

## **Comparative Study on E-Commerce With ERP On Specific Reference To Online Shopping**

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**ABSTRACT:** A system related administration which is much concern that is incorporated with ERP Business software. It comprises of one application, one user interface, one database for the entire process, while dissimilar system governed sales, distribution, manufacturing, and finance. Among the organizations, an E-dealing is used for clientele transaction with the sustenance of communication and network information, particularly utilizing cyberspace covering like e- chain armor and web services, effectively arrived to global client. Adoption of Cyber trading results, specifically wo-way businesses (B2B) outcome is easily understood by the traditional ERP Business software of the smallest, size medium and out-sized industries. Integration of ERP which is functioned inside around all the areas of organization was designed by the standard ERP Business software's and it also introduces package solutions with a Web-interface need to extend SCM, Net -enabled CRM, and various pattern of Internet -business organization. The contemporary ERP Business software's are completely incorporated with Cyber dealing supply chain solutions likee-procurement, seller -oriented marketplaces, exchanges and auction, etc. The part of research in several fields, whereas the increasing connection of ERP in Cyber dealing and its reactions in society has focused the attention of this investigation in analyzing the data which will give the outline about of Non-ERP and ERP Business software. The analysis were executed as suggested, for observed outcomes it clearly denotes that there is a major relationship amongst the ERP integrated system software's and Cyber dealing in the industry that helps in promoting productivity and assists to offer consistent and efficient service to its business traders while making sure to accomplish similar from the vendors. Finally, from the outcome there will be unanimous elevation that was done by the technical part along within the management innovations. The effective integration of Cyber dealing and ERP takes full advantage of the responsibility of enterprise to dynamic market, encounter the distinct requirements for the users and grow the enterprises to achieve further economic benefits in the environment that is much economical within new market.

**KEYWORDS:** Business and Customer (B2C), E-Commerce, Enterprise resource planning (ERP),

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### **I. INTRODUCTION**

The E-Dealing, which is a main potency of administrations, needs their Business software's to unite more firmly with suppliers and customers via this channel of which certain styles are noticeable. Initially, small and middle-sized enterprises (SMEs) are flattering purposes of ERP sellers. Subsequently, ERP fixed with Cyber dealing operationally will dictate the shop as it is flattering a novel method of doing business between business and business (B2B) and between business and customer (B2C). Aimed at the intervening time, Cyber dealing centered ERP schemes are commercially offered. The utmost regular manner of implementing this procedure for ERP users is edict handling in the progression of telephone interaction with the customer. Certain ERP schemes also need necessities which agree on the customer to residence an order through the internet.

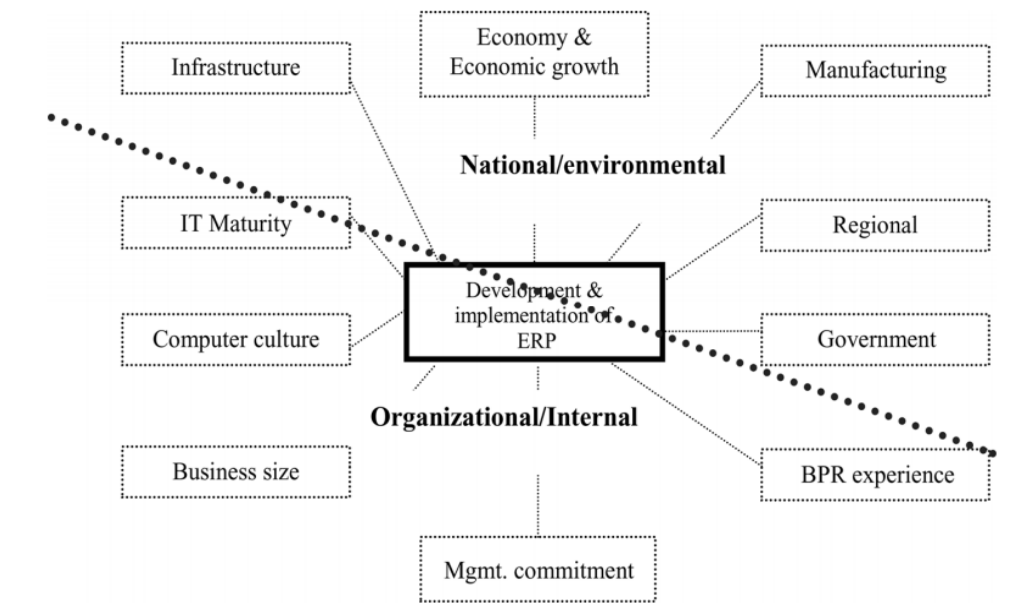
ERP and E-Dealing systems are significant to recognize that cyber dealing tackles and ERP groups are two diverse schemes, which assist dissimilar resolutions and are expected for a diverse assembly of users (Blakeley, C. J., & Matsuura, J. H, 2004; Rodriguez et al, 2008). When assimilating an electronic business key, corporations possessing a commercial ERP Business software have to rely on their vendor who often can provide integration support for cyber dealing tools, which are however limited to a certain type and brand of software. One of the aspects that should be kept in mind during the ERP and cyber dealing integration is that the Internet never sleeps. This means that the cyber dealing tool should be fully functional and continuously available to the customers on the internet even when the ERP Business software is undergoing maintenance otherwise it is not available. The scope of your commercial and the projected quantity of web-transaction in a given timeframe completed by the cyber dealing instrument is the imperative factor. Businesses can select

