.2
University	291	93.9
Current job position variable		
Deputy Manager	103	33.2

Employee	81	26.1
Manager	61	19.7
Assistant Manager	65	21.0
Number of years working with ERP system		
More than 6 years	27	8.7
More than 1-3 years	186	60.0
More than 3-6 years	78	25.2
1 years and less	19	6.1
ERP modifications		
No	222	71.6
Yes	88	28.4

The table above shows that the percentage of males in the research sample is 89.9%, while the percentage of females is 10.1%. The age of the respondents in the age group between 26 to 35 years is 46.8% of the sample, followed by the respondents with the age group from 35 to 45 years which is 45.2% of the total sample and that the least age group is greater than 45 Less than 26 years represent 5.2% of the sample. The experience of the respondents is concentrated in the periods ranging from 10 to 15 years by 46.5%, followed by the owners of years of experience from five to ten years by 38.7%, and that the experiences of less than five years and more than 20 years are equal at 7.4% of the sample search. The educational level, where the answers are concentrated in the university-level category by 95.7%, followed by the educational group that received postgraduate studies with 4.3%, and that there are six respondents whose educational level is unknown, indicating that all the largest percentage of Employees have completed university education. The position of the deputy director in the tourism company at 33.2%, followed by ordinary employees at 26.1%, the managers of the tour companies surveyed at 19.7%, while the assistant manager of the research sample at 21%. The number of years of work with ERP system, where the largest categories used this system from one to three years, followed by a group of companies used it from 3 to 6 years, while the companies that used the system for one year is 6.1% of the research sample.

Table 2: The impact of using the ERP system on the performance of employee of tourism companies

Variable (N=407)	Mean	Standard deviation	EFA factor loading
The Quality of Information axis			
The information I get from the ERP system is more clearly understood than manual reporting and is concise and accurate	1.72903	68.383	2.358
ERP errors rates compared to other manual systems are much lower	1.70323	64.548	2.317
ERP information covers various	1.58065	56.308	2.36

topics in the work

The ERP gives its time information	1.35806	49.109	2.71
The information in the ERP system is important	1.293	49.932	2.58
Portability Use information in the ERP system appropriately and effectively	1.196	52.91	2.39
The company's resource management system provides usable information and analysis in multiple graphical formats	1.174	54.421	2.34
The company's ERP system provides information to all users from all departments at all levels	1.161	55.502	2.322
Electronic planning systems helps keep detailed records of trips and various reports showing the history of these data	1.148	56.78	2.28

Internal Prpcess

The ERP system is easily linked to the information systems of other departments operating in the company	1.754	71.707	2.519
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Variable (N=407)	Mean	Standard deviation	EFA factor loading
The ERP system has enabled employees to perform better in all departments	1.687	63.021	2.37
The ERP system has contributed to increasing the effectiveness of the participation of workers in decision-making through the general vision of tourism operations	1.435	49.00	2.76
Electronic corporate systems help the organization to clearly recognize the roles and responsibilities of its employees	1.264	50.39	2.52
The company is characterized by simple business processes through ERP system	1.172	50.484	2.33
The company is clearly characterized by the system of control of various businesses	1.148	54.092	2.29
There is a link between sales and other departments in the company			
Excursions and tour packages are always priced	1.203	51.54	2.39
There is an application or pages through which the	1.193	53.10	2.37

supplier uses to enter invoices and review the sales of each vendor			
The existence of a system that helps the company sometimes to identify the level of satisfaction of employees	1.148	51.748	2.29
Through these systems the company can identify the quality of its services provided to its customers through various comments) Guest comments(1.187	50.397	2.37
The ERP system has accelerated the processing and resolution of complaints and suggestions of employees and the development of proposals to maximize customer satisfaction	1.183	50.560	2.35

