

"ROLE OF E - COMMERCE IN REDUCING OPERATIONAL COST BASED ON DESIGN THINKING IN AN ORGANISATION"

Dr. K. Sumathi M.Com.CA., M.Phil., MBA., Phd. Associate Professor
in Commerce & Head Department of Commerce

Ms. V. R. Varshini M.Com., Department of Commerce

Dr. SNS Rajalakshmi College of Arts and Science, Coimbatore - 49.

ABSTRACT

Following the tremendous advancements that have occurred in the areas of trade and traffic markets, companies and items that are numerous and diverse, as well as the intensification of competition among these companies to achieve benefits, e-commerce for modern trade emerged, which has contributed significantly to changing the future of business and has contributed by working with the process of electronic trading in increasing the efficiency of companies and strengthening its competitive position and contrived to change the future of business. The benefits and challenges of electronic commerce, as well as their role in cost reduction, will be discussed further in this research. The growth of the Internet has made a plethora of

things possible for people all over the globe, and it seems that the world has shrunk in size. In addition to correspondence and information exchange, it went beyond that to establish what is known as electronic commerce, which is the process of conducting business over the Internet in its most restricted sense, and has provided a wealth of benefits to businesses, including the reduction in costs that have been troubling a large number of them and have been their primary source of concern.

Keywords

E - Commerce, Online trading, Operational cost, Organization, Labors.

INTRODUCTION

In business, e-commerce refers to the process of doing business electronically across diverse organizations in order to achieve a hierarchical or individual goal. The advertising and purchase of labor and goods through the Internet, which is also referred to as electronic swapping, is a critical component of the E-Commerce industry. It has become less important to consider concerns such as software distribution and software setup at this stage, which has encouraged the spread of E-Commerce via the use of Intranets, Extranets, and the Internet as a result of this typical stage. They include shortening contractual distances and timeframes, decreasing distribution and operating expenses, expediting item

creation, providing more information to buyers and sellers. It is more expensive to conduct a single exchange when there are fewer transactions. In an e-commerce firm, the operating costs are the same regardless of how many orders come in or how many orders are cancelled. They are striving to establish a "Shared benefit" situation on a daily basis for neighboring shops that need to attract new clients, as well as for consumers who need to save money while taking use of excellent services and activities available in their own city, on a daily basis.

EMPATHY

DESIGN STAGE	THINKING	POTENTIAL QUESTIONS
Empathy		1.What is the most prominent domain in Ecommerce? 2.For what purpose do you use E-commerce? 3.How E-Commerce is useful to consumers? 4.How E-Commerce reduces operational cost?

STATEMENT OF THE PROBLEM

Many E-Commerce initiatives have risen in a short period of time. Its effect on the reduction of operational cost of organization has been examined in a number of ways comparatively to brick and mortar organizations for instance the money received for every transaction will pay for the item, it will also

contribute to the salesperson salary, credit card fees, lease on storefront, electricity, telephone, heating/cooling, taxes, displays, repairs and maintenance to the building. The cost overall of maintaining a virtual store is far less than that of a brick and mortar store.

DEFINE

DESIGN THINKING STAGE	INTERFERENCE
Define	1.What are the problems faced by E Commerce users? 2. What are the solutions to be provided for the problem faced by the consumers?

OBJECTIVES OF THE STUDY

1. To explore what further benefits can be garnered from E-commerce in India.
2. To examine the role of E-commerce in reducing operational cost in an organization.
- 3.To analyze the unique customer experience on E – Commerce.
- 4.To know why are people changing from offline to online.

SCOPE OF THE STUDY

Ecommerce business is able to reduce labor and other costs in many areas, including: document preparation, reconciliation, mail preparation, telephone calling, data entry,

overtime and supervision expenses. E-Business can help manage operating costs in many areas, thereby reducing the cost of individual transactions. E- Commerce contributes to

economic efficiency in five important ways. They includes shrinking distances and timescale, lowering distribution and operational costs,

speeding product development, providing more information to buyers and sellers and enlarging customer choice and supplier reason.

SIGNIFICANCE OF THE STUDY

COST REDUCTION one of the biggest significance of E-Commerce to business in online selling is cost reduction. It broadens your range of products & services for sales, expand your business, brings you more customers, and diversity your sales. Shipping is also the most important factor.

1) Customers can shop at home, at work or on vacation. Easy shopping from anywhere makes the whole process more convenient for customers.

2) Browse a wide range of products & there's no limit to how many products you can sell in an online store, so customers get access to a wider range of products online.

