

Impact of E-Commerce on Banking and Financial Sector of United Kingdom

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Abstract. Since the introduction of internet in 1990's, the world of computing replace each and every field of life with computer and the whole world become global village. In the field of business and trade the usage of computer become necessity of business development and growth and E-commerce have larger impact on the economy and internet change the world of business. Traditional business processes are related with IT technologies and in 21 century when the IT is replacing human being with machine, it is predicted that in near future all the processes involve in business whether those are related with manufacturing or servicing will be replaced by machine.

The purpose of this paper is to investigate the benefit, success factors and challenges in E-commerce in United Kingdom businesses with special focus on banking and financial sector. The studies will analysis the finding in all processes of banking and financial sectors with depth focus on innovations in services of banking and financial sector. The study will focus to identify the key challenges like cost of technology, lack of knowledge of e-commerce, shortage of IT skills and services along with the issues and concerns which are associated with online banking and finance. The study will explore the impact of changes in rule and regulations which are imposed by the financial regulation authority United Kingdom along with the study of success factors of e-commerce. Paper will explore the impact of interactive and user friendly websites to use online banking and financial applications and how they impact on the growth of the banking and financial sector.

1. Introduction

Electronic commerce[1][4] is the new way of doing business as it is the fast growing field and becoming popular in United Kingdom along with other parts of the world.

Since the introduction of Internet and especially after Wi-Fi technology the whole world become

global village and people start using computers and computers become the important part of daily life. As per statistics, in UK top 100 companies claim that their 45% revenue is generated by E-commerce and in 2000 it was 20% only.

As per scope of the paper, our focus is E-commerce in Banking and Financial sectors in United Kingdom, it is so surprising to know that there are around 1,650,000 business which are using internet business which are using internet, websites and internet commerce. The study show that there are utmost every organization in the world who is using internet for business purpose and statistics show that there are 98% business which are using Internet for email, 88% are using for searching , 45% are related with government business, as per latest statistics 39% use E-commerce for banking.

2. An Overview E-banking

E-banking [2][3] is the alternative channel for fast and proactive delivery of banking services to handle wider range of customer. E-banking can be of different form like Internet or online banking, Telephone banking, TV-Base, Mobile banking and PC banking. One of the most common use of e-banking is automatic payment of bills as they are so frequent like every month and online payment is hassle free and need less effort along this peoples use online banking for managing and transferring their money and managing their different banks account online.

Banking customer who wants to use online banking must have update information about internet and PC which will lead to use online banking.

An overview of e-banking consists of types of e-banking, benefits and success factors of e-banking as describe n coming sub sections.

2.1 Types of electronic banking

There are [5] number of ways in which customers can access the banking services and these are as following;

- 1) **Tele-banking:** this type of banking service is provided by the telephone and to access this service, customers have to dial a specific number.
- 2) **PC-Banking:** customer can use their personal computer for making banking transactions and PC banking increase since the introduction of internet accessibility specially after introduction of WI-FI.
- 3) **Mobile Banking:** it is also called m-banking in this type of banking with the combination of internet and mobile the customer can access banking applications as banking are design their banking applications which are accessible through mobile phones.

2.2 Benefits of E-banking

There are [7][8] lots of benefits to use E-commerce in general, some of them as following:

2.2.1 Global Village:

With the usage of internet the whole world is now global village and you don't need a physical store to sell your product and now stores are not limited to a city or county. With the usage of websites the whole world is playground and can be seen through computer, mobile without time and geography limitation;

2.2.2 Low cast and Gain New customers

Concept of virtual marketing is come through internet as we don't need personnel like cashier, inventory management etc. now each and every thing is manage and control by the software and there is less need of labour, there is hassle free advertisement and market and there are no barrier of real estate as in E-commerce we don't need any physical location. When the product is available on internet and can be seen and purchase from any part of the world, it lead to gain in new customers and

business growth so fast and since the introduction of search engines the product market, advertisement and low cost lead to satisfaction of customer.

2.2.3 Easy to Locate Product and Shopping Comparison

It became very easy to locate any product using search engine capability and we can compare with other products of same nature to understand whether our product selection is leading us to achieve high level of satisfaction.

2.2.4 Remain Open 24/7 and provide abundant information

There is no need to wait for opening market as E-commerce is available for 24/7 as website are running all the time and E-commerce lead to availability of abundant information all the time and most of the information can get from vendor without any cost.