Variable (N=407)	Mean	Standard deviation	EFA factor loading
profitability, productivity and institutional vision			
The format of reports and documents issued by the ERP system is satisfactory to the users of the system	1.122	51.597	2.1
I prefer to work on the ERP system more than any other system	1.064	33.85	2.12
The ERP system has helped to increase our control to reduce labor costs and increase productivity	1.113	48.057	2.31
I am excited about doing my business since the implementation of the ERP system	.919	27.00	1.75
The ERP has achieved the desired goal for which it was found	1.106	44.40	2.1
Provides a system of accounts that reflects the real reality of the corporation	1.158	51.070	2.32
Resource and production costs are tracked	1.112	56.58	2.12
Bills issued are followed up			
Profitability analysis reports are prepared	1.164	52.79	2.32
Losses are reported in trips sales	1.135	52.79	2.3
Reports are prepared to compare the sale prices and the cost of trips and bookings and compare them with the competing market prices	1.177	50.90	2.35

A report is prepared showing the percentage of each representative contribution to the company's profits agent	1.116	50.862	2.31
Analysis reports are prepared for the financial statements	1.145	53.15	2.28

Variable (N=407)	Mean	Standard deviation	EFA factor loading	
A report is prepared to assess the performance of the organization		1.148	56.78	2.28
Prepare a detailed report of the factors affecting the performance of the institution		1.125	55.028	2.1
the human resources axis and the facilities provided				
Personal data of employees is provided and updated continuously		1.138	49.33	2.1
There is an efficient and effective recruitment department	1.083	42.66	2.16	
The attendance and attendance dates are followed up	1.067	34.16	2.12	
The right person is assigned in the right place	1.2	16.78	1.3	
Payroll is prepared at a specific time	1.11	39.15	2.1	
Statements are prepared for overtime	1.077	38.21	2.15	
A system is available to track the current position of staff leave balances	1.109	39.32	2.1	
When hiring a new employee, the system helps to add its information to the database	1.129	44.08	2.1	
Provides updated training data	1.132	47.876	2.1	

It deals with the achievement of the compatibility of the measurement model through a set of indicators in the direction of good conformity between the independent variables and the components of the ERP system in tourism companies and the extent to provide these components to the information needs of the company as intermediate variables contribute to achieve good operational performance and then access to the quality of tourism services provided through the path of that

model shown in the figure 2:

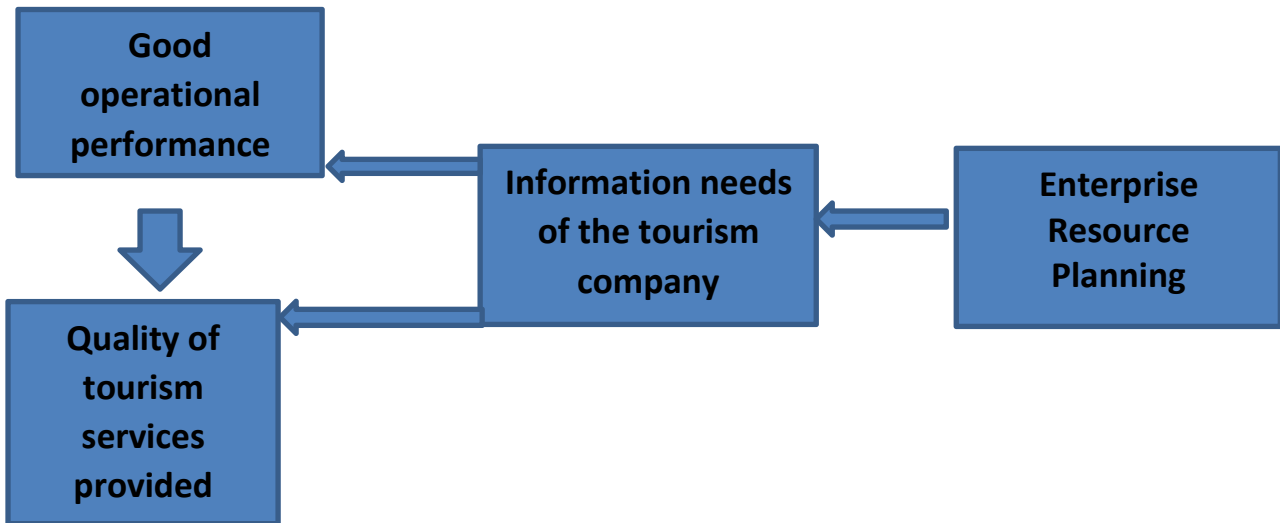
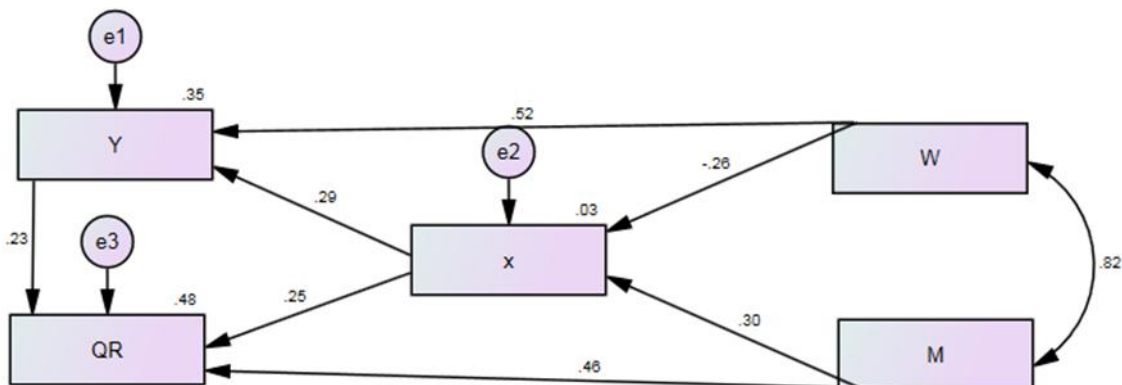


