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**TO DETERMINE THE IMPACT OF ERP IMPLEMENTATION IN IMPROVING THE SCM  
OPERATIONS IN MANUFACTURING**

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**Abstract:**

The research is carried out to determine the impact of ERP implementation in the improvement of the Supply chain in the manufacturing sector. The research undermines a detail investigation of How ERP is working to improve the performance of a firm. However, our research is quite specific with improving the SCM performance. The identified problem for the research I basically related to process issues, control management issues etc. However, ERP has come up with solutions for it. Previous researches have clearly documented the fact that ERP is based on best practices and therefore, it being's revolution to the firms. The research is carried out on similar basis to determine how manufacturing firms with ERP can improve its SCM performance. In conclusion, the research identifies that manufacturing firms through ERP implementation can serve in leading the market, fulfilling the right demand, saving cost and improving operations.

**Key Words:**

*ERP, SCM, Manufacturing Firm,  
Supply Chain Performance,  
Pakistan.*

## **1. Introduction**

The advancement in technology has led firm to compete on various avenues which are directly impacting the firm revenue streams. The main objective of any firm is to maximize its profitability by minimizing their cost (Kilic, Zaim, & Delen, 2015). To achieve this objective, firms are working on different avenues and technology has been the most integral among them (Aburub, 2015). Previous researchers have identified the fact that, investments on technology has been quite fruitful as they serve the purpose of operational optimization, cost and time savings etc (Rajan & Baral, 2015) There are different ways through which investments in technology can be made for instance: the firm can implement departmental tool, the firm can use inventory management software, they can develop their own reporting tool for cost controlling, the firm can develop customized production software which helps in controlling but, altogether an ERP serves the purpose for all. The abbreviation ERP stands for Enterprise Resource Planning and describes the enterprise resource planning applications (Almajali, Masa'deh, & Tarhini, 2016). An ERP system is accordingly software that is used to control all business processes running in a company. It contains modules for the areas of procurement / materials management, production, sales, human resources, finance and accounting, controlling, etc. These modules are linked together using a common database. This makes it possible to plan the processes across all levels of the company - from different departments to different plants and storage locations Abugabah, Sanzogni, & Alfarraj, 2015). This research is carried out to determine how ERP implementation is helping the firm in achieving operational efficiency in Manufacturing Sector of Pakistan.

## **2. Literature Review**

### **2.1 Empirical Studies**

According to Akkermans, & Helden, (2002) performance is the key word for many companies worldwide. Organizations are interested in maximizing the productivity through effective and efficient resources. It is in this search for excellence that ERPs are inserted. The acronym ERP comes from the name in English Enterprise Resourcing Planning (Planning of the Resources) of the company. It is nothing more than a corporate system – as software or even an IT tool - that can integrate all areas of the company in a managerial scope. ERP is an integrated approach in an organization and benefits the organization in numerous ways. The benefits of ERP can be evaluated in the organization through multiple ways, for instance, it helps different departments of the organization to access the information. ERP has also been beneficial to the organizations as it helps the information, data and reports to be accurate and same data can be used by different

departments, hence all the departments and teams have same data and information, which minimizes any errors. In conclusion, the systems will help in process standardization and aids in making the reports available at any point in time with proper data and justification can aids in better planning.

Yang, Wu & Tsai (2007) conducted a research on how technology is grooming business in the last 21 centuries, in different parts of the organization. The main aim of the research is to check the impact of technology tools and to identify that, how technology is helping business in different ways. The problem which the research has highlighted or due to which the research has been conducted is related to the investment in technology tools. Most of the businesses were not aware of the integral importance of technology tools and the change they are bringing in within the business. The findings also address the problems attempt that, firms are severely facing the issues of having low controls or no controls through ERP they can build and develop stronger controls. The research therefore, concludes that, ERP helps the firm in achieving their target of developing and strengthening their controls through effective processes and automation. The research recommends that, proper training to the stakeholders will result in reaping the benefits of ERP in longer run.

