



Impact of ERP on Operational Performance of ABC Hotel, A case in Sri Lanka

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ABSTRACT

The main purpose of this research is to find out whether there is and impact of effectiveness of ERP implementation on the ABC Hotel with five research objectives and five research questions. The objectives of this research study are to identify the impact of ERP system on financial performance, impact of ERP system on organizational learnings, impact of ERP system on internal processes and impact of ERP system on customer related performances in ABC Hotel. Both primary data and secondary data have used for this research study and self-administered questionnaire used for gathering primary data from the respondents. Previous studies have used as a base for the development of conceptual framework and research hypotheses of the research study. Data collected through 35 employees who are working in the Finance department and information technology department in the ABC Hotel. Collected data from the questionnaire was analyzed through SPSS 20 version statistical package. Majority of respondents are male and majority of them are degree holders and diploma holders. According to the descriptive analysis, ERP system, financial performances and customer related performances are within the strong agree level to agree level while organizational learning and internal processes are within the agree and neutral level. Reliability test shows that all variables are reliable and Correlation coefficient analysis shows that there is a relationship between independent variable and each and every dependent variable of the study. All developed hypotheses have accepted while rejecting all null hypotheses. It has found that there is an impact of ERP system on Organizational performances of ABC Hotel. Key Words –ERP System, Financial Performances, Organizational Learnings, Internal Processes, Customer Related Performances

Introduction

Hospitality management is considered as an important aspect in tourism industry. Well managed and arranged hospitality service in any country makes influence the feeling of revisit to that country in tourists' mind especially in foreign tourists. When comparing with other developed country services and facilities, developing country services and facilities are at low levels but elevating service quality the gap can be compensated

(Andrew, 2017). As all the other industries, hospitality and tourism industry also updated and upgraded with the technology advancement and entities who fails to go with updated technology fails in the industry making difficulties to survive in the market. Hence challenges are not met successfully by such entities that ignored the education and updating with current trends which act as barriers for their success. The modifications offered by the impulse of technologies force the change in the way business is conducted in the hospitality industry (Dimitrios, 2011). Enterprise Resource Planning systems are there to minimize their challenges by

giving system into their own regional languages. Application of ERP systems into their regular works makes those easy and convenient while enhancing the efficiency by reducing operational time. Moreover, it enables hoteliers to achieve customer satisfaction and good quality management.

Adaptation of ERP systems in Hotel industry provides many benefits to the hotel entities. Even though the hotel industry has affected by crisis occurred currently in the country, the hospitality in Sri Lankan hotels are always appreciated by guests from different countries. Hence the industry was developing its capacities all over the country and the tourism industry has recorded as the fourth major foreign income earning source in the country. The government concern on the industry also gained on the topic hence Sri Lanka is delightful tourist destination with quality and appreciated hospitality service by the industry stakeholders. The education on the industry has subjected to enhance through higher education resource allocations hence the future of the industry is positive and also well-established hotels itself know the importance of updating. Therefore, updating with technologies has become major concern in the industry.

This study was developed in order to identify the impact of ERP system which is effective on the operation performance in the hotel industry.

Research Objectives

In order to answer identified questions above research has identified following research objectives which the research will be directed towards the achieving objectives. ✓ To find out whether there is an impact of effectiveness of ERP implementation on the ABC Hotel

✓ To examine the impact of ERP system on financial performance in ABC Hotel ✓ To examine the impact of ERP system on organizational learning in ABC Hotel ✓ To examine the impact of ERP system on internal processes in ABC Hotel ✓ To examine the impact of ERP system on Customer related performance in ABC Hotel

Significance of the Study

Managers would be able to evaluate whether it is necessary to invest in an enterprise resource planning to enhance the Hotel's financial performance. The study would also be useful to the government in evaluating the performance of commercial state corporations after adoption of an enterprise resource planning system. The study would be useful to scholars evaluating the performance of state corporations and in particular commercial state corporations upon adoption of enterprise resource planning. The study adds to the body of knowledge in the area of information technology and enterprise resource plans and its results contributes to improved decision-making and setting expectations by Hotels prior to purchasing an enterprise resource plan system. Future researchers may use this research to further develop models that illustrate the relationship between an enterprise resource planning and financial performance of a Hotel.

The use of enterprise resource planning (ERP) has become increasingly more common in lot of today's businesses (Ahmed & Adman, 2011). The advent of an information technology led era and increased competition has forced companies to react to the new changes in information technology in order to remain competitive. Because of this trend, enterprise resource planning has been adopted by many Hotels in an attempt to improve their business performance. The concept of business performance can be operationalized as financial gains by the organization, operational improvements for the organization or intangible gains for the organization. Enterprise resource planning (ERP) offers distinct advantages in this new business environment as it lower operating costs, reduce cycle times and arguably increase customer satisfaction (Liu, Miao & Li, 2007). State Corporations are deeply implicated in most fiscal problems of African governments because of their inefficiency, losses, budgetary burdens, and provision of poor products and services. Occasionally, they achieve some non-commercial objectives, which are used to justify their poor economic performance (Low, 1999). In Kenya, State Corporations consume large portions of scarce national resources and do not always use them effectively or efficiently. With over 160 State Corporations, more

than 50% receive direct exchequer funding for either all their expenditure or are subsidized to a very large extent with funding that averages 30% of Development and Recurrent national budget (State Corporations

Advisory Committee [SCAC], 2009). The same had been voiced by the Taskforce on Parastatal Reforms in their October 2013 report.

The implementation of ERP in the world is developing rapidly as people have realized the corporate benefits that ERP can bring. As mentioned in the previous paragraphs, although people or authorized individuals in the hotel industry are aware of the significant and potential benefits of deploying ERP systems in their industry, they are hesitant because it also has the negative effect of not being implemented properly. Therefore, the study highlights the term Effective ERP, where authorized people are required to implement a correct and effective system with the help of professionals.

The study will be relevant in some areas. Specialists in the hotel industry can better understand how the system can improve performance to meet organizational goals. Apart from the research results, it will be useful for ABC hotel, which has not yet implemented ERP systems. They will be encouraged to adopt the system. This study will also benefit those scholars who are looking for literature on this topic in the Sri Lankan context. Since this study will also test ERP systems, the researcher will also be able to identify potential problems with the systems.

As the government has also focused on improving the capacity of the hospitality and tourism industry, efficient and effective service providers in this sector will benefit and have a competitive advantage over competitors.