Figure 2: General model of the study

Using the AMOS program, a statistical model is drawn to test a key hypothesis, which includes considering the impact of the ERP system in achieving good operational performance and thus ensuring the quality of tourism services provided.



Fig

ure 3. Track map of the general model of the study

It is clear from the previous figure that the general model of the study contains five dimensions, which include two dimensions that reflect the elements of the ERP system in tourism companies. This relates to the human resources, services and facilities provided through that system and is symbolized in the previous figure by the symbol (W).

The above figure also contains other dimensions representing intermediate variables, which is the dimension of the information needs of the tourism company and is symbolized by the symbol (X) and the dimension of operational performance as another intermediate variable symbolized by the symbol (Y) and this variable is of great importance in achieving the aspirations of the tourism company in providing distinctive services to tourists which represent the dependent variable in the previous figure and symbolized by the code (QR) and by reading the outputs of the statistical program (AMOS.23). It summarized the data of good conformity (Goodness of Fit Path) in the following table (3).

Fit Index Results Table 3:

Goodness of Fit Path	Calculated Value	Indicator
Smallest possible (non-function)	85.788	Chi- Square
Cmin/df <5	2	Degrees of freedom df
	0.00	Significance level
<5)X ² /df(42.89	Normed Chi- Square)X ² /df(
Absolute Fit Indexes		
GFI>0.90	0.486	GFI Goodness of Fit Index
AGFI>0>0.90	0.230	Adjust goodness of Fit Index AGFI
0.05<Rmse<0.08	0.368	Rmesa Index
Incremental Fit Indexes		
TLI>0>90	0.462	TLI Tucker Lewis Index
CFI>0.95	0.892	CFI Comparative Fit Index
NFI>0.90	0.000	NFI Normed Fit Index

It is clear from the previous table that the indicators of good conformity (Goodness of Fit) of the five relations model in the model of activation of the use of the ERP system in tourism companies that he has not got preferential values in all the previous indicators as he collects a significant level of value (Chi-square) much below the 0.05 level because the value of Chi-Square is greater than 5, which indicates the quality of the proposed general model by introducing intermediate effects related to the conditions of producing comprehensive information and integrated reports that serve the operational performance and quality of services in tourism companies.

The fact that the proposed model does not match the reality of tourism companies confirms that the Tucker-Lewis index is 0.46, which indicates the non-conformity as it should exceed 90%, and that the Ramsey index is one of the most important indicators in the structural model, which is worth 0.368, although good because it is larger. The value of 0.05, however, is not good because it is less than the statistical value 0.08. It also indicates the mismatch of the proposed model of using the ERP system for the reality of tourism companies through the responses of the study sample. It is not feasible with this model to use the normed chi-square because it is greater than the value (5) to indicate that the conformity of the model in the previous form of reality in the tourism companies is getting worse as the level of morale is very close to zero indicating the non-conformity of the model with the reality tested.