2.3 E-commerce Success factors

There are lot [9] of factors which are involve in the success of the company and these are related with management, , pre and post-sale service, team management, organized business structure and well manage , well design website. There are following key factors to make business of companies in e-commerce;

2.3.1 Technical and organizational aspects

There are lot of things which are interrelated with success factor and one of the key factors of success is technical and organizational aspects of the company. By technical aspect we mean that the companies should occupied with latest technology along with technical labour which can run company efficiently while on the same time the organization should take care of some basic and key aspect like proper market research and analysis before starting a business or product so the results can be measure and business can achieve success in proactively while one of the most important aspect of e-commerce business the streamline business process using information technologies and re-engineering. Companies should develop user friendly and attractive websites so the customers can be attracted [10].

2.3.2 Customer-Oriented

The key to success of an e-commerce organization is to provide reward and an enjoyable experience to its customers. There are some key factors which lead to make this possible and thee factors are as following:

- 1) The first and foremost factor is to provide value to customers and vendors can achieve this making attracting in production line and offer product at competitive prices as compare to non-electronic commerce.
- 2) Providing service and performance so customer fee user-friendly experience and queries should be response proactively.
- 3) Sales promotions and easy in buying and sale policy play significant role in business and they should provide personal attention like to provide personal webpage, special offers, purchase suggestions.

2.3.3 Acceptance

There is great need of customer acceptance that the e-commerce business model less readily as compare to it was accepted [11][12]. Electronic shopping is developed so slowly and there are several reasons that are accountable for slow uptakes and it include:

- 1) Peoples have concern about security as they are always afraid about theft of their bank and credit card details.
- 2) There is big problem of access e-commerce websites in poor household and in developing

countries due to internet access issues which is reducing potential of e-commerce.

- 3) Poor websites design is another key aspect of e-commerce and it frustrates the online shopping along with inconsistent return policies annoy customer and don't want to use e-commerce.

2.3.4 Product suitability

There are lot of products which are suitable for online sales and certain remain suitable for offline sales. There are lot of virtual companies which are dealing with digital products which include information storage, retrieval and modification of music, movies, education, communication, software and financial transactions like Google, eBay and Paypal.

Virtual marketers can sell some of the non-digital products and services efficiently and these are the products which have high value-to-weight ratio and it may involve embarrassing purchasing as peoples may have to go to remote location for purchase and items which can be lifted through letter box like book, CD, DVDs and Mobile are suitable for virtual marketers and heavily items like care spare parts, washing machines and industrial equipment's seems possible now using e-commerce [9].

3. Research methodology

The study is based on the data collection through web based questionnaire along with some with different bankers in different parts of United Kingdom. The purpose of questionnaires was to get information that what bankers think about e-banking, strategies implementation and consideration and operational and technical consideration [9][10].

In this research we focus on the impact of e-banking on banks along with its operational and strategically dimension; issues like thread of e-banking, operational issues to achieve high customer satisfaction, decreasing transaction cost.

The survey was based on benefits of e-banking and strategic questions using Likert Scale along with some simple 'YES' or 'No'

We selected leading banking of United Kingdom, which are HSBC, NATWEST, Halifax, Standard Chartered, Lloyds, Barclays, Tesco bank, Sainsbury Bank and Co-operative bank and sample size is 700 participants.

4. Result analysis

The result analysis is based on the understanding the banking sector with special focus on e-banking and in Figure 1 and Figure.2 we show the health of banking assets of united kingdom and it is shown that assets of banks are quite healthy and there are 12% banks who have assets of more than 300 million pounds and majority of banks falls under 220million pounds assets as shown in Figure.1 with blue shade while there are 26% banks how have assets of 250 to 299 million pounds while there are 24% banks who fall in asset range 220 to 230 million.