Data analysis, findings and discussions is the fifth chapter of this research study and the main purpose of this chapter is to analyze the collected data through a self-administered questionnaire by using SPSS 20 version statistical package. This chapter comprises of few main parts which are demographic analysis, descriptive analysis, reliability test, correlation analysis and regression analysis and it is expecting to test hypotheses of the research study and achieve research objectives and find answers for the research questions.

5.2. Data Analysis

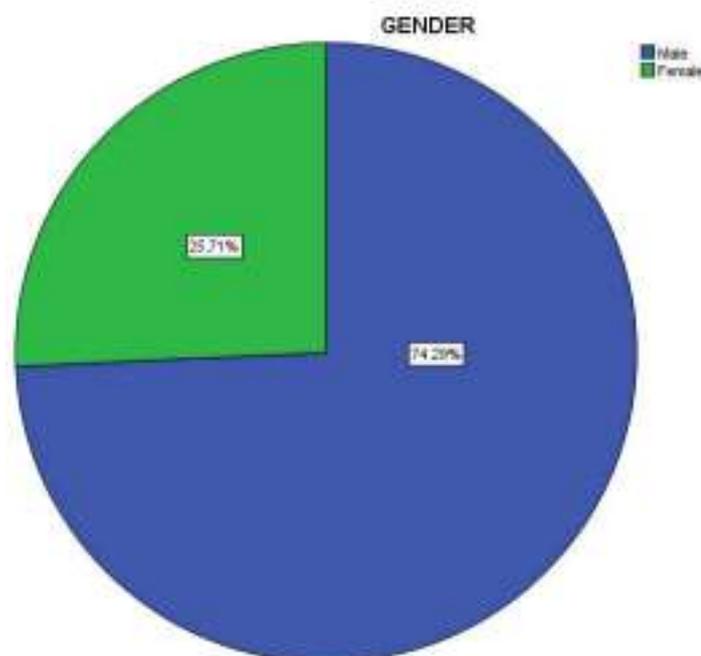
Data analysis represents an important part in the whole research study and it provides the base for the findings of the research.

5.3. Demographic Analysis

Demographic analysis is a method of understanding and identifying demographic data about the sample of the research study and the questionnaire has few demographic related questions. This part will analyze demographic data of the sample of the research study.

Gender

Figure 2 Gender Distribution of the Study

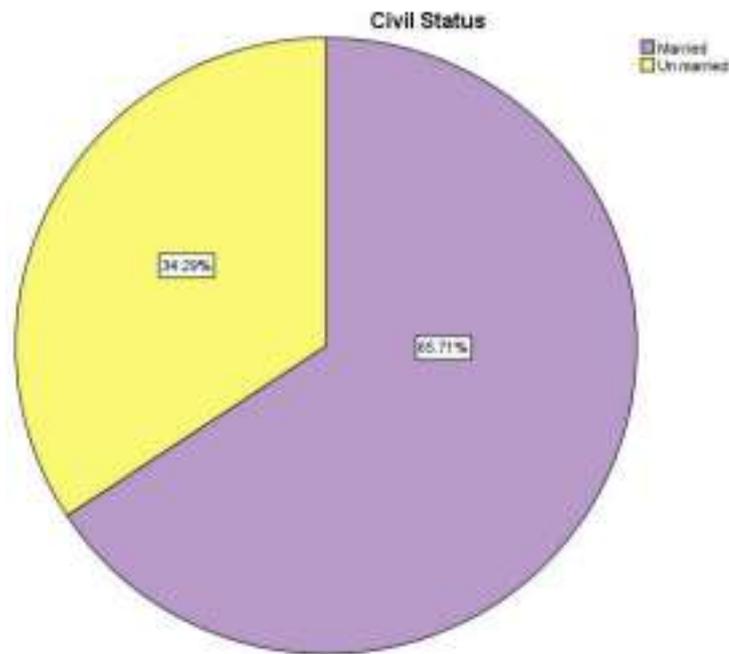


Source: Author

According to the figure number two, majority of respondents of the study are male and as a percentage it is approximately 74% Female respondents of the sample are approximately 25%. Male respondents of the sample third from fourth (3/4) while female employees are only one fourth (1/4). Therefore, according to that it can conclude majority of employees of the hotel are males. According to the research on, "Gender differences on job satisfaction of the five-star hotel employees" by Derya Kara, Muzaffer Uysal and Vincent P. Magnini, majority of hotel employees are male and female employees are less than the number of male employees (Kara, et al., 2012).

Civil Status

Figure 3 Civil Status Distribution of the Study



Source: Author

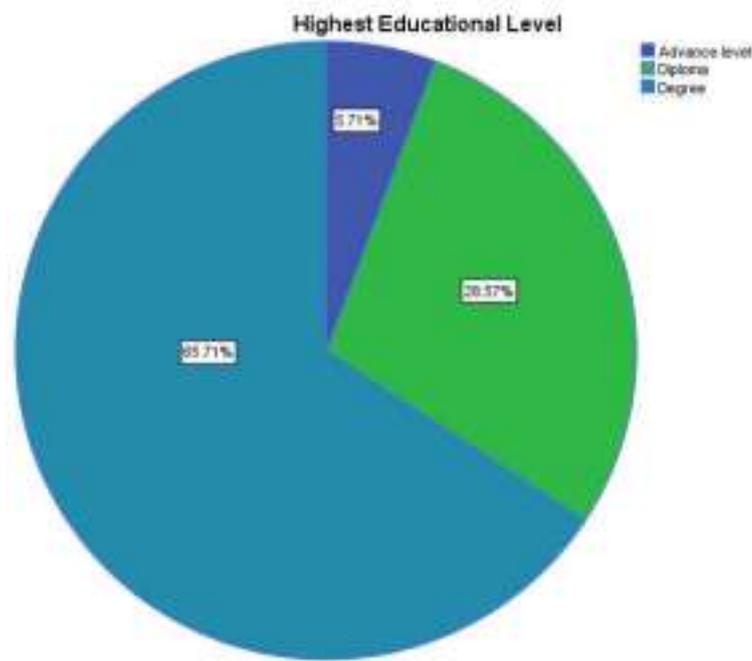
According to the figure number three, majority of respondents are married and unmarried or single employees are less than the married employees. Married employees represent approximately 65% of sample while single employees represent the sample by approximately 35%.