The following table 4) indicates that the CR value (normality distribution test) for all aspects of the proposed general model is greater than the value (1.96). This indicates that the paragraphs or indicators in the proposed model are already able to measure the relationships between variables at which values of the sincerity or saturation coefficients of the paragraphs are acceptable values of the respondents' responses as the model simulates the minds of the respondents and the comprehensive knowledge of its applications. However, it is decided to reject this proposed framework of ERP applications in tourism companies in order to achieve the quality of operational performance as a guide to achieve the quality of services provided because the indicators of the application path of the model do not match the reality of tourism companies in Egypt.

Therefore, the researchers had to analyze the details of the application process of the ERP system from the reports extracted from it to the desired situation in the good operational performance or the quality of the tourism services provided. This is shown in details in the estimation of the efficiency of the model or analysis of its path and shown in the following table (4).

Estimates of model efficiency through path analysis Table 4:

Dependent variables	Path	Independent variables	Estimate	S.E.	C.R.	P	Path Num.
		Enterprise Resource planning	Unregulated estimates	Standard Error	(T) test value	Value Sig. level	
X Quality information	of <---	W Human Resources and ERP Facilities	-.171	.065	-2.630	.009	The first
X Quality information	of <---	M Profitability, productivity and corporate vision reports	.147	.048	3.035	.002	The second
Y Operational performance tourism companies	of <---	X Quality of information	.389	.061	6.354	***	The third
Y Operational performance tourism companies	of <---	W Human Resources and ERP Facilities	.455	.041	11.222	***	The fourth
QR Quality services provided tourism companies	of <---	X Quality of information	.420	.072	5.832	***	fifth
QR Quality services provided tourism companies	of <---	M Profitability, productivity and corporate vision reports	.383	.038	10.090	***	Sixth
QR Quality services provided tourism	of <---	Y Operational performance of tourism companies	.288	.060	4.779	***	Seventh

Dependent variables	Path	Independent variables Enterprise Resource planning	Estimate Unregulated estimates	S.E. Standard Error	C.R. (T) test value	P Value Sig. level	Path Num.
companies							

Measuring the direct and indirect impact of the variables of the proposed model: The researchers use the outputs of the AMOS program in measuring the direct and indirect impact according to the following:

Measuring the direct impact of the variables of the general model: The following table (5) shows the direct impact of the components of the ERP system on the intermediate and dependent variables according to the proposed general model as follows:

Table 5: Direct Impact of ERP In the proposed general model

	M Profitability, productivity and corporate vision reports	W Human Resources and ERP Facilities	X Quality of information	Y Operational performance of tourism companies
X Quality of information	0.147	-0.171	0.000	0.000
Y Operational performance of tourism companies	0.000	0.455	0.389	0.000
QR Quality of services provided by tourism companies	0.383	0.000	0.420	0.288

Level of significance of the direct effect of the variables of the proposed general model:

The following table (6) shows the level of significance of the direct impact of the components of the ERP system on the intermediate and dependent variables according to the proposed general model as follows:

Table 6: Significance Level of Direct Impact System (ERP) in the proposed general model

	M Profitability, productivity and corporate vision reports	W Human Resources and ERP Facilities	X Quality of information	Y Operational performance of tourism companies
X Quality of information	0.056	0.065	0.00	0.00
Y Operational performance of tourism companies	0.00	0.59	0.073	0.00

QR Quality of services provided by tourism companies	0.055	0.000	0.107	0.101
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The previous table (6) shows the direct impact between the variables of the general model of resource planning in tourism companies. The direct effect does not take into account intermediate paths where (W, M) represent independent variables.