LIMITATIONS OF THE STUDY

1. Different expectations of goods such as goods, sales online when customers are purchasing.
2. Privacy and security issues of

RESEARCH METHODOLOGY

The study is descriptive and analytical and based on primary data. It aims at studying the role of e-commerce in reducing operational cost. Exploratory data analysis and logistic regression

Tools used

- Percentage analysis
- Chi-square
- ANOVA

REVIEW OF LITERATURE

1. **Das & Ara (2015)** observe in “Growth of E-Commerce in India” that though online travel and hotel bookings still control the lion’s share of e-commerce market, their share has comparatively fallen over the years due to the recent augmentation and consequent rise of entailing services. There has been a tremendous surge in the volume of investment in this sector.
2. **(Nyagwencha, 2018)** The planning further considers the associated risks and limitations to which the company may be exposed so that an Effective contingency plan may be developed through critical planning and considerations.
3. **Tzavlopoulos et al.(2019)** The business model is Designed to provide its offerings

customers credit card (other card details).Fear, cultural obstacles, lack of technical and commercial issues are some of the limitations

were used to analyze data collected from the survey. The analysis showed that companies had improved the level of service they can provide to their customers with e-commerce.

online and allow the consumers to select and purchase the desired products. This allows the firm to consider the related dynamics and implementation of the business model consider the probable adversities and challenges that may arise during the process and functionality.

4. Aleksandar Andonov et al. (2021) stated that E-commerce has emerged as one of the most successful business models That have

provided numerous benefits to businesses in the contemporary environment.

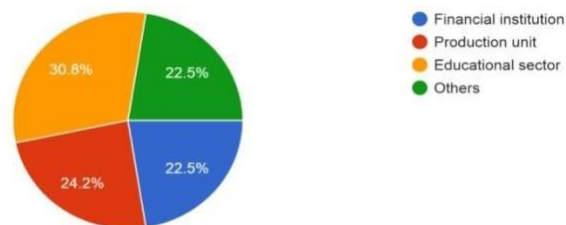
RESEARCH GAP

The application of e-commerce is becoming widely accepted among businesses and consumers. The numbers of virtual stores and online customers are on the rise. In recent years, a number of regular - brick and mortar - stores have started to embrace e-commerce as an important channel for offering their goods and services. The continuous quest for optimization is a characteristic of business people and incorporating e-commerce is a major milestone in continuous optimization efforts.

DATA ANALYSIS AND INTERPRETATION

TABLE 1.1 SHOWING THE PURPOSE OF E COMMERCE AT PRESENT

PARTICULARS	NUMBER OF RESPONDENTS	PERCENTAGE %
Financial institution	27	22.5 %
Production unit	29	24.2 %
Educational sector	37	30.8 %
Others	27	22.5 %
Total	120	100 %



INTERPRETATION :

In the above chart it shows that 22.5% of respondents use E-commerce for financial institutions, 24.2% of respondents use it for production unit, 30.8% of respondents use it for educational purpose and 22.5% of respondents use it for other purposes. **TABLE 1.2 SHOWING THE USE OF E COMMERCE IN NEXT FEW YEARS**

	Observed N	Expected N	Residual
Cost effectiveness	36	40.0	-4.0
Improved credit card security	42	40.0	2.0
Resolution in internet service provider	42	40.0	2.0
Total	120		

TEST STATISTICS

	Next few years
Chi-Square	.600 ^a
df	2
Asymp. Sig.	.741

.0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 40.0

INTERPRETATION

The above table shows that 36% of respondents predict E-commerce will be helpful for cost effectiveness, 42% of respondents for credit card security, 42% of respondents for resolution on internet service related problems by next few years.

TABLE 1.3 SHOWING WHAT PURPOSE DOES E COMMERCE ARE USED ?

	Observed N	Expected N	Residual
Personal	51	40.0	11.0
Business	32	40.0	-8.0
Both	37	40.0	-3.0
Total	120		

TEST STATISTICS

	Prominent domain
Chi-Square	4.850 ^a
df	2
Asymp. Sig.	.088

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 40.0

INTERPRETATION

The above table shows that 51% of respondents use E-commerce for personal use, 32% of respondents use for business purpose, 37% of respondents use for both personal and business purpose.

TABLE 1.4 MOST PROMINENT DOMAIN IN WHICH E- COMMERCE IS USED

DESCRIPTIVES

	N	Mean	Std. Deviation	Standard error	95% Confidence interval for Mean		Minimum	Maximum
					Lower bound	Upper bound		
Banking & business	36	2.3056	.88864	.14811	2.0049	2.6062	1.00	4.00
Stocks & shares	30	2.1333	.77608	.14169	1.84352	2.4231	1.00	4.00
Real estate	15	2.5333	.91548	.23637	2.0264	3.0403	1.00	4.00
Travel & tourism	25	2.4400	1.12101	.22420	1.9773	2.9027	1.00	4.00
Matrimony	14	2.5833	1.16450	.33616	1.8434	3.3232	1.00	4.00
Total	120	2.3475	.94622	.08711	2.1749	2.5200	1.00	4.00

ANOVA

	Sum of squares	df	Mean square	F	Sig.
Between groups	2.839	4	.710	.78	.536
Within groups	101.916	113	.910		
Total	104.754	117			

INTERPRETATION

The above table indicates that 36% of respondents use E-commerce for banking and business, 30% of respondents use it for stocks and shares, 15% of respondents use it for real estate, 25% of respondents use it for travel and tourism, 14% of respondents use it for matrimony purposes.