Education Level

According to the figure number four, majority of employees who have participated to the data collection are degree holders and it is 65% from the sample. Approximately 28% of respondents have diploma while only 5% of respondents have only advanced level qualification. This study has collected data from only finance department and the

Information Technology department and the employees of that two departments would have educated employees and it may be the reason for this distribution.

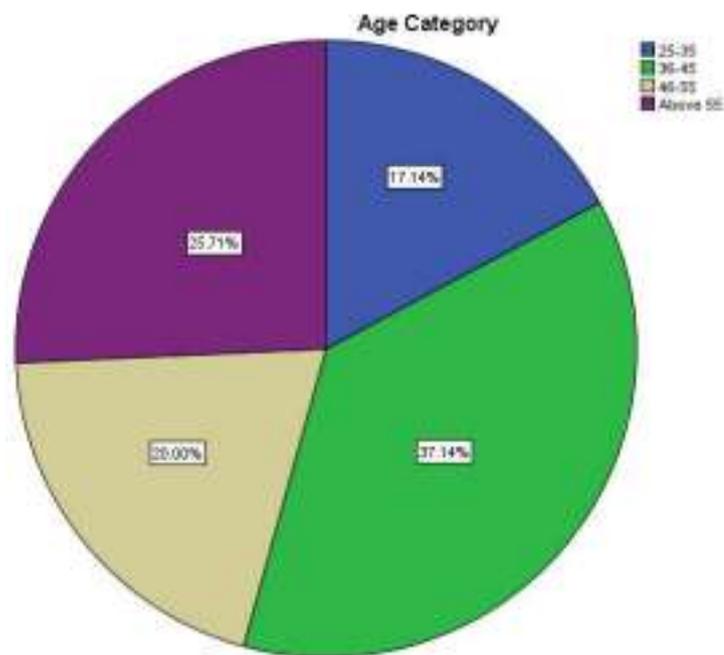
Figure 4 Education Level Distribution of the Study



Source: Author

Age

Figure 5 Age Distribution of the Study



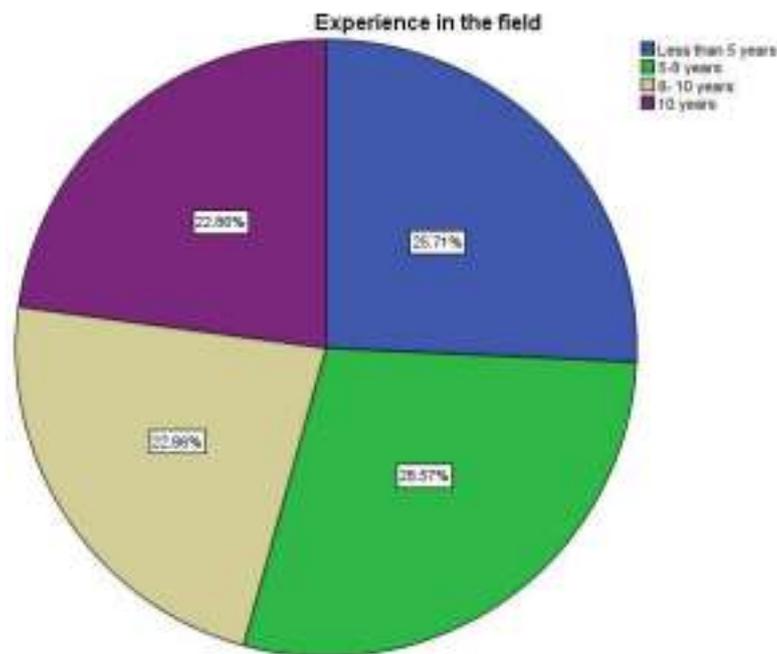
Source: Author

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Questionnaire has given four answers for this questionnaire and the sample has represented all the age categories. The sample comprises of approximately 37% of respondents who are between the category of 36 years to 45 years. 25% of respondents are belonging to the more than 55 years' age category and it may be due to the sample comprises of staff of offices of the hotel only. Approximately 20% of sample are the persons who are belonging to 46 years to 55 years while 17% of employees are the youngest employee category in the Finance and IT departments of the hotel and it is 25 years to 35 years.

Experience

Figure 6 Experience Distribution of the study



Source: Author

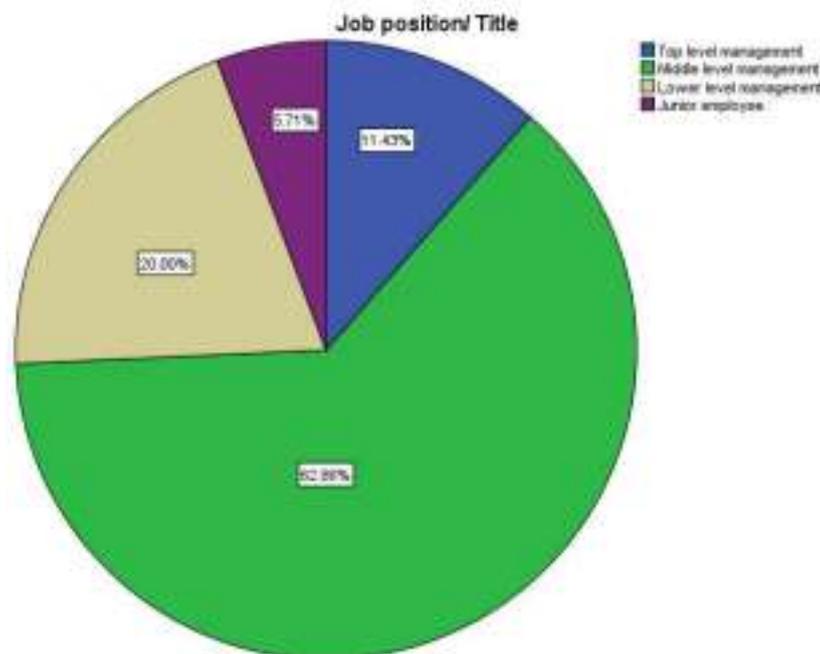
According to the above figure number six, 28% employees have 5 to 8-year experience in the industry, 25% of employees have less than 5 years' experience in the industry. The employees who are belonging to the categories of 5 to 10 years and more than 10 years' category has 22.8% respondents from the sample for each category.

Job Position

According to the figure number seven, majority of respondents who have participated to the study are middle management level employees. Approximately 20% of sample represent lower level of management and 11% of sample has lower level management employees. Junior employees of two departments represent by 5% of the sample.