among commercial or open-source, ETL or data connectors. Every tactic is actually specific and has its personal set advantages and disadvantages (Balbale et al, 1999).

Simplifying finding procedure is done cyber dealing in the B2B market of Iran. Novel skills improvements shared with the increase of cyber dealing which stretches raise tremendous openings for a group of wealth. For great companies, in particular, E-Purchasing may even be the greatest significant component of cyber business for operational excellence. Cyber dealing supports a system of supply chain associates to recognize and reply rapidly to altering client request. EC emphasizes on the procedure increase of inter-organizational transactions. Not every company would adopt EC fully while migrating their procurement functions onto the Internet, corporations possibly will not essentially require to implement all four phases or start from the first phase, depending on the current systematic necessities of the companies. Receiving distribution data announcement, search for trailers and order following are procurement sub-processes where respondents see high possibilities to simplify them by Cyber dealing (Bankole et al, 2017; Park et al, 2004). Complete Cyber dealing monitoring procedures and tracking the goods in their supply chain including transportation are said to make the processes to go more rapid and with higher speed. The ERP in the corporations supports to get a right planning which is a widely accepted method for cyber dealing increase (Hasselbring, W., &Steinacker, G, 2017; Zhang et al, 2010).

Huang and Palvia (2001)100, proposed ten factors (at the national/environmental and organizational level) concerning ERP implementation by making a comparison of advanced and developing countries. The national/environmental factors identified by them are economy and economic growth, infrastructure, regional environment, government regulations, and manufacturing strengths. They also noted that information technology maturity, computer culture, business size, business process re-engineering experience, and management commitment are the organizational level factors.

Figure 1 - Framework for ERP Implementation



## II. ERP AND E-COMMERCE

E-Commerce is the entire transformed process towards selling products at a comparatively low price above an electronic medium typically the Internet. However, partaking an active e-commerce storefront incorporated with an ERP system are going to be investigated in this study. Maximum of trade owners use e-commerce platform and ERP system distinctly, making storage tower of evidence and missing out on welfares of an integrated system. Straight from the ERP system by receiving an e-commerce fact without human interface will provide numerous benefits.

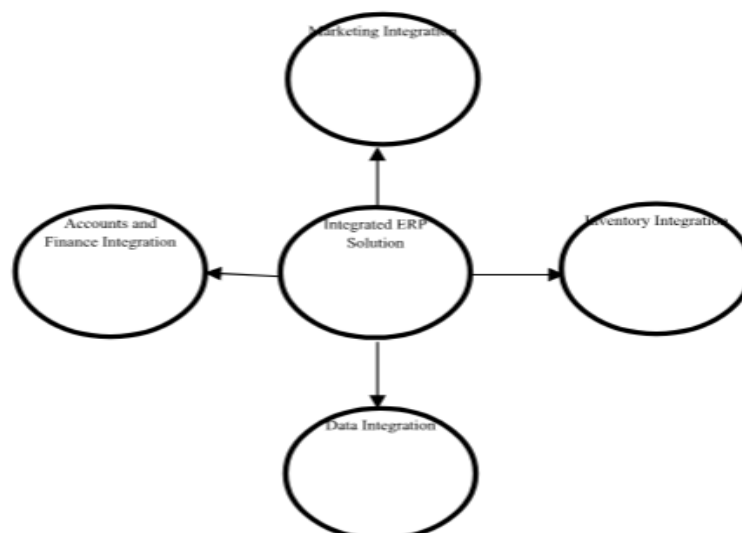
### Profits of having an Integrated ERP system with E-Commerce are:

- Increases Self- Service Functionality: – The accessibility of real-time data from the ERP system on to storefront, permits customers to take available sight inventory, newest order position, and path deliveries with tracking numbers. This assistance in decreasing the cost of actions and progresses customer practice with a storefront.