TABLE 1.5 SHOWING THE USE OF E COMMERCE IN YEARS

DESCRIPTIVES

	N	Mean	Std. Deviation	Standard error	95% Confidence interval for Mean		Minimum	Maximum
					Lower bound	Upper bound		
Less than 1y	23	2.5652	1.40861	.29372	1.9561	3.1743	1.00	5.00
1-3yrs	47	2.4681	1.36495	.19910	2.0673	2.8688	1.00	5.00
More than 3	32	2.2188	1.21109	.21409	1.7821	2.6554	1.00	5.00
None	18	3.4375	1.45917	.36479	2.6600	4.2150	1.00	5.00
Total	120	2.5508	1.38118	.12715	2.2990	2.8027	1.00	5.00

ANOVA

	Sum of squares	df	Mean square	F	Sig .
Between groups	16.434	3	5.478	3.00	.033
Within groups	206.761	114	1.814		
Total	223.195	117			

INTERPRETATION

The table shows that 23% of respondents are using E-commerce for less than

ayear, 47% of respondents for 1-3 years, 32% of respondents are more than 3 years, 18% of respondents are not using it.

FINDINGS OF THE STUDY .

1. Majority (30.8 %) of the respondent are in the category of educational sector.
2. Majority (42 %) of the respondent are in the category of improved credit card security improvement and resolution on internet provider related problems.
3. Majority (51 %) of the respondent are in the category of use of website for personal use.
4. Majority (36 %) of the respondent are in the category of business and banking sector.
5. Majority (47 %) of the respondents are in the category of 1-3 years.

SUGGESTIONS

- E-Commerce platform is user friendly and comes with integrated tools that automate most of the tasks. This saves large amount of capital for business.
- It also proves to be a faster and more convenient for buyers.
- Unlike physical stores, E-Commerce businesses are available 24/7 online.
- E-Commerce business offers many benefits for businesses both big and small.
- Thus E-Commerce greatly reduce the operating costs of businesses and significantly enhance their sales.

CONCLUSION

E-commerce enterprises must maintain a competitive edge, failing which they will be forced to close their doors. It is critical to keep your running expenses as low as possible in order to compete with online retailers such as Amazon and to maintain a healthy, self-regulating, and expanding firm. There are various approaches for

lowering your E-commerce operational expenses when all factors are taken into consideration. Other strategies to consider include: Keep in mind to concentrate on providing excellent services in order to boost client retention and lower customer procurement expenses.

REFERENCE

1. Bartell, R.L. Blackwood, N.A. Eggenschwiler, D. Nguyen, M. Schnidrig, C. Yatchman, M.J. (1999) The Media Xact system – a framework for personalised electronic commerce services, *Bell Labs Technical Journal* 4 (2) 153–173.
2. Levis, K. (1996) Electronic commerce, *British Telecommunications Engineering* 14 (4) 281–285.
3. Turban, E. Lee, J. King, D. Chung, H.M. *Electronic Commerce: A Managerial Perspective*, Prentice-Hall International (UK) Limited, London, 2000.
4. Rhodes, E. Carter, R. Electronic commerce technologies and changing product distribution, *International Journal of Technology Management* 15 (1/2) (1998) 31–48.
5. Allen, E. & Fjermestad, J. (2001). E-commerce marketing strategies: an integrated framework and case analysis. *Logistics Information Management*, Volume 14. Number 1/2. 2001. pp. 14-23
6. Alrawi, K. (2007). The internet and international marketing, *Competitiveness Review. An International Business Journal*, Vol. 17 No. 4, 2007, pp. 222-233
7. Brand, M. & Huizingh, E. (2008). Into the drivers of innovation adoption. *European Journal of Innovation Management*, Vol. 11 No. 1, 2008, pp. 5-24
8. Chaffey, D. (2002). *E-business and e-commerce management – Strategy, implementation and practice*. First Edition. Pearson Education Ltd.
9. Chaffey, D. (2007). *E-business and e-commerce management – Strategy, implementation and practice*. Third Edition. Pearson Education Ltd.
10. Turban, E., Lee, J., King, D., McKay, J., Marshall, P. & Viehland, D. (2008). *Electronic commerce – a managerial perspective*, International edition, Prentice Hall.