According to Paulraj, Chen & Blome (2017) transparency has been an important element which must be ensured by every organization. Previous researches suggests that there are various tools which can easily address the problems of increase in prices due to ERP implementation, for instance, inventory management tools, run time reporting etc. according to (Hervani et al., 2005) has identified that the firms that implements ERP in their operations are strictly adhere to the controls and transparency because they initiate with developing strong and effective processes. This will aid the firm in reducing their product cycle time, production time as well as, save cost which is embedded in the product. According to (Khan & Qianli, 2017), also emphasises on the transparency which renders effective operations for a firm, and ERP as a result has proved to be beneficial for the organizations.

Huin (2004) defines that Supply chain management of the firms will always try to reduce the lead time for making a product. ERP helps the firm to meet this objective in various forms. Since, an ERP is designed based on firm's best practices therefore, this function is considered as basic level operational element of the ERP (Olson & Zhao, 2007). Various studies have evaluated that Lead time management is engaged with different concept for instance; transparency, automation and process design (Chin et al., 2015). ERP serves as a strong contender when it comes to reduce the lead time require producing a good. According to (Mentzer et al., 2001), ERP not only reduces the lead time but it also provides financial stability

and specified tracking. According to (Hervani et al., 2005), ERP has a trickle down as well as, have a multiple effect on the firm production. Technology companies like Dell and HP have various complaints about increased lead time and due to this increase in lead time the cost of production i.e. the fixed cost increases which leads to slow down the market revenues. The firms have tried multiple options to improve their lead time but, none proved to be successful (King, 2005).

According to (Mentzer et al., 2001), inventory management is referred to the idea of handling and managing the excessive inventory or the shortage of inventory. Inventory control is the idea of supplying goods and services at the right time in the right quantity for smooth operations, (Khan & Qianli, 2017). Inventory management and its control is an important area of the organization which affects the production and the entire operational performance, which is indirectly linked with the financials of the organizations and the customer satisfaction. According to (Chin et al., 2015), organizations that purchase raw materials are at risk at inventory management by depending on smooth processes of inventory, and hence inventory control in the supply chain department. Inventory controls are critical for underproduction and high production costs of an organization.

## **2.2 Hypothesis Development**

### **2.2.1 Enterprise Resource Planning (ERP)**

Dantes, & Hasibuan, (2010) believes that, ERP is helpful for the firm in many ways. It serves as a platform that fulfills the firm targets and future vision through its functionality. ERPs are excellent sources for integrating a business. The technology is very beneficial to streamline processes, but also to directly contribute in reducing costs. ERP works with core issues of the firm that, it processes definition, controls development, reduce redundancies. It is therefore, identified by the researches that, ERP are increasing the planning quality of the firm. Previously the planning function was handled by the firm manually however, now ERP systems are effectively and efficiently providing the organizations for analytical reporting which gives a clear evidence of increasing the firm productivity and reducing its overhead cost. The research has also identified that; through this the ERP's seems to aid in having the opportunity cost as it is faster and accurate. All in all according to the previous the researches through the implementation of ERP system a firm can easily capitalize on developing a planning stream aids in effective opportunity capitalization (Dantes, & Hasibuan, 2010).

### **2.2.2 Developing Controls to Reduce Wastage**

Akkermans, & Helden, (2002) worked on a research to examine the relationship between technology initiatives by a firm and their impact on firm overall productivity. The research was carried out in manufacturing sector as their role in the whole organization is extensive and critical. Here the research has pointed out the fact that, controls have significant impact on the firm profitability. However, most of the firm didn't account the importance of controlling on performance and therefore, their product cost is higher as compared to others. Considering these problems, the firms have implemented the technology solutions like ERP and CRM. Both systems have their impact on operations and customer service of the firm. The findings from the research show that, firms are leading in their operational performance after implementation of ERP tools. Once the processes become automated, the whole control would be developed and similarly becomes transparent. This concludes that, ERP are the software which starts from developing controls and then automate all these to make a perfect SOP for all. The research also recommends that, the processes should be defined in flexible manner so that, controls could effectively be developed.