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Figure 7 Job Position Distribution of the study



Source: Author

Reliability Test

Reliability test uses to measure and get an idea about the internal consistency of the study and it measures the degree of consistence and stable of measuring that what is intend to measure by the research study. Cronbach's alpha reliability test uses to assess the reliability of the data and it analyze and measure reliability of each and every variable of the study. Every study need to assess the reliability through Cronbach's alpha reliability test and it is important for every research study. Reliability of questionnaire can measure through reliability test and reliable data can get through reliable questionnaire.

- ❖ According to the reliability test of the research study, Cronbach's alpha reliability test shows that the Cronbach's alpha value is 0.855 and it denotes that the all variables in the research study are reliable.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.855	.858	5

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Descriptive Analysis

Descriptive analysis of the study can do by using mean values and other statistics, Table 4 Descriptive analysis

Variable	N	Minimum	Maximum	Mean	Standard Deviation
ERP System	35	1.4	2.8	1.9743	0.30711
Financial Performances	35	1	3	1.8514	0.38606
Organizational Learnings	35	1.6	3	2.1257	0.29936
Internal Processes	35	1.4	3	2.1200	0.34368
Customer related Performances	35	1.2	2.8	1.92	0.35711

According to the table number four, descriptive analysis uses different factors such as mean, maximum, minimum and standard deviation values to measure the variables of the study. According to the above analysis,

Mean value of ERP system is 1.9 and it is within the range between 1 and 2 and therefore, it denotes that the variable is within strongly agree and agree level. Mean value of Financial Performances is 1.85 and it is within the range between 1 and 2 and therefore, it denotes that the variable is within strongly agree and agree level. Mean value of Organizational Learnings is 2.12 and it is within the range between 2 and 3 and therefore, it denotes that the variable is within agree and neutral level. Mean value of Internal Processes is 2.12 and it is within the range between 2 and 3 and therefore, it denotes that the variable is within agree and neutral level.

Mean value of Customer related Performances is 1.92 and it is within the range between 1 and 2 and therefore, it denotes that the variable is within strongly agree and agree level.

Descriptive analysis of Financial Performances

The table number five shows the mean value of dimensions of financial performances variable.

Table 5 Descriptive analysis of Financial Performances

No	Dimension	Mean
1	ERP has involve increase of sales in the hotel	1.69

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2	ERP has involve in reduction of operational cost	1.77
3	ERP has involve in reducing unwanted wastage	1.77
4	ERP system has influence the competitive advantage of the hotel system	2.00
5	ERP has involve hotel's market share increment	2.03

According to the table number five, all dimensions of the Financial Performances variable, are within the strongly agree and neutral level and there is no any dimension go beyond than the neutral level.

Descriptive analysis of Organizational Learnings

The table number six shows the mean value of dimensions of Organizational Learnings variable.

Table 6 Descriptive analysis of Organizational Learnings

No	Dimension	Mean
1	ERP has involve effective decision making process	2.09
2	ERP has involve in business processes	2.2
3	ERP has involve in enhancing productivity	2.17
4	ERP system has influence the managerial control process	2.06
5	ERP has involve hotel's customer satisfaction enhancement	2.11

According to the table number six, all dimensions of the Organizational Learnings variable, are within the agree and neutral level and there is no any dimension go beyond than the neutral level.

Descriptive analysis of Internal Processes

The table number seven shows the mean value of dimensions of Internal Processes variable.

Table 7 Descriptive analysis of Internal Processes

No	Dimension	Mean
1	ERP has involve hotel's monitoring process	2.17
2	ERP has involve in business internal processes	2.20

3	ERP has impact on access to information in hotel	2.09
4	ERP system has influence the human resource management process	2.09
5	ERP has impact on communication within the hotel staff	2.09

According to the table number seven, all dimensions of the Internal Processes variable, are within the agree and neutral level and there is no any dimension go beyond than the neutral level.

Descriptive analysis of Customer related Performances

The table number seven shows the mean value of dimensions of Customer related Performances variable.

Table 8 Descriptive analysis of Customer related Performances

No	Dimension	Mean
1	ERP system facilitates to get positive and favorable feedbacks from customers	1.86
2	ERP system facilitates to reduce the amount of customer complaints regarding the service of the hotel	1.94
3	ERP system facilitates to retain customers with the hotel	1.89
4	ERP system facilitates to provide better customer service	1.91
5	ERP system facilitates to resolve customer complaints quickly and respond quickly	2.00

According to the table number eight, all dimensions of the Customer related Performances variable, are within the strongly agree and neutral level and there is no any dimension go beyond than the neutral level.

Descriptive analysis of ERP System

The table number seven shows the mean value of dimensions of ERP System variable.

Table 9 Descriptive analysis of ERP System

No	Dimension	Mean
Perceived Usefulness		
1	My job would be difficult to perform without ERP	2.00
2	Using ERP gives me greater control over my work.	2.03
3	Using ERP improves my job performance.	2.00

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4	The ERP system addresses my job-related needs.	2.00
5	Using ERP saves me time.	2.03
Ease of Use		
6	I often become confused when ERP.	2.06

7	I make errors frequently when using ERP.	2.03
8	Interacting with the ERP is often frustrating.	1.8
9	I need to consult the user manual often when using ERP.	1.89
10	Interacting with the ERP requires a lot of my mental effort	1.91

According to the table number nine, all dimensions of the ERP System variable, are within the strongly agree and neutral level and there is no any dimension go beyond than the neutral level.

5.5.1. Employee Ranking on Organizational Performances

The questionnaire has another type of questions to rank to the respondents based on their view and questionnaire has five ranking questions for each dependent variable and based on that we can find which aspect was affected by the effective ERP system based on the employee or staff (finance department and information technology) view point.

Table 10 Employee Ranking on Organizational Performances

Variable	Priority one	Priority Two
Financial performance	Operations cost	Profitability
Organizational learning	Employee or staff productivity	Decision making
Internal process	Access to information	Monitoring
Customer performances	Relationship with customer	Customer retention rate

Aspect of financial performance

According to the rankings of aspects of financial performances by respondents, majority of respondents have said that operations cost is the most effective aspect which affect from the effectiveness of ERP system in ABC hotel. Then second rank was gone to profitability and the employees believe that the ERP system has impact on profitability of the ABC hotel.

