Relationship of ERP User's Support and System Success: Empirical Analysis at Corporate Level in Pakistan

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Abstract

Organizations are focusing for effective and efficient functionalities of their systems in order to survive in this technological and competitive world. These are using the integrated approach where they can handle and manage the organization wide activities in better manners. In this study, the relationship of user's support and ERP system success will investigatae. For this explanatory research, five organizations were selected, survey research method and convenient sampling technique was used in this quantitative research. Likert scale was used to prepare questionnaire and distributed to the users of the ERP system in five different organizations of Pakistan. Analysis was done using SPSS and results showed that there is positive relationship of ERP user's support and ERP system success. Organizations can help from this study for better knowledge about employee's satisfaction. Limited organizations were selected due to time constraint and this research will contribute towards existing body of knowledge where users support and success is cruicial. Researchers can get help from this study for better decision making.

Keywords: Enterprise Resource Planning, financial support, System Users, Trainings.

Reference to this paper should be made as follows: Shahzadi, M. (2020) 'Relationship of ERP User's Support and System Success: Empirical Analysis at Corporate Level in Pakistan', *Asia Pacific Journal of Emerging Markets,* Vol. 4, No. 1, pp.01–13.

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1. Introduction

In National and international level Enterprise Resource Planning (ERP) is mostly used for effective handling the different activities and processes. For moving towards successful side, businesses bear the cost with somewhat successful results but most of them bear the huge loss due to poor effectiveness (Zornada & Velkavrh, 2005). ERP system is being used in different departments with different modules like warehousing, Transportation, inventory control system, different ledgers maintenance, product production as well as HRM (Human Resource Management) etc (Faisal, Faridi, Javaid, & Shahid, 2012).

Implementing ERP is costly and often it leads to high abandonment and employee turnover because of social and business culture unfit (Almajali et al. 2016) All over the world, organizations always consider Stakeholders interest where they should consider employees also because organizational change and performance measurement plans can lead towards sustainable growth (Wolf, 2013). According to (Sirca, Babnik & Breznik, 2013) and (Esteves, 2013), HRM should be strong enough for the proper and in time successful implementation of the systems. While managing HRM, employees show different attitudes in different environment and there should be fit between job and person because it will affect on employee's performance which leads to organizational success and one can achieve competitive edge. Trainings require differernt situations and budgets. ERP system implementation can lead towards employee's producutivity, quality services which is too good to succeed for the long term (Qutaishat et al. 2012).

In ERP implementational phases, Effective Knowledge Transfer is also very crucial which cannot be neglected. Providers of Knowledge can be from the outside or may be from inside but most important thing is sharing in proper way and must be communicated all over the hierarchy (Maditinos, 2012).

Human resource management includes various types of activities such as recruitment and selection, trainings, employee's developments, compensations with benefits, retirement schemes and managing work in efficient and effective manners. According to the past studies, there is huge difference between system adopters and non adopters and more successful are those which are adopting this system because of High ROI and operational productivity (Hunton, Lippincot & Reck, 2003).

There are many factors which contribute failure of the system and most important is HRM practices because poor implementation leads towards delayed procedures, lack of decision making, trainings costs, changing perceptions about working conditions. Task significances is effective where Employees aware of what they are doing and can manage their work within time constraint (Ghosh, 2012).

Trainings with proper education and guidance are also the factors for success, little efforts means lower level of commitment and employees will reluctant for change and its difficult to manage entire business functions. Past studies revealed the fact that employees are not willing to participate in different training sessions and they are not interested in learning. This is the level where proper guidance is required by the management and authorities to cope up with failures. There should be timely implementation of ERP with proper trainings so that employees can understand the complexity and overcome hurdles for better impact. Management should have to answer questions where employees are hesitant and want clearance of complexity level during training sessions. Most of ERP suppliers launch updated and change version, where performance of the employees may suffer and they show resistance to change management (Nicolaou & Bhattacharya, 2005).