- Decrease inventory cost by having adequate sales information: – All web sales data will rapidly seem into ERP system. ERP product Inventory will also be reorganized through these web dealings. So with record up to date web sales info and inventory, ERP user can correctly plan purchase and therefore reduces the inventory cost.
- Produce economic reports in ERP, based on Web Transactions: – E-Commerce applications are smart to produce financial reports on deals. However, the addition of ERP offers merchant aptitude to create a Balance Sheet, P/L Statement, Trial Balance, Cash Flow and so on, which gives the clarity of financial information across the organization.
- Enlarged interior productivity: – Because integrated system rationalizes numerous business processes, it consumes small human resource contribution in these processes. Web sales guidelines will be combined with the ERP system in real time; back-office ERP operator can promptly track the order and start the additional processing. Thus the order contentment cycle is condensed over this integration.
- Reduced Human Involvement, Data Redundancy, and Error: –web guidelines, with integration, payment, web customer particulars and delivery info will be combined to ERP system, Inventory particulars, and similarly Item can be uploaded from ERP to e-commerce portal, so in any way, this integration will remove the essential of recurring the information. Thus integration solution will decrease data redundancy, human involvement, and mistake over two stages.
- Rise in Customer Satisfaction: – Comfort of receiving record, up to date product information, inventory accessibility detail, order tracking feature, etc. in the web from customer satisfaction and ERP system level is highly on the increase, thereby decreasing working annoyance for the business.
- Better Control of Business: – Integration of e-commerce and ERP business processes provides the business owners with better control of their business receiving a modest advantage.

#### **Variation of E-Commerce system**

**Stevens, T. (1997)** Emphasizes the significance of incorporating of ERP and E-Business. E-Business change is very much characterized here as an authoritative activity to display an e-business venture “to accomplish huge (leap forward) improvements in introduction (eg. quality, readiness, cost, adaptability, satisfaction, estimation of investor and additional measures of basic e-business) through changes in affiliations among administration, data, innovation, hierarchical structure, and individuals” (**Hesterbrink, 1999**). Arranging and overseeing such frameworks requires a coordinated multi-dimensional approach over the e-business and the improvement of new business process models (**Guha, et al, 1997**). Know that internet business apparatuses and ERP suites are two distinct frameworks, which fill diverse needs and are gone for an alternate gathering of clients. Both have their own particular extraordinary work processes and usefulness, which are best to be contained inside a suitable gathering of topic masters, e.g. showcasing groups for internet business and activity groups for ERP. Coordination of E-Business into ERP will prompt better outcome. Potential advantages of an ERP framework is that it contains efficiency and quality improvements in key zones, similar to item unwavering quality, client benefit and also learning administration. Subsequently, ERP frameworks are unsurprising to enhance, advertise esteem and execution of firm through proficiency and in addition adequacy picks up. From the near investigation it is plainly gotten that the ERP based frameworks can give better efficiency, administration and different advantages to the association than the Non-ERP based frameworks.



The incorporation of E-Trade with the ERP expanded the convenience of the ERP and E-Commerce. It additionally expanded the development of E-Business ventures in light of the money related and creation systems.

#### **Future scope of ERP**

This segment will give the point by point investigation of future ERP administration objectives, the ebb and flow look into ERP comprising of the accompanying segment. Routinely the ERP frameworks have essentially centered around the help of key business methodology and capacities bringing about an institutionalized method for maintaining the business. As it were, they have been prevailing with regards to doing that. In any case, these days, they require to accentuate on the best way to help the basic leadership system, also educated choices can have far progress outcomes, influencing all business see. There are various basic leadership models; remarkable between them is Simon's basic leadership demonstrates. Beginning with knowledge stage, the plan stage, the decision stage taken after the usage segment.

A choice execution is just viewed as fruitful when it really settles its anticipated issue and satisfies the targets that were fundamentally set for it. Be that as it may, it merits proclaiming that by and large, half or a greater amount of the choices settled on by the individual chiefs were observed to be a disappointment, regardless of successfully following the basic leadership strategy. Hence, another pattern in basic leadership is to incorporate the group achieving the purported swarm sourcing. This will enhance the knowledge and in addition the decision periods of the basic leadership process. Coordinating the jam into ERP to encourage the basic leadership process is a since a long time ago sat tight for ERP upgrade.