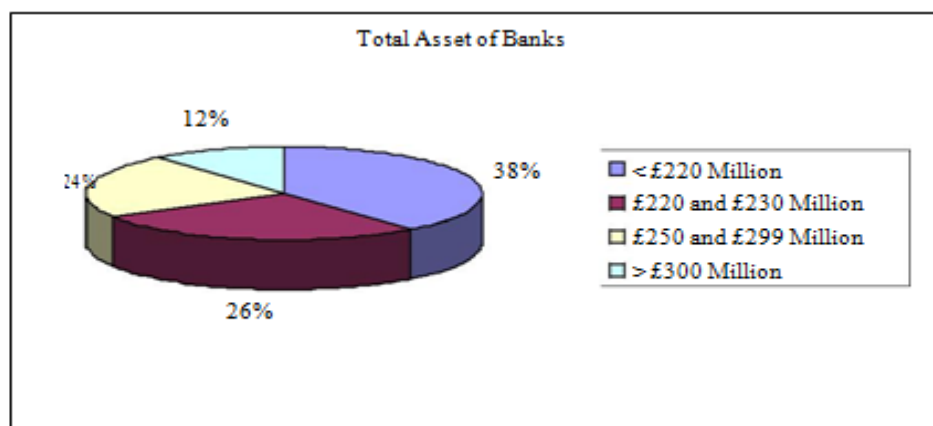


Figure.1.Assets Analysis of Survey banks

Figure.2 shows trend of online banking users and it is interested to know that since the passage of time internet banking users are increasing and now over 75% customers are using e-banking services as shown in figure.2 with complete detail.

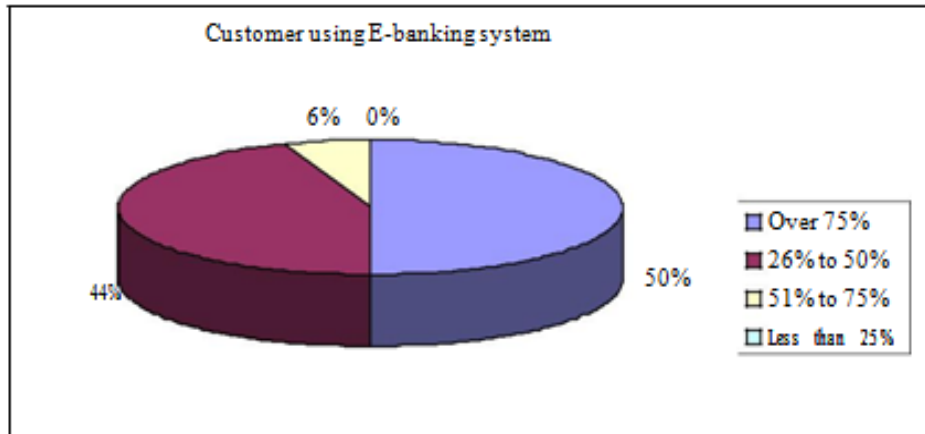


Figure.2.E-banking using customers

In Figure.3 we shown that which type of banking services are available and what is the ration of the customers who are using those services and there are 42% peoples who are using online banking for e-banking online bills payments and then there are 30% customer who are using it for online money transfer while 20% use for account deposit and there are 4% person who apply for mortgage application while 4% for online application for small business loans.