Statistics

	Profitability	Competitive advantage	Operational cost	Market share	Productivity
N ^{Valid}	35	35	35	35	35
Missing	0	0	0	0	0
Mode	2	3	5	4	1

Aspect of organizational learning

According to the rankings of aspects of organizational learnings by respondents, majority of respondents have said that employee or staff productivity is the most effective aspect which affect from the effectiveness of ERP system in ABC hotel. Then second rank was gone to decision making and the employees believe that the ERP system has impact on decision making of the ABC hotel.

Statistics

	Decision making	Business process	Employee/ staff productivity	Management control	Customer satisfaction
N ^{Valid} Missing Mode	35 0 2	35 0 4	35 0 1	35 0 5	35 0 5

Aspect of internal process

According to the rankings of aspects of organizational learnings by respondents, majority of respondents have said that access to information is the most effective aspect which affect from the effectiveness of ERP system in ABC hotel. Then second rank was gone to monitoring and the employees believe that the ERP system has impact on monitoring of the ABC hotel.

Statistics

	Monitoring	Support of internal process	Enforcement of internal process	Access to information	Communication
N ^{Valid} Missing Mode	35 0 2	35 0 4	35 0 5	35 0 1	35 0 3

Aspect of customer performances

According to the rankings of aspects of organizational learnings by respondents, majority of respondents have said that relationship with customer is the most effective aspect which affect from the effectiveness of ERP system in ABC hotel. Then second rank was gone to customer retention rate and the employees believe that the ERP system has impact on customer retention rate of the ABC hotel.

Statistics

	Customer retention rate	Responsiveness	Relationship with customers	Lead time	Repeat customer rate
N ^{Valid} Missing Mode	35 0 2	35 0 4	35 0 1	35 0 5	35 0 4

5.6. Correlation Coefficient Analysis

According to the conceptual framework, developed hypotheses and research objectives of the research study, it is requiring to measure the relationship between each dependent variable and independent variable and the Correlation coefficient analysis uses to measure the linear relationship among two variables. Pearson

correlation coefficient analysis uses to check whether there is a relationship between ERP System and all dependent variables.

Correlations

	MEAN_FP	MEAN_OL	MEAN_IP	MEAN_CP	MEAN_ERP
Pearson Correlation	1	.451**	.546**	.543**	.597**
MEAN_FP		.006	.001	.001	.000
Sig. (2-tailed)		35	35	35	35
N	.451**	1	.535**	.581**	.503**
Pearson Correlation	.006		.001	.000	.002
MEAN_OL	35	35	35	35	35
Sig. (2-tailed)					
N	.546**	.535**	1	.493**	.677**
Pearson Correlation	.001	.001		.003	.000
MEAN_IP	35	35	35	35	35
Sig. (2-tailed)	.543**	.581**	.493**	1	.549**
N	.001	.000	.003		.001
Pearson Correlation	35	35	35	35	35
MEAN_CP	.597**	.503**	.677**	.549**	1
Sig. (2-tailed)	.000	.002	.000	.001	
N	35	35	35	35	35
Pearson Correlation					
MEAN_ERP					
Sig. (2-tailed)					
N					

** . Correlation is significant at the 0.01 level (2-tailed).

ERP system and financial performance in ABC Hotel

According to the hypotheses of the research study, this research study aims to test the following hypotheses to check whether there is a relationship between effective ERP system and financial performance in ABC Hotel.

- H1 There is a relationship between Perceived usefulness and ease of use of ERP system and financial performance in ABC Hotel

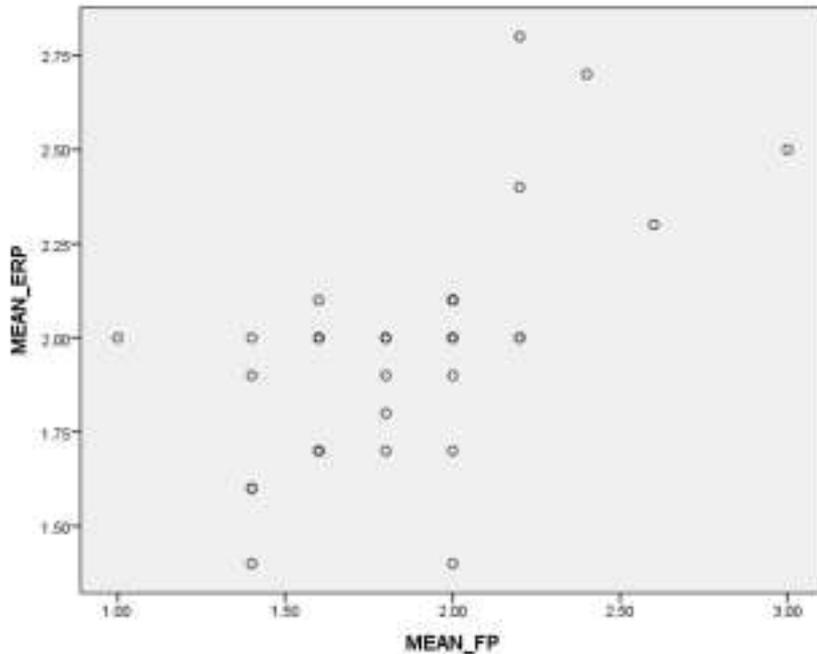
The validity of the above hypotheses based on the significance value of the independent variable and dependent variable. According to the correlation analysis, significance value of financial performance is 0.000 and significance value between effective ERP system is 0.000. It can be concluded that both between effective ERP system variable and financial performance variable are significant since their significance values are lower than the standard significance value.

Correlation value between the effective ERP system and financial performance in ABC Hotel facilitate to test the hypotheses and based on the value it can reject one hypotheses and can accept one hypotheses. Correlation value between the effective ERP system and financial performance is 0.597 and it denotes that there is a moderate positive relationship between the effective ERP system and financial performance in ABC Hotel. According to the above, hypotheses one can accept and can reject null hypotheses.

Scatter diagram is another method which uses to assess the relationship between two variables and it shows the relationship between two variables. The figure number eight is the scatter diagram between effective ERP system and financial performance and it shows the relationship between effective ERP system and financial performance. Following figure shows that there is a moderate level positive relationship among ERP system and financial performance in ABC Hotel.

Figure 8 Relationship between ERP system and financial performance in ABC Hotel

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Source: Author

Finally conclude that,

- H1: There is a relationship between Perceived usefulness and ease of use of ERP system and financial performance in ABC Hotel

ERP system and organizational learning in ABC Hotel

According to the hypotheses of the research study, this research study aims to test the following hypotheses to check whether there is a relationship between effective ERP system and organizational learning in ABC Hotel.