#### **Advantages of ERP implementation in Future**

ERP can upgrade worker fulfillment through taking out excess and additional monotony from everyday activities. It allows extra time for esteem included obligations, which all together would prompt an all the more fulfilling activity for resources. Staffs can turn out to be more associated with settling on of choices and, with the correct preparing and also direction, can transform into approved to influence those judgments without the nearby, by being aware of eye of their director. In the event that laborers are gone up against and not drained on the calling, they will be more plausible to remain with that calling, develop into more educated, and subsequently transform into extra quality to the organization.

This experience and additionally information underpins the organization to pick up a prudent advantage through lower turnover and lower preparing spending plans. Turnovers and additionally preparing are huge consumptions to organizations, especially with the specialized aptitudes that are obligatory to carry out various employments. With benefits like enhancing the fulfillment of worker and also drawing out focused advantage, the use of coordinated frameworks is getting to be predominant in various enterprises, including the assembling business. ERP frameworks, consolidating this well basic leadership, focus on the elements of center business that have a long history of achievement. It accomplishes those basics and conveys a uniform path for organizations to fuse them into their individual professional workplace.

### **III. STATEMENT OF THE PROBLEM**

An investigation research is a scientific way to progress or develop new approaches for gathering data and analyzing it. This study is intended to response specific questions on how they contribute, compare, and implement the Business integrated management in Cyber dealing and also to state that ERP implementation is useful for such businesses. Mainly on the basis of this fact the process adopted for the data gathering and study consequences have been determined. The methodology adopted has also assisted to choose the process of data gathering. So, to an extent the majority of facts and moreover the competence of the data composed is analyzed by the method of data assortment. Further, the examination of the data is extra significant part of the investigation. In fact, the data study is measured to be one of the maximum vital aspects of the study as the procedure to an excessive extent influences the conclusive results or the consequences of the investigation. An exploration study is also essential to be subsequent to a proper design. Depending on the project of the study, the method by which the investigation has to be conducted gets determined. Also, the investigation ethics are exact significant as the investigator has to convey out the investigation study by maintaining the approved norms.

### **IV. RESEARCH METHODOLOGY**

This part provides the research with the entire process formulated to determine the focused objective. Other related term for this methodology is stated as it is a skeletal structure for processing out the research study. Methodology with perspective to numerous investigations is considered to be the deciding factor behind the success and effectiveness of the research study.

It is an estimated method of integrated Material related Planning Requirements commonly known as (MRP) and Computer Integrated software Manufacturing (CIM) system. It is a wide establishment of

accomplishments that helps the business to manage its business procedures and facilitate smooth functioning. It mainly focuses on automating numerous back office purposes like service, resource based on human and technological equipment. Software applications of ERP support dealing to cope and associate data from all the core areas of organization with goal of improving definite conclusion forming. ERP software solutions encourage prominence throughout entire organization, letting choice creators to develop business processes such as order management, inventory management, accounting, chain of supply, lifecycle based product, resources based on manpower and management relationship with customer. ERP software needs to function as one of its main point for handling all significant features of a trade.

It is certainly not possible for a single researcher to collect data from all the people who are concerned with the subject matter and can provide valuable and authentic information on the same. Tackling the large data will be difficult and at times due to the complications caused because of generating data in large amount the researcher may not at all land on to the perfect inferences. Therefore, it becomes essential to find out the means or sampling techniques that would help the researcher to assess data and come out with the right outcomes based on data gathered from the less numbers. There are a variety of sampling methods that are developed so as to ensure optimal level of data efficacy. When its sample edges are quite small a usually occurring process considered as probability sampling is applied with a definite possibility of selecting every individual from its population. A sample centred on the discrete probability that would be selected by the Random process was used to adopt on. In this research Stratified Random Sampling technique was primarily used. For analyzing the randomly collected data which is collected from the employers at various categories of e-governance the sample is separated into groups. Data are stored and examined in tables in the procedure of rows and columns along with proper configuring of the data. The lost variables in research are disregarded as the sample size was very large, examination of imperfect data has been done in difficult periods of the research.

### V. OBJECTIVE OF RESEARCH

- Illustrating the evolution of E-Commerce in the context of Industries as per the Present generation.
- Defining the influence of E-Commerce on the environment of ERP based Industries and addressing its success factors.