The indirect effect of the variables of the proposed general model: The following table (7) shows the indirect effect of the components of the ERP system on the intermediate and dependent variables according to the proposed general model as follows:

Direct Impact of ERP In the proposed general model Table 7:

	M Profitability, productivity and corporate vision reports	W Human Resources and ERP Facilities	X Quality of information	Y Operational performance of tourism companies
X Quality of information	0.000	0.000	0.00	0.00
Y Operational performance of tourism companies	0.057	-0.067	0.000	0.00
QR Quality of services provided by tourism companies	0.078	0.040	0.112	0.00

The previous table (7) shows the magnitude of the indirect impact between the variables of the general model of resource planning in tourism companies, where the intermediate variables are taken into account when measuring the impact in two dependent variables and operational performance (Y) in the path of another dependent variable is the quality of services provided by tourism companies (QR), where (W, M) represents the independent variables and it is clear as follows:

Level of significance of indirect effect of the variables of the proposed general model:

The following table (18) shows the level of indirect effect of the components of the ERP system on the intermediate and dependent variables according to the proposed general model as follows:

Table 8: Significance Level of Direct Impact System (ERP) in the proposed general model

	M Profitability, productivity and corporate vision reports	W Human Resources and ERP Facilities	X Quality of information	Y Operational performance of tourism companies
X Quality of information	0.000	0.000	0.00	0.00
Y Operational performance of tourism companies	0.027	0.030	0.000	0.00

QR Quality of services provided by tourism companies	0.032	0.064	0.047	0.00
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1- Table (7) shows a weak indirect positive effect of 5.7% for one of the independent variables (profitability, productivity and institutional vision - M) in the dependent variable (operational performance - Y) while the other independent variable (human resources and ERP facilities - W) It has an indirect negative effect of 6.7% with the same dependent variable (operational performance) based on the opinion of the respondents. Accordingly, it Improves operational performance as can be seen from Table (6).

2- From Table (7), there is a weak indirect positive effect of 7.8% for one of the independent variables (profitability, productivity and institutional vision - M) in the dependent variable (tourism services quality - QR) and the other independent variable (human resources and ERP facilities). W) The effect is indirect positive 4% with the same dependent variable (quality of tourism services) based on the opinion of respondents and that the level of significance of these effects (0.032, 0.064) less than the level of 0.05 for the independent variable (profitability and productivity reports).

The assumption was accepted by which it determines that there is no statistical significance of the elements of the ERP system in terms of profitability and productivity reports in improving the quality of tourism services, whereas for the other independent variable (human resources and facilities) its level of significance is 0.64 which is greater than 0.05 It is decided to accept the alternative hypothesis that there is a statistical significance of the elements of the ERP system with regard to human resources and facilities in improving the quality of tourism services as shown in Table (8).

5. Conclusion

The importance and impact of ERP system in travel agencies, is to gain a competitive and better performance in various functions of the organization. A good ERP system also makes an organization seamless by removing all the communication barriers. Thus, the overall purpose of ERP system is to provide profitability and related information. This information help managers and staff to understand business performance and to plan their future direction. Besides, it allows companies to correct negative situations quickly, and to minimize financial losses. ERP System acts as a solution to run the business globally and profitably.

In tourism industry ERP system makes a complete integration of front, mid and back offices. This integrated link enables a tight financial control and reduces losses, because of inefficient reconciliation, duplication of work, and possible delays. ERP system offers a set of ready-made programs that are integrated together to form a single database for all the company's information, and facilitate the process of information sharing. They also enable the agency to manage its resources efficiently and effectively and achieve competitive advantages. Enterprise Resource Planning (ERP) is the consolidation of the enterprise database and the linking of various departments and units to a unified system as shown in figure number (4).

So, after showing all these benefits to the system, the effect of the system on performance in tourism companies is confirmed.

Contributions

Implementation of ERP system contributes to improving and developing employees' performance in tourism companies through reducing and saving more time lead to achieving more business and tasks in the work cycle over the day, which leads to increased productivity. ERP contributes in decreasing costs too as a result of depends on using IT instead of paper at work. It is participating in improving the quality of information. The information obtained from the ERP system is more clearly understood than manual reporting. It is concise and accurate. ERP error rates compared to other manual systems are much lower. ERP information covers various topics at work. In addition, internal processes through easily linked to the information systems of other departments operating in the company. The

ERP system has enabled employees to perform better in all departments. The ERP system has contributed to increasing the effectiveness of the participation of workers in decision-making through the general vision of tourism operations, and participating in the development of Human resources in the company too.