**H1:** Developing controls for reducing wastage has significant impact on firm's operational performance.

### **2.2.3 Developing Processes through ERP**

According to Dantes, & Hasibuan, (2010) ERP's are extensively working in the construction industry as, they involve large scale processes and their impact can be witnessed directly in firm's profitability. Companies that understand their key business processes and the information requirements of these processes can avoid inefficiencies, and may also increase productivity and face the challenges of transparency of information. According to (Lee et al., 2012) careful selection of software systems is critical in obtaining effective improvements. Some important aspects have been clearly identified by (Khan & Qianli, 2017), that the growing organizations in different industries are focused on developing effective processes, since not all the industries are software based but, they are running their business through the software. In addition to that, integrated ERP software solutions achieves the fastest and most accurate completion of key business processes, and better information transparency to support timely KPIs. According to (Zailani et al., 2012), research recommends that, by investing in a scalable and modular ERP software solution, organizations can also avoid buying a software system that offers more functionality and applications than necessary, which can be costly for the company and confusing for users, to avoid training costs, time, and increase complexed processes to the

employees. With the purchase of integrated software system can be scaled to specific requirements; construction companies can avoid confusion and the cost of learning and maintenance of unnecessary applications.

**H2:** Process Development through ERP has significant impact on firm's operational performance.

#### **2.2.4 Improves Lead Time**

The implementation of ERP in firms have totally changed the scenario as the firms do not only reduces their lead time but, improves tracking, revenues, streamline order management and inventory management. According to (Lee et al., 2012), the current estimated waste percentage a firm generally has is from 10% to 12%, which is considered to be a huge loss and will result in increasing the production cost impacting the firm's competitiveness in the market. Another rising problem according to (Chin et al., 2015), is that, the absence of an integrated system is increasing their lead time to produce a good. This increases the lead time which directly effects the cost and time to market ratio. Also, firms are incurring problems for instance, the product delivery time has been increased this increased in delivery time is opposite to the customer expectations of on the spot deliveries (Zailani et al., 2012).

**H3:** Lead time management through ERP has significant impact on firm's operational performance.

#### **2.2.5 Inventory Control**

To maintain inventory controls for high organizational performance strong inventory policies are designed by the management, (Croxtton et al., 2001). To maintain minimum usage of inventory, and minimum losses in the inventory the organization applies strict inventory controls in its operational processes. Inventories are a major concern to any level of organization, as an organization invests the highest in the inventory to run the operations. Hence inventory control plays a critical role in the supply chain management of an organization. According to (Sabath et al., 2001), Better management of inventory helps the organization to utilize the same capital in other areas. Hence Inventory control is referred to the coordination of materials accessibility, controlling, utilization and procuring of material.