- H1: There is a relationship between Perceived usefulness and ease of use of ERP system and organizational learning in ABC Hotel

The validity of the above hypotheses based on the significance value of the independent variable and dependent variable. According to the correlation analysis, significance value of organizational learning is 0.002 and significance value between effective ERP system is 0.002. It can conclude that the both between effective ERP system variable and organizational learning variable are significant since their significance values are lower than the standard significance value.

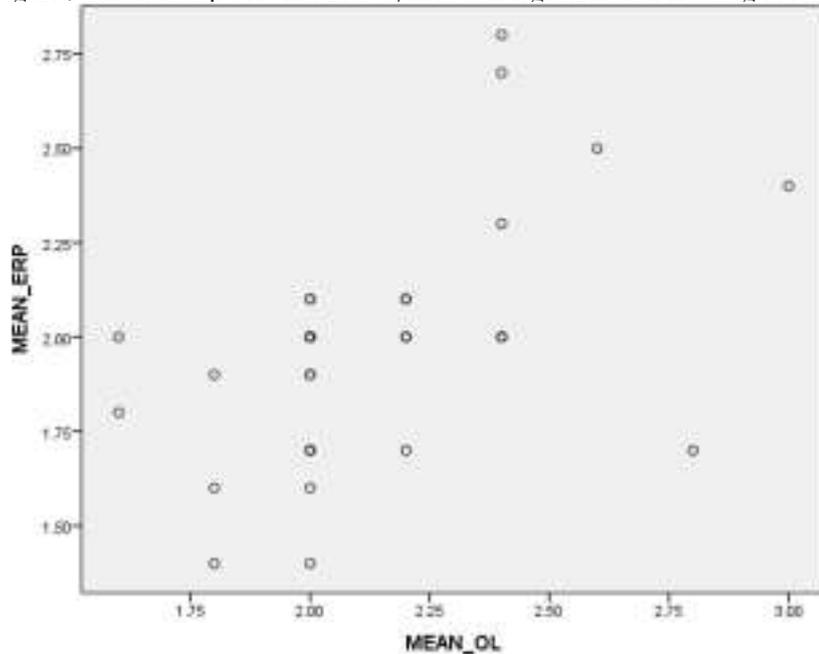
Correlation value between the effective ERP system and organizational learning in ABC Hotel facilitate to test the hypotheses and based on the value it can reject one hypotheses and can accept one hypotheses. Correlation value between the effective ERP system and organizational learning is 0.503 and it denotes that there is a moderate positive relationship between the effective ERP system and organizational learning in

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ABC Hotel. According to the above, hypotheses one can accept and can reject null hypotheses.

The figure number nine is the scatter diagram between effective ERP system and organizational learning and it shows the relationship between effective ERP system and organizational learning. Following figure shows that there is a moderate level positive relationship among ERP system and organizational learning in ABC Hotel.

Figure 9 Relationship between ERP system and organizational learning in ABC Hotel



Source: Author

Finally conclude that,

- H1: There is a relationship between Perceived usefulness and ease of use of ERP system and organizational learning in ABC Hotel

ERP system and Internal Processes of ABC Hotel

According to the hypotheses of the research study, this research study aims to test the following hypotheses to check whether there is a relationship between effective ERP system and Internal Processes in ABC Hotel.

- H1: There is a relationship between Perceived usefulness and ease of use of ERP system and Internal Processes of ABC Hotel.

The validity of the above hypotheses based on the significance value of the independent variable and dependent variable. According to the correlation analysis, significance value of Internal Processes is 0.000 and significance value between effective ERP system is 0.000. It can conclude that the both between effective ERP system variable

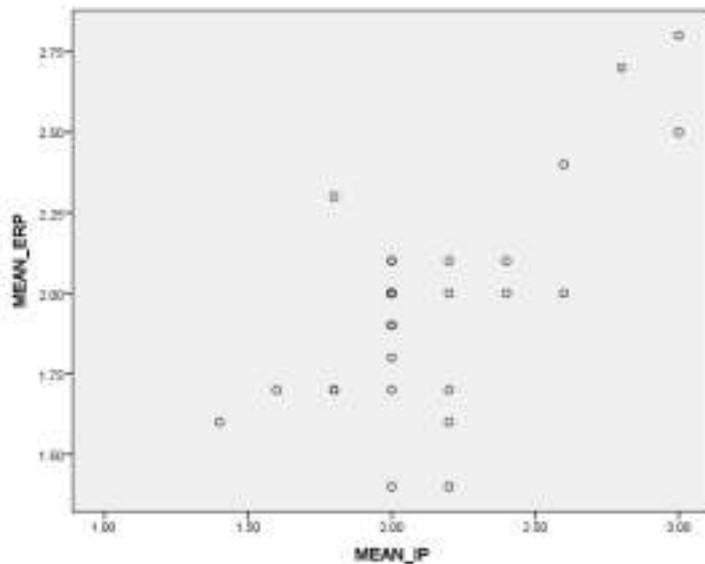
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and Internal Processes variable are significant since their significance values are lower than the standard significance value.

Correlation value between the effective ERP system and Internal Processes in ABC Hotel facilitate to test the hypotheses and based on the value it can reject one hypotheses and can accepts one hypotheses. Correlation value between the effective ERP system and Internal Processes is 0.677 and it denotes that there is a moderate positive relationship between the effective ERP system and Internal Processes in ABC Hotel. According to the above, hypotheses one can accept and can reject null hypotheses.

The figure number ten is the scatter diagram between effective ERP system and Internal Processes and it shows the relationship between effective ERP system and Internal Processes. Following figure shows that there is a moderate level positive relationship among ERP system and Internal Processes in ABC Hotel.

Figure 10 Relationship between ERP system and Internal Processes in ABC Hotel



Source: Author

Finally conclude that,

- H1: There is a relationship between Perceived usefulness and ease of use of ERP system and Internal Processes of ABC Hotel.

ERP system and Customer related performance of ABC Hotel

According to the hypotheses of the research study, this research study aims to test the

following hypotheses to check whether there is a relationship between effective ERP system and Customer related performance in ABC Hotel.