Performance Management is very important for the businesses where organizations can get feedback and take necessary actions; Different reports with feedback sessions can be done through IT departments. Central database system is helping towards better review of performances. These central databases are installed and fully operational in large scale business with performance measurement and continuous improvements but these are not the

main focus of the study for the small and medium term organizations. Organizations prepare both long term and short term goals where short term include the financial side while long term include the non- financial side i-e employees. Different modules are installed in the organizations including Accounting, Inventory, Asset Management, Procurement, Human Resource, Sales and Record Management Module (Petter at al. 2000). Through this ERP system, one module can effect the productivity of other and one can get access and related information at any time (Hoch, & Dulebohn, 2013).

Past studies showed that there are differential impact on employee's efficiency and productivity of the organizations when managed through this system (Kallunki, Laitinen & Silvola, 2011). Among Technical and non technical side of employees, Non technical side should not be ignored so that failures can be minimized and for it, there should be job person fit while implementing ERP system (Basoglu, Daim & Kerimoglu, 2007). In different organizations, Subject Matter Specialists are hired in order to provide the services so that system can run in proper way (Gallagher & Gallagher, 2011). Studies revealed that Employee's satisfaction is important for better performances. If jobs are redesigned from time to time, it can create dissatisfaction level and employees cannot tolerate beyond limits (Morris & Venkatesh, 2010).

Total Quality Management (TQM) and Business Excellence Models create transformational change i-e behavioral & cultural, they can show positive attitude and adapt accordingly. In this modern Era, Human resource management is trying to coordinate different activities and develop employee's skills irrespective of race, gender, ethnicity etc (Price, 2007). According to (Umble, Haft & Umble, 2003), there must be cost effective mechanism while fulfilling training needs because just 10-15 percent overall budget on trainings can results 80 percent chance of this system success.

User satisfaction should be measured time to time but it can be considered as successful factor if measured after proper trainings. There is always a need of training such as in computer internet, and telecommunication. Positive Employees perception and attitudes can be achieved through trainings and knowledge sharing (Choi et al. 2007). In Organizations, there should be well-trained employees because they can better utilize the technology and different resources (Compeau & Higgins, 1995). In different countries, organizations are facing challenging situations where employees are not willing to do work

because of poorly installed system which increases the chances of business failure (Haddara & Zach, 2011).

In Human resource management activities, trainings and compensations are effective tools through which one can measure organizational productivity. Performance based compensation means a lot for the employees as well as organizations because it increased the satisfaction, performance and productivity (Singh, 2004). Training can affect the performance in two dimensions. First, if it matches with the tasks and development. Second, if it increases the employee's satisfaction relevant to the job and work place environment (Tzafrir, 2006). In private sector where Human resource management practices are not fully functional there is a greater risk of businesses losses (Majumder, 2012).

Organizations are designing the ERP system in a way to support the different functions but there is still a difference between developed and under-developed countries due to many challenging situations which they are facing now a day (Huang & Palvia, 2001). Case studies of the different organizations reveal the fact that ERP system can go towards the failure or successful side irrespective of their size and installation (Kakouris & Polychronopoulos, 2005).

Organizations also focusing on the innovation of systems, quality of the work and productivity and for it, they trained the employees accordingly because they know how to gain success. Organizations which are doing their work on large level, they actually are not considering short term incentives of managerial employees, rather than their focus is on long term incentives because they know that they are high risk firms and by considering on short term, they can show poor performances (Bloom & Milkovich, 1998). Past researches showed that salary and other incentives can increase the employee productivity. Different organizational executives see the system success in different ways. They can rate the performance and success through design, data base architecture, budgets and timely completion while other depend on end user's convenience and ease (Wenrich, 2007). There should not underestimate the requirements of the trainings which the users require to do particular work (Mabert et al., 2001).). Employer of the organization always supports financially through pay and reward systems (Dessler, 2011). Financial support increases the employee status, living standard as well as performances which in turn leads to better productivity (Aswathappa,2008). According to (Yassien et al. 2017) Strong power of usability should be there for ERP project success.