**H4:** Inventory control through ERP has significant impact on firm's operational performance.

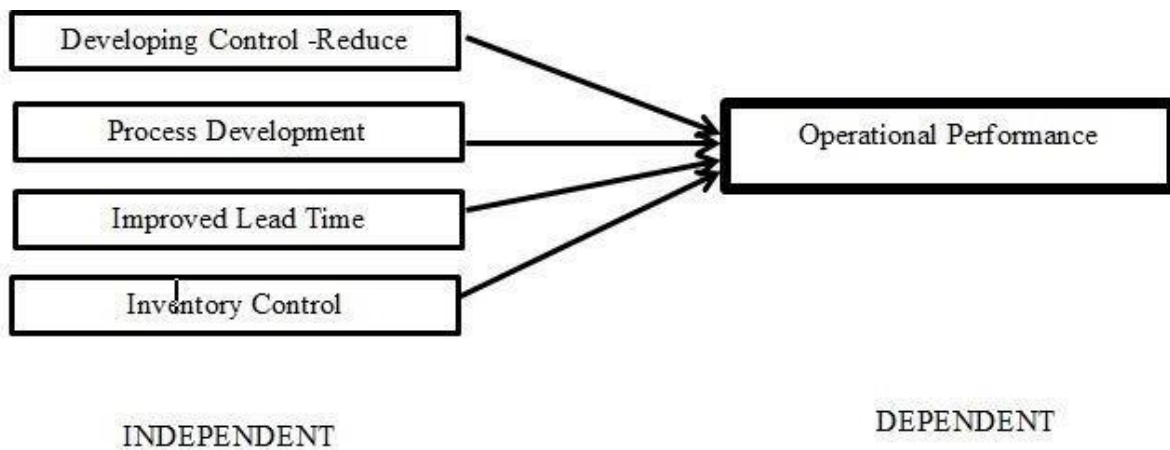
### **3. Research Methodology**

### 3.1 Research Approach

The research approach for this study is deductive research approach which is concerned with “developing a hypothesis based on existing theory, therefore, it uses tests to determine this hypothesis. It also aids in getting conclusion from general statements (Lindlof & Taylor, 2017).

### 3.2 Research Model

Figure 1: Research Framework



The above table shows the research Framework of the study. Developing control consists of 12 items adapted from Rahman (2010), Process Development consists of 5 items adapted from yeyung, (2008), Improved Lead Time consists of 5 items adapted from Qrunfleh (2014), Inventory Control consists of 3 items adapted from Vakilifard et al. (2013) and Operational Performance consists of 6 items adapted from Flynn (2010).

### 3.3 Research Type

The type of research for this study is quantitative research. There are mainly two types of research method qualitative and quantitative research methodology (Creswell, 2011). The usage of these methods is determined based on the scope of the study while, the scope of this research suggest that to use quantitative research methodology. The researcher in this research type is trying to measure the impact of one variable over other which is facilitated by this type.

### 3.4 Research Population and sample

The population of this research has been selected as manufacturing companies in Karachi. The size of the sample was 200 employees working through ERP in manufacturing firms.

### 3.5 Sampling Technique

For this research, non-probability sampling type called convenience sampling has been chosen. Therefore, a convenience sampling method was selected for the data collection process using an online & physical survey.

### 3.6 Research Instrument

The instrument used for this study is questionnaire. A questionnaire is helpful in getting the responses in minimal time within limited cost (Hox, & Boeije, 2005). The scale used for this study is Likert scale while questions are devised in accordance with the research variables. The research instrument i.e. questionnaire is distributed among the respondents to gather data from 200 respondents.

### 3.7 Data Collection

For this research the researcher has used primary data because, it facilitates the preliminary understanding of the impact of ERP implementation of ERP on the SCM operations of the firm. The primary data collection is helpful as it saves time, cost and the degree of accuracy is also higher. The primary data helps researcher in determining the respondents' perspective as it includes data collection directly from respondents through different research instruments.

### 3.8 Data Analyses Method

Since, the research follows a quantitative research methodology and its main reason is to measure the impact thus, to measure this impact this research uses regression testing for its data analysis. The data has been gathered through primary sources while, it has been analyzed through Smart PLS version 3.2.8.

## 4. Results

### 4.1 Respondent Profile

Following table 1 provides descriptive statistics of total 134 respondents.

Table 1: Descriptive Statistics

		Frequency	Percent
Gender	Male	165	82.5
	Female	35	17.5
Year	Less than 1 yeas	12	6



	1 to 5 years	148	74
	6 to 10 years	24	12
	More than 10 years	16	8

The findings from the above table suggest the respondents' profile for this research. The table analyzes the respondents' profile on three basic aspects: 1) Gender, and Years in organization. According to the profiling, 82.5% of the respondents from this research are Male, while 35% of the respondents Female. Secondly, the years in organization shows that, 6% of the respondents having less than 1 years working experience, 74% of the respondents working experience in organization 1 to 5 years, 12% of the respondent have 6 to 10 years while remaining 8% of the respondent more than 10 years working experience in organization.