#### Analysis & Interpretations

**Enhance production Non-ERP through Data integrity**

Variables		Enhance production Non-ERP			Total
		NA	Strongly Agree	Agree	
Data integrity	NA	0	31	96	127
	Strongly Agree	146	0	0	146
	Agree	223	0	0	223
	Neutral	4	0	0	4
Total		373	31	96	500

Chi-Square Tests	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	500.000 <sup>a</sup>	6	.000
Likelihood Ratio	566.687	6	.000
Linear-by-Linear Association	333.245	1	.000
N of Valid Cases	500		
a. 3 cells (25.0%) have expected count less than 5. The minimum expected count is .25.			

The above investigation specifies that Data integrity ERP and Enhance production Non-ERP is completely associated. The p-value lies to be < 0.05 at 5% level of significant therefore the null hypothesis was rejected and concluded. Hence it can be specified that there is an association between Data integrity ERP and Enhance production Non-ERP.

The p-value is less than 0.05 at 5% level of significant therefore we conclude that the null hypothesis is rejected. Hence we determine that there is a correlation between Data integrity ERP and Enhance production Non-ERP.

**Enhance production Non-ERP through Tool support**

Variables		Enhance production Non-ERP			Total
		NA	Strongly Agree	Agree	
Tool support	NA	0	31	96	127
	Strongly Agree	164	0	0	164
	Agree	201	0	0	201
	Neutral	8	0	0	8
Total		373	31	96	500

Chi-Square Tests	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	500.000 <sup>a</sup>	6	.000
Likelihood Ratio	566.687	6	.000
Linear-by-Linear Association	318.501	1	.000
N of Valid Cases	500		

a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is .50.

The above investigation specifies that Tool support ERP and Enhance production Non-ERP is completely associated. The p-value was found to be < 0.05 at 5% level of significant therefore we conclude that the null hypothesis is rejected. Hence it can be stated that there is a relationship between tool support ERP and Enhance production Non-ERP.

**Enhance production Non-ERP through Innovative uses**

Variables		Enhance production Non-ERP			Total
		NA	Strongly Agree	Agree	
Innovative uses	NA	0	31	96	127
	Strongly Agree	174	0	0	174
	Agree	192	0	0	192
	Neutral	7	0	0	7
Total		373	31	96	500

Chi-Square Tests	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	500.000 <sup>a</sup>	6	.000
Likelihood Ratio	566.687	6	.000
Linear-by-Linear Association	315.247	1	.000
N of Valid Cases	500		

a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is .43.

The above analysis indicates that Innovative uses of ERP and Enhance production Non-ERP are positively correlated. The p-value was found to be < 0.05 at 5% level of significant therefore we conclude that the null hypothesis is rejected. Hence it can be stated that, there is a relationship between Innovative uses of ERP and Enhance production Non-ERP.

**Enhance production Non-ERP and ERP**

Variables		Enhance production through Non-ERP			Total
		NA	Strongly Agree	Agree	
Enhance production through ERP	NA	0	31	96	127
	Strongly Agree	275	0	0	275
	Agree	98	0	0	98
Total		373	31	96	500

Chi-Square Tests	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	500.000 <sup>a</sup>	4	.000
Likelihood Ratio	566.687	4	.000
Linear-by-Linear Association	312.486	1	.000
N of Valid Cases	500		

a. 0 cells (0.0%) have expected count less than 5. The least count is 6.08.

The above analysis indicates that Enhance production ERP and Enhance production Non-ERP are positively correlated. The p-value was found to be < 0.05 at 5% level of significant therefore we determine that the null hypothesis is rejected. Hence it shows that, there is a relationship between Enhance production ERP and Enhance production Non-ERP.

**Enhance production and business enhancement**

Variables		Enhance production			Total
		NA	Strongly Agree	Agree	
Enhancement Business	NA	0	31	96	127
	Strongly Agree	200	0	0	200
	Agree	173	0	0	173
Total		373	31	96	500

Chi-Square Tests	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	500.000 <sup>a</sup>	4	.000
Likelihood Ratio	566.687	4	.000
Linear-by-Linear Association	317.064	1	.000
N of Valid Cases	500		

a. 0 cells (0.0%) have estimated count less than 5. The least predictable count is 7.87.

The above analysis indicates that Enhance business ERP and Enhance production Non-ERP are positively correlated. The p-value lies to be < 0.05 at 5% level of significant therefore we accomplished that the null hypothesis is rejected. Hence it is specified that, there is an association between Enhance business ERP and Enhance production Non-ERP.