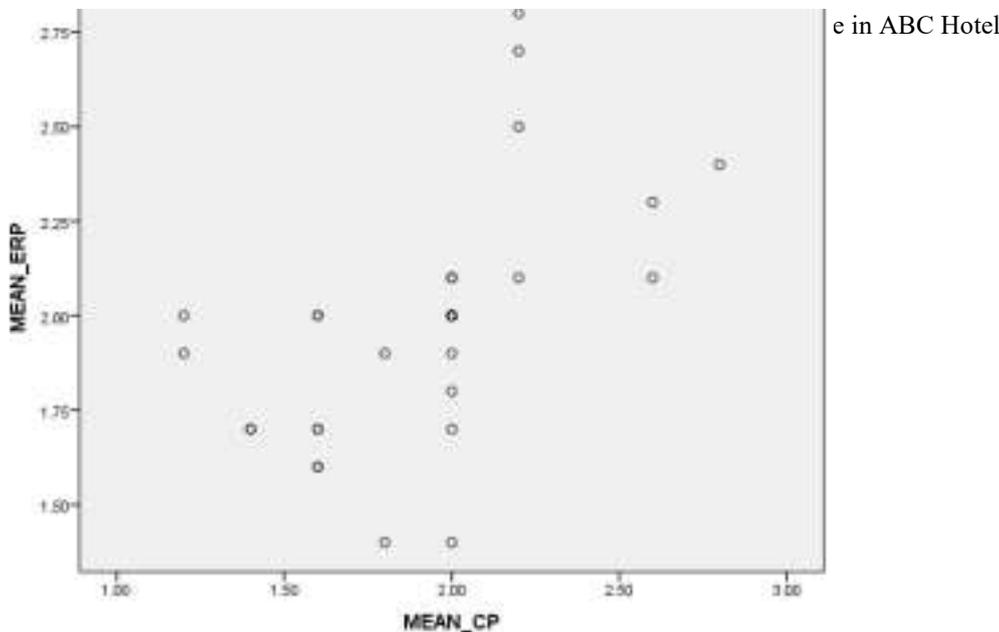
- H1: There is a relationship between Perceived usefulness and ease of use of ERP system and Customer related performance of ABC Hotel.

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The validity of the above hypotheses based on the significance value of the independent variable and dependent variable. According to the correlation analysis, significance value of Customer related performance is 0.001 and significance value of between effective ERP system is 0.001. It can conclude that the both between effective ERP system variable and Customer related performance variable are significant since their significance values are lower than the standard significance value.

Correlation value between the effective ERP system and Customer related performance in ABC Hotel facilitate to test the hypotheses and based on the value it can reject one hypotheses and can accepts one hypotheses. Correlation value between the effective ERP system and Customer related performance is 0.549 and it denotes that there is a moderate positive relationship between the effective ERP system and Customer related performance in ABC Hotel. According to the above, hypotheses one can accept and can reject null hypotheses.

The figure number eleven is the scatter diagram between effective ERP system and Customer related performance and it shows the relationship between effective ERP system and Customer related performance. Following figure shows that there is a moderate level positive relationship among ERP system and Customer related performance in ABC Hotel.



Source: Author

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 Finally conclude that,

- H1: There is a relationship between Perceived usefulness and ease of use of ERP system and Customer related performance of ABC Hotel.

Regression Analysis

According to the conceptual framework of this research study, it is requiring to measure the relationship through regression analysis like each and every dependent variable and effective ERP system.

Regression analysis on ERP system and financial performance in ABC Hotel Regression analyze assess the study using R square value and R square value shows the total variation which has explained by the variable. R square value of the model between effective ERP system and financial performances 0.597 and it demotes that the 59% of effectiveness of ERP system explained by the financial performances. According to the coefficient analysis,

Table 11 Coefficient Analysis

Variable	B
(Constant)	0.370
Effective ERP system	0.750

- Significance value or P value is 0.000 and it is less than standard value 0.05 and therefore the variables are significant variable. The Beta value of Effective ERP system is 0.750 and it denotes that there is a positive relationship between Effective ERP system and financial performances. It denotes that there is an impact from Effective ERP system on financial performances of the ABC Hotel. Financial performances increase 0.750 when Effective ERP system increase by one unit.

Regression analysis on ERP system and organizational learning in ABC Hotel R square value of the model between effective ERP system and organizational learning 0.503 and it demotes that the 50% of effectiveness of ERP system explained by the organizational learning.

According to the coefficient analysis,

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Table 12 Coefficient Analysis

Variable	B
(Constant)	1.157
Effective ERP system	0.491

- Significance value or P value is 0.002 and it is less than standard value 0.05 and therefore the variables are significant variable. The Beta value of Effective ERP system is 0.491 and it denotes that there is a positive relationship between Effective ERP system and organizational learning. It denotes that there is an impact from Effective ERP system on organizational learning of the ABC Hotel. organizational learning increase 0.491 when Effective ERP system increase by one unit.

Regression analysis on ERP system on Internal Processes of ABC Hotel

R square value of the model between effective ERP system and internal process 0.677 and it demotes that the 67% of effectiveness of ERP system explained by the internal process.

According to the coefficient analysis,

Table 13 Coefficient Analysis

Variable	B
(Constant)	0.625
Effective ERP system	0.757

- Significance value or P value is 0.000 and it is less than standard value 0.05 and therefore the variables are significant variable. The Beta value of Effective ERP system is 0.757 and it denotes that there is a positive relationship between Effective ERP system and internal process. It denotes that there is an impact from Effective ERP system on internal process of the ABC Hotel. internal process increase 0.757 when Effective ERP system increase by one unit.

Regression analysis on ERP system and Customer related performance of ABC Hotel

R square value of the model between effective ERP system and customer related performances 0.549 and it demotes that the 54% of effectiveness of ERP system explained by the customer related performances.

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According to the coefficient analysis,

Table 14 Coefficient Analysis

Variable	B
(Constant)	0.659
Effective ERP system	0.639

· Significance value or P value is 0.000 and it is less than standard value 0.05 and therefore the variables are significant variable. The Beta value of Effective ERP system is 0.639 and it denotes that there is a positive relationship between Effective ERP system and Customer related performances. It denotes that there is an impact from Effective ERP system on Customer related performances of the ABC Hotel. Customer related performances increase 0.750 when Effective.

This study based on a hotel which is one of part of Sri Lanka's largest listed conglomerate in the Colombo Stock Exchange and considering as one of largest five star hotel which is operating under Sri Lanka's Hospitality industry. They provide both products and services to both foreign customers and local customers. This research study has conducted with few research objectives to achieve and expected to find answers for few research questions also. This research study has one independent variable which is effectiveness of ERP system and has four dependent variables and they are financial performances, organizational learnings, internal processes and customer related performances.