2. Methodology

Based on the past studies, proposed model was prepared and hypotheses were developed in order to determine the ERP relationship and impact of ERP user's support and system success. To measure the user's support, two dimensions were taken in terms of financial support and training support. User's support was the independent variable having two dimensions. Mediating variable was employee performance and dependent variable in proposed model was system success. Quantitative research was done through Survey research method and data was collected through convenient sampling. Five organizations were selected for data collection purpose having sample size 300. These include Orient Company of Pakistan, Engro Foods Ltd., LUMS, Mobilink and Nestle Pakistan Ltd. ERP user's support evaluation was done using SPSS-16 and Amose-18. Five organizations were selected where target respondents were the employees or the ERP users who have direct link with ERP system. Questionnaires were distributed to the organizations of Pakistan. Five point Likert Scale was used ranging from Strongly Disagree to Strongly Agree and 22 items were asked.

Tab: 1 Reliability Measures

	Value of Cronbach's Alpha	No. of Items
Financial Support	**.779**	**5**
Training Support	**.739**	**6**
Employee Performance	**.719**	**5**
ERP System Success	**.823**	**6**

H1: Financial support is positively associate with employee performance.

H2: Training support is positively associate with employee performance.

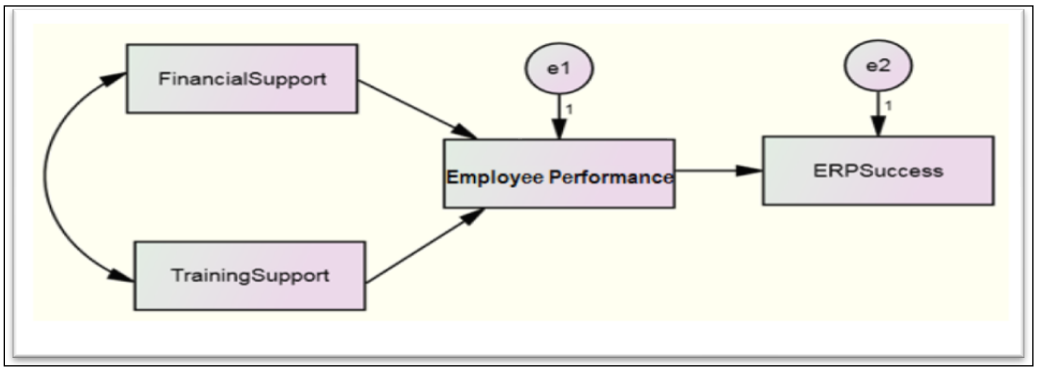
H3: Employee performance is positively associate with system success

4. Empirical Results

For reliability test, Cronbach's Alpha was used (Santos, 1999). In Table:1 showed the value of Cronbach's Alpha with No. of items for each variable are given. Total items were 22 and value of Cronbach's Alpha for Financial support was 0.779> 0.7 and according to (Santos, 1999) 0.7 or above reliability measure is considered as accepted and this indicated that item's reliability was good enough.

Similarly items used for Training Support had Cronbach's Alpha reliability 0.739; Employee Performance 0.719 and ERP System Success 0.823 showed that reliability statistics were accepted

In Table:2, showed the details about employee's Age, Gender and Experience with system. ERP users under this research provided the data about their age and in between them 26-30 were high and the percentage was 43.7. Out of 300 respondents, 208 were male and 92 were female as shown in below table. ERP experience of having 5-6 years was high with 49.7% while 24.7 percent were those who experience with system of almost 4-5 Y. 13.7 %of having 3-4 and only 2.7% were those of less than 3 years of experience with ERP system.