**Enhance production ERP and Customer benefits**

Variables		Enhance production			Total
		NA	Strongly Agree	Agree	
Customer benefit	NA	0	31	96	127
	Strongly Agree	123	0	0	123
	Agree	250	0	0	250
Total		373	31	96	500

Chi-Square Tests	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	500.000 <sup>a</sup>	4	.000
Likelihood Ratio	566.687	4	.000
Linear-by-Linear Association	352.114	1	.000
N of Valid Cases	500		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.63

The above analysis indicates that Customer benefit ERP and Enhance production Non-ERP are positively correlated. The p-value was found to be < 0.05 at 5% level of significant therefore we conclude that the null hypothesis is rejected. Hence it can be stated that, there is a relationship between customer benefit ERP and Enhance production Non-ERP.

**Designation of Employee and successful deployment**

Variables		Designation ERP					Total
		NA	An executive manager	Project leader	Financial or technical specialist	Consultant	
Successful Deployment	NA	127	0	0	0	0	127
	Strongly Agree	0	41	63	45	57	206
	Agree	0	45	43	49	30	167
Total		127	86	106	94	87	500

Chi-Square Tests	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	511.427 <sup>a</sup>	8	.000
Likelihood Ratio	575.274	8	.000
Linear-by-Linear Association	175.372	1	.000
N of Valid Cases	500		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 21.84.

The above analysis indicates that designation of the employee and ERP successfully deployed are positively correlated. The p-value was found to be < 0.05 at 5% level of significant therefore we conclude that the null hypothesis is rejected. Hence it can be stated that, there is a significant impact of a designation of an employee in the successful deployment of ERP.

**Enhancement of E-Commerce in ERP based industries**

Variables	Purchase online	N	Mean	Std. Deviation	Std. Error Mean
Enhance business	Yes	430	1.09	.785	.038
	No	70	1.11	.671	.080
Enhance finance	Yes	430	1.13	.807	.039
	No	70	1.26	.736	.088
Enhance production	Yes	430	.93	.683	.033
	No	70	.99	.577	.069
Enhance logistics	Yes	430	.84	.589	.028
	No	70	.94	.535	.064
Customer benefit	Yes	430	1.19	.830	.040
	No	70	1.60	.769	.092
Production process	Yes	430	1.18	.880	.042
	No	70	1.16	.694	.083
Service satisfaction	Yes	430	.77	.502	.024
	No	70	1.06	.634	.076

**Independent sample Test for Enhancement of E-Commerce in ERP based industries**

Variables		Levene's Test for Equality of Variances and t-test for Equality of Means								
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% CI Lower Upper	
Enhance Business	Equal variances assumed	6.298	.012	-.261	498	.794	-.026	.099	-.221	.169
	Equal variances not assumed			-.292	102.371	.771	-.026	.089	-.202	.150
Enhance finance	Equal variances assumed	1.206	.273	-1.212	498	.226	-.125	.103	-.327	.077
	Equal variances not assumed			-1.295	98.058	.198	-.125	.096	-.315	.066
Enhance production	Equal variances assumed	7.318	.007	-.589	498	.556	-.051	.086	-.220	.119
	Equal variances not assumed			-.665	103.192	.508	-.051	.076	-.202	.101
Enhance logistics	Equal variances assumed	6.214	.013	-1.410	498	.159	-.106	.075	-.253	.042



	Equal variances not assumed			-1.509	98.218	.134	-.106	.070	-.245	.033
Customer benefit	Equal variances assumed	6.066	.014	-3.885	498	.000	-.412	.106	-.620	-.203
	Equal variances not assumed			-4.106	97.114	.000	-.412	.100	-.611	-.213
Production process	Equal variances assumed	11.790	.001	.241	498	.810	.027	.110	-.190	.244
	Equal variances not assumed			.285	108.636	.776	.027	.093	-.158	.211
Service satisfaction	Equal variances assumed	.223	.637	-4.267	498	.000	-.287	.067	-.420	-.155
	Equal variances not assumed			-3.610	83.657	.001	-.287	.080	-.446	-.129

From table, the mean value of the score, for Enhance business is 0.12, Enhance production is 0.007, Enhance logistics is 0.013, customer benefit is 0.014, and production process is 0.001 which is significantly different from the test value of purchase over online. Hence we conclude that purchase over online is significantly connected to these variables.

**Paired sample T test**

The paired t-test also termed as the paired-sample t-test or dependent t-test, helps to determine whether the mean of a dependent variable is the same in two related groups.