The main research objective or the focus of this research study is to identify the impact of implementation and effectiveness of ERP on performances of the ABC hotel and in order to achieve main objective of the research study, there are four sub objectives developed to check and find the impact of effectiveness of ERP on the performances of ABC hotel.

According to the objectives of the research study, it was required to check the impact of effectiveness of ERP system on each and every variable individually and regression analysis run for four time to check whether the impact on four dependent variables. Regression analysis shows that the all individual variables are affecting from the effectiveness of ERP system of the ABC hotel. Based on regression analysis there are four regression models have developed and they show that the impact of effectiveness of ERP system on each variable. Regression models show that there is a positive impact from effectiveness ERP system on every dependent variable in the research study.

Correlation analysis shows that,

- There is a moderate positive relationship between the effective ERP system and financial performance in ABC Hotel.
- There is a moderate positive relationship between the effective ERP system and organizational learning in ABC Hotel.
- There is a moderate positive relationship between the effective ERP system and Internal Processes in ABC Hotel.
- There is a moderate positive relationship between the effective ERP system and Customer related performance in ABC Hotel.

Summary of the Model

Figure 12 Summary of the Model

Financial performance

R Squared: 0.597

Organizational

ERP systems Learning R Squared: 0.503

R Squared: 0.549

R Squared: 0.677

Internal Processes

Customer related performance

Efficiency

Training and Management Support awareness

R square value of the model between effective ERP system and financial performances 0.597 and it demotes that the 59% of effectiveness of ERP system explained by the financial performances.

R square value of the model between effective ERP system and organizational learning 0.503 and it demotes that the 50% of effectiveness of ERP system explained by the organizational learning.

R square value of the model between effective ERP system and internal process 0.677 and it demotes that the 67% of effectiveness of ERP system explained by the internal process.

R square value of the model between effective ERP system and customer related performances 0.549 and it demotes that the 54% of effectiveness of ERP system explained by the customer related performances.

Implications of the Study

Main implication of this study is the identification of the impact of implementation of effective ERP system on overall organization performances in ABC hotel Sri Lanka. According to the research findings, it shows that the effective ERP system has impact on the ABC hotel financial performances, organizational learning, internal processes of the organization and customer related performances. The organization can get to know that their investment on ERP system has provide huge and considerable amount of contribution to the whole organization since ERP system has positive impact and relationship on organization performances. The another contribution of tis research study is, the organization able to identify difficulties when employees have faced when implementing the ERP system and some limitations and barriers they are already facing with this ERP system. The findings of this research study can use by another hotel which are operating under Sri Lanka hospitality industry and which are expecting to implement ERP system to the hotel. The findings of this research study can also use by another type of business organizations other than the hotel which already have ERP system and expecting to implement ERP system to the organization.

Future Research Directions

The future researchers can use this research model to assess the impact of ERP system on organizational performances in hotels and other types of business organizations other than the hotel. The research model can expand through adding other dependent variables such as operational performances, customer satisfaction, service quality etc. This model can be used to assess the impact on organization performances from other applications of technology advancements and systems such as human resource management information system, quality management information system etc. This research study has conducted on hospitality industry in Sri Lanka and future researchers can use this research model to another industry which uses ERP systems in organizations.

Difficulties and limitations of ERP system

The questionnaire has one open ended question at the end of the questionnaire and it asked to get an idea about the current limitations and difficulties are facing by the employees of the ABC hotel.

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According to their answers, following points can be summarized

Difficulties when implement the ERP system to the ABC Hotel

- 8 months of research had to be done before implanting.

- Training was hard due to lack of user-friendliness.

- License cost is very expensive, around 32 Billion and the payback can take about 5 years.

- Too many authorizations and too many controls to be looked into and assigned to personnel. Which can slow down an urgent task.
- Weekends are selected for system updates and however hotels are crowded mostly on weekends.
Difficulties and limitations which occur when using

ERP is not made for Hotel Environment but for Manufacturing. · Example: - Material Management is hard; There can be 1kg Sugar packets today but 500g Sugar Packets only in future. In that case have to create two units of measurements in the system. And will have to define which unit to be used for cupcake recipe's. Material Management is hard.

- Example: - Finished goods and raw materials being displayed as they are in the same master file. Coca cola bottles and Chicken (**raw**) both will be shown when we search from letter c. Raw chicken is also showed in the restaurant point of sale system.
 - No drag and drop functions, therefore less user friendliness.
- G/L accounting – No sub categories under one G/L, there's a work around with reference numbers. Therefore, if the user fails to add the reference number in the type of expense, it can go as general expense instead of the particular expense the user intended to.
- Correct G/L and correct reference number both are essential, if not internal audit process can be hectic.
 - System maintenance is hard and there will be a high downtime. · Weekends are selected for system updates and however hotels are crowded mostly on weekends.

Recommendations

There are few recommendations available based on the findings of the research study. The research study found that there is a positive relationship between ERP system effectiveness and financial performances, organizational learnings, internal processes and customer related performances, therefore it is recommending to invest on enhancing the effectiveness of ERP system because it will give huge advantages and favorable results to the organization. It is recommending to insert drag and drop functions to the material management part and it will enhance user friendly of the system. Point of sale system need to improve until it receives ability of identifying raw material and finished products separately and it will provide more advantages on restaurant employees as well as visitors since it facilitates to save time or reduce the time take for selecting products and billing the payment. It is recommending to create sub ledgers in the general ledger and it will enhance the user friendly.

Conclusion

As the conclusion, it can say that the model of the research study able to achieve all the research objectives and it can conclude that the effectiveness of ERP system has impact on the financial performances, organizational learnings, internal processes and customer related performance of the ABC hotel. According to the regression analysis, internal processes are the most effected factor from the effectiveness of ERP system and the second effected factor is financial performances. Impact of effectiveness of ERP system on organizational learning is less than the impact on customer related performances. Finally, it can conclude that the effectiveness of ERP system has significant impact on the financial performances, organizational learnings, internal processes and customer related performances in ABC hotel and there are moderate positive relationships between effectiveness of ERP system and financial performances, effectiveness of ERP system and organizational learnings, effectiveness of ERP system and internal processes and effectiveness of ERP system and customer related performances in ABC hotel

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