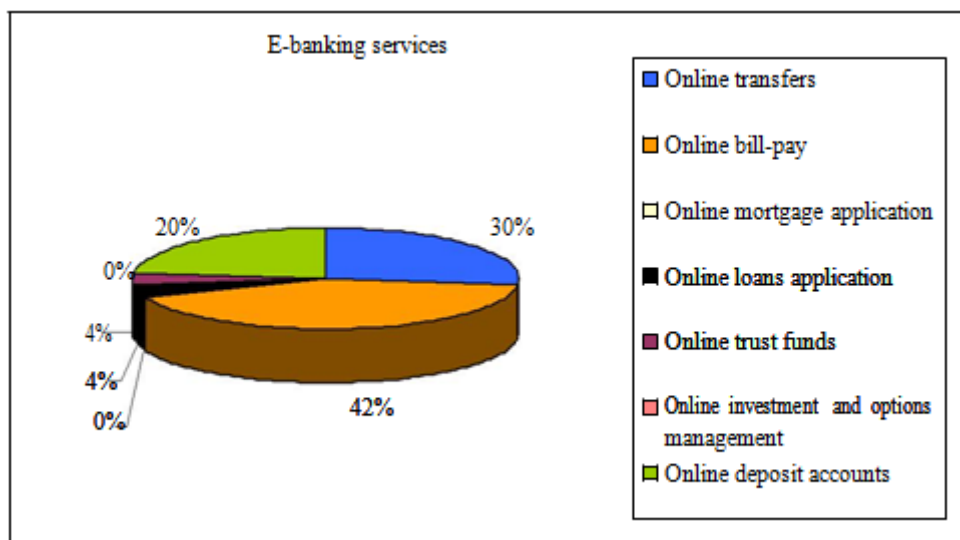


Figure 3 E-banking Service and Their usage ratio

As per Figure.4, there are a positive sign that there are 48% banks which offer online assistant while 30 user other form of assistant which can be in person, which 11% customer assistance is provided by the brochures and 11% provided by the training and this training can be of product training which conclude the online banking overtake traditional banking in developed countries and become backbone of the banking sector.

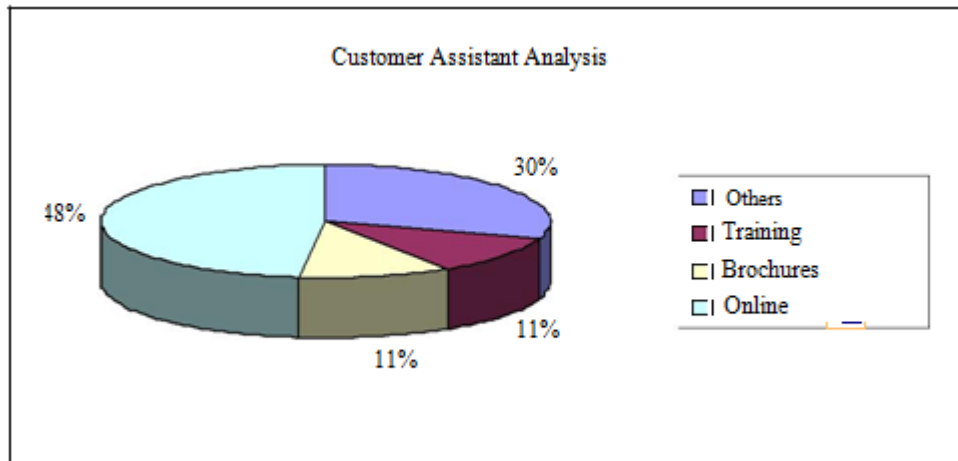


Figure 4 banking Customer Assistance

Table.1 summarized the operational issues and it is notice that 89% banks are reporting that e-banking is cost effective and there are 11% which are not agree with this there are 72% which believe that e-banking is increasing number of customers and 12% are disagree with this statement. 89% peoples believe that since the introduction of e-banking the quality of service in term of customer service increase and 11% peoples remain natural on questions and none of them are disagree on customer service improvement question. While reducing in transaction cost along with add-on service are strongly agreed with 83% and 95% respectively. There are 82 % customers which believe that account management is so easy with e-banking while lot of peoples believe that they need proper training to use e-banking. 80% believes that e-banking is the stair to success while 83% believe that security of e-baking increase as it was before. To sum up this table discussion we come to know that peoples are adopting e-banking and it became necessary part of their daily life as it increased customer service with additional services along with increase in security in e-baking so it is gaining customer trust.

Table 1 operational issues

| <i>Operational measures of e-banking</i> | <i>Mean</i> | <i>% Agreeing</i> | <i>% Neutral</i> | <i>% Disagree</i> |
|---|-------------|-------------------|------------------|-------------------|
| Cost effective | 4.28 | 89.0 | 00 | 11 |
| Lead to increase customers | 3.61 | 72 | 16 | 12 |
| Improves customer service | 4.33 | 89 | 11 | 00 |
| Lowers transaction costs | 3.78 | 83 | 00 | 17 |
| Offers additional services | 4.22 | 95 | 00 | 05 |
| Ease to manage accounts | 2.72 | 82 | 00 | 18 |
| Customer training required to use e-banking | 3.67 | 61 | 28 | 11 |
| E-banking lead to market leader | 4.17 | 80 | 00 | 20 |
| Customer satisfaction. | 3.83 | 90 | 00 | 10 |
| Online Banking security increase as it was before | 4.00 | 83 | 00 | 17 |

Items are measured using a five-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree).