Tab: 2 Age Gender and ERP Experiences			
		Frequency	%
Age	Less than25	51	17.0
	26-30	131	43.7
	31-35	83	27.7
	36-40	21	7.0
	above 40	14	4.7
	Total	300	100.0
Gender	Male	208	69.3
	Female	92	30.7
	Total Male	300	100.0
ERP Exp.	Less than 3 Years	8	2.7
	3-4 Y	41	13.7
	4-5 Y	74	24.7
	5-6 Y	149	49.7
	6-7 Y	28	9.3
	Total	300	100.0

In the above Table:3 Descriptive statistics were showing the analysis of what type of variable indicating what type of Mean and Standard Deviation. In variables of the study, responses were more towards agreed side. For the analysis of the study, SPSS-16 and AMOSE-18 was used and data was first analyzed using SPSS and to see the relationship of the variables SEM was used i-e Structural Equation Modeling. For thoroughly observation of the data, Proposed model was built because SEM is helpful to measure the relationship of independent, mediating and dependent variables (Lei & Wu, 2007). In model, user's support was independent variable having financial support and training support; employee satisfaction was mediating while ERP success was dependent variable.

In the table:4 Regression Weights are given and in this analysis, Financial Support was showing the positive significant relationship with Employee

performance having estimate .879 with less than 0.5 P-value indicating hypothesis acceptance. Training support was also showed the estimates .875 with critical value 41.877 where value of P is less than 0.5 again indicating that Training support was also showing the positive significant relationship with Employee performance. Employee performance was also showed positive significant relationship and accepts the hypothesis with the estimates .833 and P- value less than 0.5 as well as Standard error is comparatively high between employee performance and ERP success as compared to others. So, all the hypotheses were accepted with P-value less than 0.5 (Lei & Wu, 2007).

Tab: 4 Covariance & Regression

			Estimates	Standard Error	C.R (Critical Ratio)	Value of P
Employee Satisfaction	<---	Financial Support	**.879**	**.021**	**42.536**	***
Employee Performance	<---	Training Support	**.875**	**.023**	**41.877**	***
ERP Success	<--	Employee Satisfaction	**.833**	**.026**	**40.331**	***
Covariance						
Financial Support	<-->	Training Support	**.297**	**.030**	**9.958**	***

Tab: 5 Model Summery

Model	GFI	CFI	AGFI	RMR	RMSEA
Default Model	**.995**	**.999**	**.974**	**.008**	**.044**
Saturated Model	**1.000**	**1.000**	---	**.000**	---
Independence Model	**.512**	**.000**	**.187**	**.182**	**.735**

In Table 4, Covariance was also measured between Training support and financial support which indicated that it has Estimates .297 with P- value less than 0.5 and covariance between these two variables was existed. Model Summery was given in the below table: 5 which showed the Model fit calculations where Structure Equation Modeling was providing the different values of default model, saturated model and independence model. According to Ryu et al., 2003,threshold of Fit indicated GFI i-e Goodness of Fit Index should be > 0.90 and analysis showed that it was .995 which was higher than threshold fit index i-e 0.90. CFI i-e Comparative Fit Index should be > 0.90 and here the value 0.999 higher than 0.90 and good enough for fitness of model. AGFI which indicates Adjusted Goodness of Fit index should be > 0.90 and here it was 0.974. According to statistics [36], RMR should be < 0.05 or

0.08 & RMSEA < 0.06. In the study analysis, RMR value was .008 < 0.05, GFI and AGFI were closer to each other. RMSEA is abbreviation of Root Mean Square Error of Approximation and here the value was 0.44

4. Conclusion

In organizations where Enterprise Resource Planning system is used and where businesses are striving for gaining the competitive edge, this system should be fully supported so that employees can better understand the system, organization and its policies. Financial support and Training support should be provided so that employee performance can be increased which ultimately leads to system success. In Pakistan, proper financial and training support can create the environment where employees feel a level of satisfaction and participate for the growth of the organizations through better performance. If the financial support and trainings are not providing up to the mark, then organizations suffer losses and cannot survive for the long term and successful system implementation require full support of the management both in financial and non financial measures.

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