**Descriptive statistics for ERP, Non-ERP and E-Commerce in industries**

Variables		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Reason non deployment	1.84	500	.896	.040
	Past 10years	.38	500	.693	.031
Pair 2	Not using modules	1.25	500	.988	.044
	using product	2.34	500	1.211	.054
Pair 3	Specific ERP implement	1.32	500	1.069	.048
	Service satisfaction	.81	500	.531	.024
Pair 4	Technical restrict	1.43	500	.869	.039
	Effective communication	1.17	500	.816	.036
Pair 5	Trust online	2.15	500	.668	.030
	Prefer payment	1.62	500	.611	.027

**Paired samples correlations for ERP, Non-ERP and E-Commerce in industries**

Variables	N	Correlation	Sig.
Pair 1 Reason non deploy & past 10years	500	-.010	.819
Pair 2 Not using modules & using product	500	-.141	.002
Pair 3 Specific ERP implement & service satisfaction	500	.695	.000
Pair 4 Technical restrict & effective communication	500	.799	.000
Pair 5 Trust online & prefer payment	500	.172	.000

Paired sample Test for ERP, Non-ERP and E-Commerce in industries

Variables		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Reason non deploy – past 10 years	1.460	1.138	.051	1.360	1.560	28.688	499	.000
Pair 2	Not using modules – using product	-1.092	1.668	.075	-1.239	-.945	-14.642	499	.000
Pair 3	Specific ERP implement service satisfaction	.508	.797	.036	.438	.578	14.253	499	.000
Pair 4	Technical restrict – effective communication	.266	.536	.024	.219	.313	11.087	499	.000
Pair 5	Trust online – prefer payment	.534	.824	.037	.462	.606	14.499	499	.000

- From Pair 2  $t(499) = -14.642$ ,  $p < 0.0005$ . Due to the means of the not using modules and product utilized by the company of the t-value, we can conclude that there was a statistically significant improvement in using a product by the company from  $1.25 \pm .988$  to  $2.34 \pm 1.211$  ( $p < 0.0005$ ); an improvement of  $1.09 \pm 1.66$ .
- From Pair 3  $t(499) = 14.253$ ,  $p < 0.0005$ . Due to the means of the specific ERP implement and service satisfaction level of the t-value, we can conclude that there was a statistically significant service satisfaction level from  $1.32 \pm 1.069$  to  $.81 \pm .531$  ( $p < 0.0005$ ); an improvement of  $0.508 \pm .797$ .
- From Pair 4  $t(499) = 11.087$ ,  $p < 0.0005$ . Due to the means of the Technical restrict and effective communication of the t-value, we can conclude that there was a statistically significant improvement in effective communication from  $1.43 \pm .869$  to  $1.17 \pm .816$  ( $p < 0.0005$ ); an improvement of  $2.66 \pm .536$ .
- From Pair 5  $t(499) = 14.499$ ,  $p < 0.0005$ . Due to the means of the trust online and prefer payment of the t-value, we can conclude that there was a statistically significant improvement in payment preference by the users from  $2.15 \pm .668$  to  $1.62 \pm .611$  ( $p < 0.0005$ ); an improvement of  $.534 \pm .824$ .

VI. CONCLUSION

The ERP is an evaluated form of combined Computer Integrated Manufacturing (CIM) and Material Requirements Planning (MRP) system. It's a wide activities' set that helps the organization to manage its business procedures and facilitate smooth functioning. It majorly focuses on automating several internal operation purposes like service, technology, and human resource. Enterprise Resource Planning (ERP) software applications support commerce to manage and associate information from all the core areas of organization with the goal of improving definite conclusion forming. ERP software solutions encourage prominence throughout entire organization, letting the choice makers to develop business processes like inventory management, supply chain, accounting, human resources, order management, product lifecycle, and customer relationship management (CRM) amongst others. In a gist ERP software must serve as the focussing point for managing all main features of a business. With the integration of E-Commerce and ERP, there will be improvement in the technical and the management innovations. The effective integration of E-Commerce and ERP takes full advantage of the responsibility of enterprise to dynamic market, encounter the distinct requirements for the users and grow the enterprises to yield further economic benefits in the competitive world of new market. Enterprises must integrate the strategy on their original position in market, and aggressively improve the strategies to integrate E-Commerce and ERP, thus leading to development in business management. As per the analysis performed, the outcomes show that a significant relationship prevails between the integration of ERP and E-Commerce in the industry to enhance productivity and to provide consistent and efficient service to the customers while ensuring to obtain the same from the vendors.