#### **4.2 Descriptive Profile of Variables**

The following table represents the descriptive statistics of the variables.

Table 2: Descriptive profile of Variables

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Develop Control	200	3.9350	.55568	.721	.172	-.382	.342
Process Develop	200	4.0390	.61069	.168	.172	-1.397	.342
Improved Lead time	200	3.9820	.50213	.907	.172	-.095	.342
Inventory Control	200	4.1217	.61724	.115	.172	-1.260	.342
Operational Performance	200	3.8850	.62145	.756	.172	-.839	.342
	200						

As show in above table the mean of the variable develop control showing 3.935 and standard deviation 0.55568, mean of process develop 4.039 and standard deviation 0.61069, mean of lead time 3.9820 and standard deviation 0.50213, mean of inventory control 4.1217 and standard deviation 0.61724 and mean of operational performance showing 3.8850 and standard deviation 0.62145. Furthermore, the table also showing the skewness and kurtosis value of each variable.

### 4.3 Content validity

Table 3: Factor loading and cross loading

Variables	Items	DC	PD	ILT	IC	OP
Developing Controls	DC1	0.672				
	DC10	0.866				
	DC11	0.628				
	DC12	0.843				
	DC2	0.756				
	DC3	0.529				
	DC4	0.700				
	DC5	0.834				
	DC6	0.531				
	DC7	0.537				
	DC8	0.743				
DC9	0.646					
Process Development	PD1		0.695			
	PD2		0.796			
	PD3		0.771			
	PD4		0.878			
	PD5		0.691			
Improved Lead Time	ILT1			0.703		
	ILT2			0.485		
	ILT3			0.854		
	ILT4			0.641		
	ILT5			0.844		
Inventory Control	IC1				0.831	
	IC2				0.710	
	IC3				0.783	
Operational Performance	OP1					0.615
	OP2					0.797
	OP3					0.794
	OP4					0.595
	OP5					0.849
	OP6					0.798

The above table 3 represents the factors loadings and cross loading of the items. Factor loadings should be greater than 0.50 as suggested by Fornell and Larcker (1981).

#### 4.4 Convergent validity

The following table represents the factors loading, AVE, composite reliability, Cronbach's reliability.

Table 4: Convergent Validity

Variables	Items	Loadings	AVE	Composite Reliability	Cronbach Alpha
Developing Controls	DC1	0.672	0.490	0.918	0.901
	DC10	0.866			
	DC11	0.628			
	DC12	0.843			
	DC2	0.756			
	DC3	0.529			
	DC4	0.700			
	DC5	0.834			
	DC6	0.531			
	DC7	0.537			
	DC8	0.743			
Process Development	PD1	0.695	0.592	0.878	0.835
	PD2	0.796			
	PD3	0.771			
	PD4	0.878			
	PD5	0.691			
Improved Lead Time	ILT1	0.703	0.516	0.837	0.756
	ILT2	0.485			
	ILT3	0.854			
	ILT4	0.641			
	ILT5	0.844			
Inventory Control	IC1	0.831	0.603	0.819	0.700
	IC2	0.710			
	IC3	0.783			
Operational Performance	OP1	0.615	0.559	0.882	0.839
	OP2	0.797			
	OP3	0.794			
	OP4	0.595			
	OP5	0.849			
	OP6	0.798			

AVE values must be greater than 0.50, and CR value should be higher than 0.60 suggested by Fornell and Larcker (1981). Cronbach’s alpha values of 0.7 or higher indicate acceptable internal consistency (Adadan & Savasci, [2011](#)). The findings from the Cronbach alpha table suggest that, scale used for this research is reliable and therefore, the research can be carried out future. The Cronbach alpha is used in order to measure the internal consistency of the research variable (Tavakol, & Dennick, 2011). The findings in this regard have clearly shown that, all the variables have internal consistency which is acceptable for the research or scale.