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Appendix

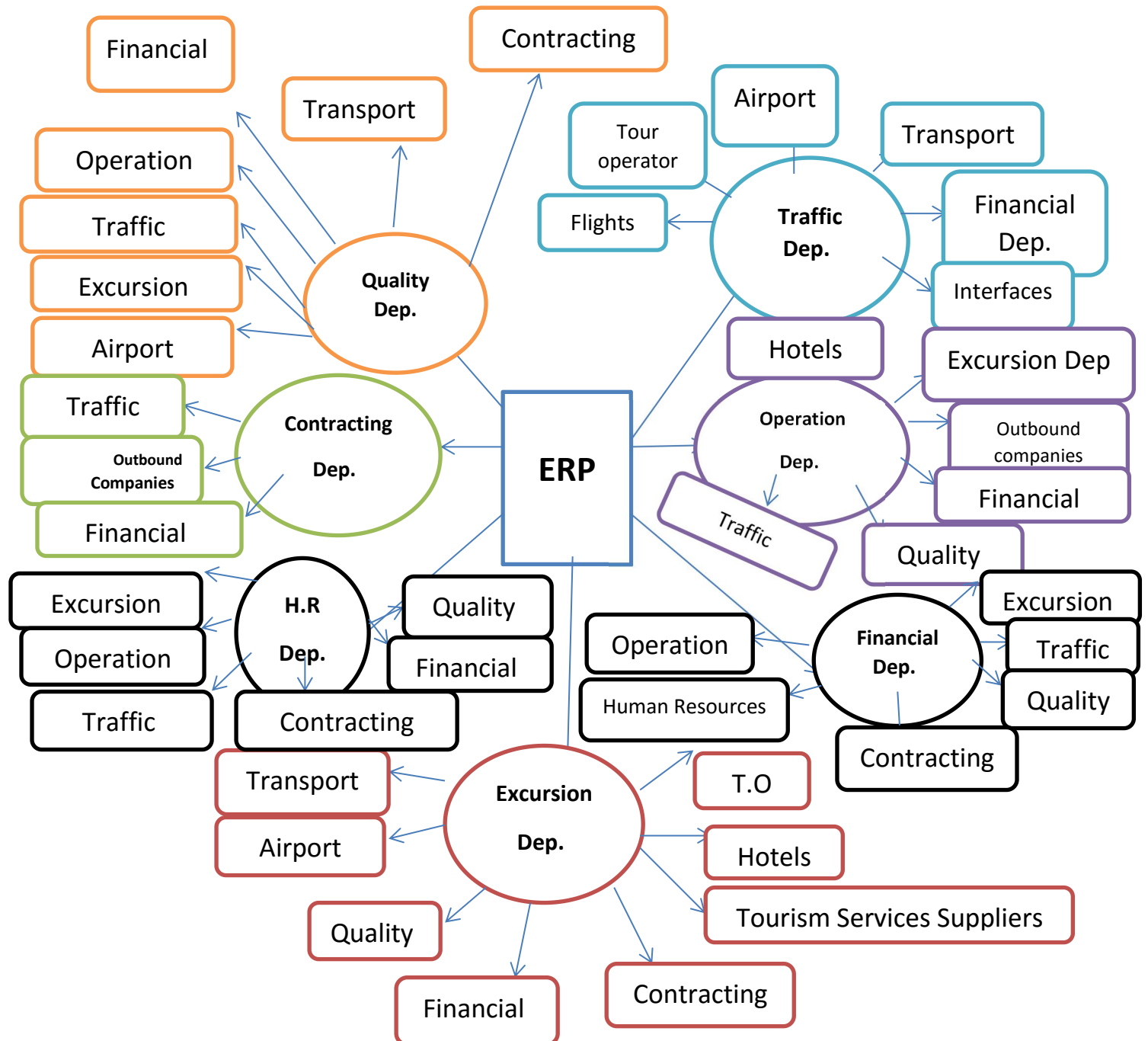


Figure 4: Advantages of using ERP systems in travel agencies