Strategic considerations are analyzed in Table 2 which show that there are 70% peoples which believe that banks survival is depend on the e-banking while there are 20% who are disagree with this and 90% believe that e-banking is cutting edge of banking system and 8* % survey believe that is the symbol of competences and no one is disagree with symbol of competences. 100% peoples believe that e-banking is future of banking along with believe that e-banking improve quality of service while 99% believe that if a bank not offer e-banking will lose market.

Table 2 strategic considerations

| <i>Strategic considerations of e-banking</i> | <i>Mean</i> | <i>% Agreeing</i> | <i>% Neutral</i> | <i>% Disagree</i> |
|---|-------------|-------------------|------------------|-------------------|
| Bank Survival depend on e-banking | 3.50 | 70 | 10 | 20 |
| Symbol of cutting edge banking | 3.56 | 90 | 00 | 10 |
| Symbol of competences effectively in the near future | 4.11 | 88 | 12 | 00 |
| Banks not offering internet banking will lose their potential customers | 3.39 | 99 | 00 | 01 |
| Improve QoS | 4.28 | 100 | 00 | 00 |
| Online Banking is future of banking | 4.17 | 100 | 00 | 00 |

Items are measured using a five-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree).

We analyzed impact of e-banking in banking customers in Table.3 that what are the benefits. As per our analysis finding there are 90% peoples which are getting e-banking benefits and 10% peoples are against this view while 88% peoples believe that physical visit to branches decrease and 12% peoples believe that have to go branch as here are some issues which are not resolvable using e-banking so they have to personally visit branch. 92% peoples satisfy that they can access the online statement and can do online transfer and there are 98% peoples which believe that they can access banking service 24/7 while 2% are complaining about 24/7 due to some other issues which create problems for online accessing.

Table 3 e-banking benefits to customers

| <i>E-banking benefits to customers</i> | <i>Mean</i> | <i>% Agreeing</i> | <i>% Neutral</i> | <i>% Disagree</i> |
|--|-------------|-------------------|------------------|-------------------|
| Customers are getting online banking benefits | 3.89 | 90 | 00 | 10 |
| Reduce Physical Visit to bank to a physical bank | 4.06 | 88 | 00 | 12 |
| Customers can make online and can view statement | 3.94 | 92 | 00 | 08 |
| Customers enjoying e-banking benefits | 3.67 | 75 | 15 | 10 |
| 24/7 access | 3.94 | 98 | 00 | 02 |
| Customer are secure while using e-banking | 4.00 | 72 | 06 | 22 |

Items are measured using a five-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree).

Technological issues of e-banking are analyzed in Table.4, we ask four questions and the finding are quite impressive that there are 75% peoples believe that there are IT professional deficiencies while only 25% peoples are satisfied with IT there are 49% peoples are addressing with recruiting professional issues there are 60% believe that government is not supporting as it should support.

Table 4 Technological considerations in e-banking

| <i>Technological considerations of e-banking</i> | <i>Yes (%)</i> | <i>No (%)</i> | <i>Total (%)</i> |
|--|----------------|---------------|------------------|
| IT Professionals Deficiency | 75 | 25 | 100 |
| Recruiting Qualified Professionals issue | 49 | 51 | 100 |
| Issue in Government Support | 60 | 40 | 100 |
| Technological Constraints | 15 | 85 | 100 |

Items are measured using a five-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree).

5. Internet Banking Regulations – United Kingdom

In the expansion of e-banking in the United Kingdom a “Banking Services Law and Practice” after the review committee setup in 1986, first of its report was published in 1989.

The main concern was related with customer activation of Electronic Fund Transfers (EFT). The committee summarizes the contents of those acts as:

“A customer [13][14] should be liable for losses incurred up to the point where the customer notifies the bank, subject to a financial limit”. On the other hand, “the bank’s liability for a loss starts thereafter”.

The regulatory bodies in the United Kingdom believe that there are three approaches which are observed from banks:

- 1) Terms and conditions are similar to card transactions but there are certain limits which are imposed on customers.
- 2) Banks assume all risks unless the customer acted fraudulently or negligently.
- 3) Banks does not own liability in case of fraudulent transactions unless they are not notify.

Conclusion

To sum up, in this paper we discuss importance of e-banking with key benefits and factors of success in e-banking, we discuss the impact of e-banking in banking and financial sector of united kingdom and an empirical study is done to understand the impact and importance of e-banking along with discussion on different forms of e-banking applications along with study of regulation policy by united kingdom financial regulating author.

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