#### **4.5 Discriminant validity**

Discriminant validity shows the relationship between variables, same variables have stronger relationship comparisons with other variables. Discriminant validity assessed the existence of variance amid research variables constructs which has been shown the separate functionality supported by theory (Hair Jr et al., 2016). The below table shows the relationship among variables used in this study.

Table 5: Discriminant validity (Fornell-Larcker)

Variables	Developing Control	Improved Lead time	Inventory Control	Operational Performance	Process Development
Developing Control	0.700				
Improved Lead time	0.858	0.719			
Inventory Control	0.776	0.645	0.777		
Operational Performance	0.824	0.829	0.655	0.748	
Process Development	0.880	0.770	0.845	0.737	0.769

#### **4.6 Path Analysis**

Table 6: Path analysis

Variables	Original Sample	Sample Mean	Std Dev	T-statistics	P-values
DC	0.386	0.385	0.138	2.798	0.005
PD	-0.033	-0.041	0.136	0.245	0.807
ILT	0.473	0.485	0.107	4.411	0.000
IC	0.078	0.077	0.099	0.785	0.432

The table 6 indicates the results that developing control has p-value less than 0.05 and improved lead time has p-value less than 0.05. The findings shows that developing controls through ERP has significant impact on the SCM operational performance and also lead time management through ERP has significant impact on firm’s operational performance. This provide an evidence the accept of two hypothesis of the study while remaining two process development through ERP and Inventory control through ERP has no significant impact on operational performance.

#### **4.7 Predictive Analysis**

Table 7: Predictive Analysis

Dependent Variable	R Square	R Square Adjusted
Operational Performance	0.737	0.732

The results from the above table provide an evidence to claim that, 73.7% of the total variation in the dependent variable is explained by the model.

### **5 Discussion**

The findings from the research shows that, ERP is tremendous software whose impact can clearly been witnessed in managing the operational performance of the firm. The findings from the statistical test also show that, the ERP has an overall impact of 73.7% on the operational performance of the firm. This suggests that, firms need to use technological advancement like ERP as they have significant influence on the improvement in SCM operations. The results also indicate that, by implementing the ERP the firm can also have the competitive edge over others. The finding shows that developing control the ERP helps the firm in reducing their wastages helping them to improve their Operational performance.

The most important and uncontrollable feature of the firm is controlling its wastages. These wastages normally range from 10 to 15% of the total production on daily basis for a firm. The cost of wastages has been added in the cost of production therefore, it becomes difficult for the firm to compete in the market. The lead time management allows the firm to capitalize on more opportunities streamline performance and, have better turnover ratios for the firm. the lead time management n Pakistani firms is quite ignored because, of the technology system and tools however, the increase in competition and Chinese products have led the firm to implement such

tools which can increase their capacity utilization and therefore, improving the lead time management of the firm.

This study has provided insights into the adoption of ERP practices in Pakistani context and provides further evidence that lean practices are significant in enhancing operational performance. Further evidence needs to be provided through case studies from Pakistani countries on how effectively ERP practices are being implemented and the critical success factors for adoption.

Adopting an ERP software methodology would help organizations aims at continuous elimination of waste in production process, lowering overall production costs; increased productivity output; and shorten production lead time. The above illustrative study target may act as a model for many organizations, which may implement this model to improve and increase the productivity and efficiency of their processes and resources. As similar to Sales Management module, the architecture of other modules on ERP concept may be developed and implemented as future work.

## **6 Conclusion**

The research is carried out to determine the impact of ERP implementation in improvement of Supply chain at Manufacturing Sector. The research undermines a detail investigation of How ERP is working to improve the performance a firm. However, our research is quite specific with improving the SCM performance. The identified problem for the research I basically related to process issues, control management issues etc. However, ERP has come up with solutions for it. Previous researches have clearly documented the fact that, ERP is based on best practices and therefore, its being's revolution to the firms.