## REFERENCES

- [1]. Abugabah, A., &Sanzogni, L. (2010). Enterprise resource planning (ERP) system in higher education: A literature review and implications. *International Journal of Human and Social Sciences*, 5(6), 395-399.
- [2]. Adenwala, M. (2014). *IMPACT-OF-E-Commerce-ON-BUSINESS PERFORMANCE A-STUDY-WITH-RESPECT-TO-TRAVEL-INDUSTRY*. DY Patil University.
- [3]. Agarwal, A. S., &Bhatawal, D. P. H. (2015). M-Commerce in India: Promise and Problems. *IJRCCCT*, 4(4), 273-276.
- [4]. Ailisto, H. J., Lindholm, M., Mantyjarvi, J., Vildjiounaite, E., &Makela, S. M. (2005, March). Identifying people from gait pattern with accelerometers. In *Proc. SPIE (Vol. 5779, pp. 7-14)*.
- [5]. Aladwani, A. M. (2001). Change management strategies for successful ERP implementation. *Business Process management journal*, 7(3), 266-275.
- [6]. Arvidsson, J., &Kojic, D. (2017). Critical Success Factors in ERP Implementation: The Perspective of the Procurement System User.
- [7]. Blakeley, C. J., & Matsuura, J. H. (2004, April). The use of e-government to encourage e-commerce development. In *Information and Communication Technologies: From Theory to Applications, 2004. Proceedings. 2004 International Conference on (pp. 15-16)*. IEEE
- [8]. Bankole, O. A., Lalitha, V. M., Khan, H. U., &Jinugu, A. (2017, January). Information technology in the maritime industry past, present and future: focus on lng carriers. In *Advance Computing Conference (IACC), 2017 IEEE 7th International (pp. 759-763)*. IEEE.
- [9]. Biagi, F., & Falk, M. (2017). The Impact of ICT and E-Commerce Activities on Employment in Europe (No. 285). The Ratio Institute.
- [10]. Chou, S. W., & Chang, Y. C. (2008). The implementation factors that influence the ERP (enterprise resource planning) benefits. *Decision support systems*, 46(1), 149-157.
- [11]. De Sousa, J. M. E. (2004). Definition and analysis of critical success factors for ERP implementation projects. *Universitat Politècnica de Catalunya*.
- [12]. Elangovan, N. (2016). Mediation of Perceived Innovation Characteristics on ERP Adoption in Industrial Cluster. *International Journal of Innovation and Technology Management*, 13(03), 1640003.
- [13]. Gunasekaran, A., Marri, H. B., McGaughey, R. E., &Nebhwani, M. D. (2002). E-Commerce and its impact on operations management. *International journal of production economics*, 75(1), 185-197.
- [14]. Haddara, M. (2013). ERP systems in SMEs: Exploring ERP lifecycle cost issues (Doctoral dissertation, Doctoral dissertation/M. Haddara).
- [15]. Hasselbring, W., &Steinacker, G. (2017, April). Microservice architectures for scalability, agility and reliability in e-commerce. In *Software Architecture Workshops (ICSAW), 2017 IEEE International Conference on (pp. 243-246)*. IEEE.
- [16]. Jamil, M. Y., &Qayyum, M. R. (2015). Enterprise resource planning (ERP) implementation in Pakistan enterprises: Critical success factors and challenges. *Journal of Management and Research*, 11(2), 1-17.
- [17]. Stevens, T. (1997). Kodak focuses on ERP. *Industry Week*, 246(15), 130-135.
- [18]. Nemat, S. A., &Mangaladurai, D. (2014). Impact of Enterprise Resource Planning in Supply Chain Management.
- [19]. Saleh Shatat, A., & Mohamed Udin, Z. (2012). The relationship between ERP system and supply chain management performance in Malaysian manufacturing companies. *Journal of Enterprise Information Management*, 25(6), 576-604.
- [20]. Stratman, J. K., & Roth, A. V. (2002). Enterprise resource planning (ERP) competence constructs: two-stage multi-item scale development and validation. *Decision Sciences*, 33(4), 601-628.
- [21]. Yamato, Y., Fukumoto, Y., &Kumazaki, H. (2017). Proposal of shoplifting prevention service using image analysis and ERP check. *IEEJ Transactions on Electrical and Electronic Engineering*, 12(S1).
- [22]. Zeng, Y. R., Wang, L., & Xu, X. H. (2017). An integrated model to select an ERP system for Chinese small-and medium-sized enterprise under uncertainty. *Technological and Economic Development of Economy*, 23(1), 38-58.

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