The research uses a quantitative research method with deductive approach however, for the purpose of collecting data for the study primary source is selected which is, questionnaire for this study. The analysis of the data is performed with the help smart PLS. The findings from the test shows that, the variables and scale of research are reliable and valid for the study however the test shows that, 73.7% of the variation in the SCM is brought through ERP implementation having the factors (Process development, control development, improving lead time and inventory control). In conclusion, the research identifies that, developing control for reducing wastage and improve lead time through ERP have significant impact on operational performance.

## 7 Recommendations

Since, ERP's are meant to be the performance enhancers in affirm especially when it is related to service industry. The capabilities of CRM could help the firm in defining a better way to tantalize the customer needs and demands. There are several ways using technology, a firm can enhance its performance pace. The lead time is most important factor in the manufacturing industry the higher the lead time it becomes difficult for the firm to manualize the market demand. The demand for switch gears increases because local construction and housing sector is also expanding. There are multiple brands available in the market and competition from Chinese brands has been the major obstacle therefore, lead time reduction will help the firm in improving their time to market ratio. This ratio will allow the availability of material in the market. Currently, the SCM operations didn't have proper documented process, a process which have better transparency & store management. Currently the process lacks Quality assurance, transparency and other related issues however; the implementation of ERP allows processes to be agile and documented assuring transparency and proper reporting. This will allow the users to entail maximum benefit and again increase the time to market ratio.

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## Appendices

### QUESTIONNAIRE

#### TO DETERMINE THE IMPACT OF ERP IMPLEMENTATION IN IMPROVING THE SCM OPERATIONS IN MANUFACTURING SECTOR

Dear respondents please fill in answers to all the questions below. Be as honest as possible. All information given will be strictly confidential. All data collected is for academic purpose only.

#### Part I: Demographic Information

Name:		Gender
		<input type="checkbox"/> Male <input type="checkbox"/> Female
Organization:		Designation:
Years in Organization:	<input type="checkbox"/> Less than 1 <input type="checkbox"/> 1 to 5 <input type="checkbox"/> 6 to 10 <input type="checkbox"/> More than 10	

**Please indicate your agreement/disagreement with the following statements using the scale given below:**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

**Part II: Instruments of factors affecting ERP:**

		1	2	3	4	5
	<i>Developing control</i>					
1	Our company is reducing production lot size					
2	Our company is reducing setup time					
3	Our company is focusing on single supplier					
4	Our company is implementing preventive maintenance activities					

5	Our company is cycle time reduction					
6	Our company is reducing inventory to expose manufacturing, distribution and scheduling problems					
7	Our company is using new process equipment or technologies					
8	Our company is using quick changeover techniques					
9	Our company is continuous/one piece flow					
10	Our company is using pull-based production system/kanban					
11	Our company is removing bottlenecks using error proofing techniques/ Poka yoke					
12	Our company is eliminating waste					
	<i>Process Development</i>					
13	Evaluate the reliability of your process development.					
14	Evaluate the responsiveness of your processes.					
15	Evaluate the flexibility of your processes.					
16	Evaluate the performance of your processes in controlling cost.					

17	Evaluate the performance of your processes in resource managing.					
	<i>Improved lead time</i>					
18	Improve the efficiency of operation between our suppliers and us					
19	Manage inventory between our suppliers and us					
20	Manage material requirements planning of our facility					
21	Manage production control between our suppliers and us					
22	Coordinate (production and information) efficiently across suppliers and product lines					
	<i>Inventory Controls</i>					
23	Decreased excess time spent for taking of inventory					
24	Decreased stagnant goods in warehouse					
25	Rapid access to inventories for warehouse keeper					

**Part III: Instruments of Operational performance:**

	<i>Operational performance</i>	1	2	3	4	5
26	Our company can quickly modify products to meet our major customer's requirements.					
27	Our company can quickly introduce new products into the market.					
28	Our company can quickly respond to changes in market demand.					
29	Our company has an outstanding on-time delivery record to our major customer.					
30	The lead time for fulfilling customers' orders (the time which elapses between the receipt of customer's order and the delivery of the goods) is short.					
31	Our company provides a high level of customer service to our major customer.					