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Abstract

As the banking sectors attempts to transfer banking services online, the way they deal with customers merits closer inspection. Failings have become more apparent and well publicised and some online technological failures could indicate that most banks do not fully understand Internet technology or appear to have failed to see that Electronic Commerce transfers power to the customer. Recent literature and press coverage of online banking in the UK is examined along with strategies for online delivery of banking services. The rise in online bank usage is also reported with considerations of what the perceived future of banking online could be. An Internet Survey has been undertaken which investigates online Banking Services and the availability of financial products online in the UK and US. The results are reported and discussed and comparisons are made between UK and US online banking sector.

1. Introduction

The UK Government has plans to set in place what it claims is the biggest government Internet portal in the world and it will be a one-stop shop for public services (Middleton 2000a). While the government seems to know what is required to modernise its operations and they seem intent on using the latest technology. UK banks seem to be struggling with Internet and Electronic Commerce technology. The growing number of people joining the Internet has presented an excellent opportunity for banks to provide better services to existing customers and attract new ones. However, the Banks and other financial institutions in the UK may not be making enough effort to speed up changes in their infrastructure to fully incorporate Internet based commerce and offer full banking services through Web sites.

The results and analysis of a survey looking at an equal number of UK and US online banking Web sites forms the core of this paper. However, to place this work in context sections two and three cover current developments in UK online banking and future perspectives. In section two details are provided of strategies for delivery, predicted growth and security. In section three information relating to future strategies and the nature of electronic commerce are presented. Section four is then devoted to the survey. In this, online banking Web sites are evaluated using criteria that determine the quality, usefulness, usability and customer service factor of each site. The results obtained from the UK and US sites are compared using score analysis. Finally the results are discussed and conclusions drawn with emphasis on the differences between the UK and USA. Particular attention is paid to the level of online banking services and products they have available entirely online.

2. Online Banking Developments in the UK

2.1 Strategies for Delivery

The UK Government planned Internet portal is set to have four major framework initiatives. The plans are to transform the delivery of public services through the following:

Call centres.
Digital Television.
Smartcards.
Web sites.

The aim is to drag Civil Service and Government services into the 21st century saving taxpayers millions of pounds. What is even more innovative, is the Government's plans to set up a new media team to monitor web sites (Middleton 2000). Monitoring as part of corporate strategy is vitally important when companies are setting up and running Internet business sites. Many do not do any monitoring and a lot of online vendors do not incorporate monitoring strategies into their initial planning. To their cost they may suddenly realise after set up is initiated that monitoring and maintenance will take up a large part of the Internet business budget. This government initiative should set an example for banks and other businesses to follow. One UK bank "Barclays" may already be taking up the challenge as they are also planning a one-stop-shop to drive sales of new financial services to its existing customers according to Ranger (2000). Customers will be able to manage all of Barclay's financial products including stocks and shares and savings at one Web site. However, this initiative appears to be thinly disguised as a new customer service. With the real aim being to cut costs, drive sales and

boost profit, three things that are important to any business but Internet business needs to have focus on the customer as the first strategy. Ranger reports on a study produced by Andersen Consulting, which warns that financial services companies do not understand electronic business. Andersen Consulting believes that the finance sector must use IT to rework their existing procedures, rather than just doing the same business modelling through online channels. They could use electronic commerce to sell different products to different markets and they could also use their own channels to sell rival products. However, even if the Barclays bank motivations are not entirely customer service orientated, the one-stop-shop should be good for customers. Having access, information and control of all your financial details/assets on one personal web page, combined with links to other services is perhaps a move in the right direction from a customer perspective

2.2 The Rise in Online Bank Use

A survey by Barclay's Bank reported by Wakefield (1999) claims that 10 million people in the UK will bank online in a year's time. There is strong competition between traditional banks and stand-alone Internet banks. Barclays claim they are the biggest in the UK with 450,000 online customers. However, Wakefield reports that all the high street UK banks are feeling the impact of Internet-only-banks appearance in the market. Three that are gaining profile in the UK are Smile. Egg and Firste, these banks are taking advantage of lower back up costs and offering better interest rates. This growth in Internet banking may change the services from traditional banks and how people use banking services. According to the Barclays' survey the most popular online banking activities are:

Viewing statements (88%).
Transferring funds (78%).
Paying bills (59%).
Downloading statements (33%).

The Most Popular Online Banking Activities
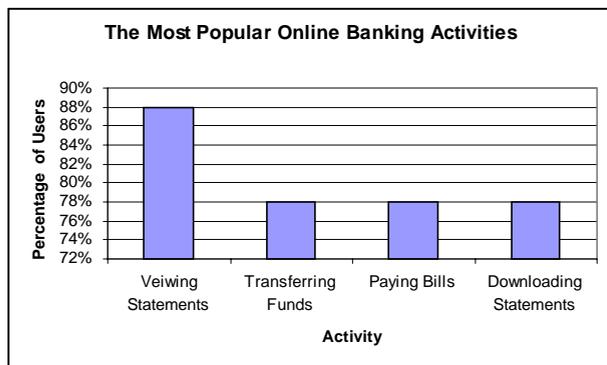
The most cited benefits of Internet banking are:

Convenience as there is no restriction on opening hours or availability.
Access to more information.
More time to think about financial decisions and more consumer control.

However, these activities and considerations do not cover the full picture of online banking. Banks in the UK who claim that they offer online banking have different definitions of what that is. Online banking has been defined for the survey carried out for this paper, details of which are in the next section. However, Wakefield reports that research firm IDC believes that Internet banks must provide more than simple banking services and they must also be aggregators of information, an example of which is the one-stop-shop idea.

2.3 Security Issues

Middleton (2000b) reports that the biggest five UK banks are holding back electronic business. Middleton's information is based on a study by the UK Institute of Directors (IoD) who claim that many banks do not trust existing electronic commerce security systems. They are very worried that they will be left with large numbers of liabilities. The IoD believe this fear is overstated and calls for the government to step in and to support companies struggling as a result of banks' attitudes. Wakefield (1999) reports that the technology is available to offer a fuller range of services but banks are reluctant to use it. Smile a UK online bank announced recently that they are the only Internet bank in world to have been accredited to BS7799 (Information Security Management) by the British Standards Institution (Smile 2000). Smile say this is further assurance to customers that Internet banking with them is safe and secure. Traditional banks face an uncertain future as they try to keep both high street and virtual banks running in conjunction. Profits are at stake according to Wakefield and as profit is ALL to all banks they should be motivating themselves to find out how they can best use the Internet to boost margins. They should start by finding out what customers want and how they can best deliver it. Not with what they think will make the most profit and then converting profit strategies to customer strategies and then telling customers, 'this is what you want'.

3 Electronic Commerce Strategies Future Perspectives

3.1 The UK Banking Sector

The real challenge according to the Bank of Scotland electronic business director (e-director) is to re-personalise banking experiences made impersonal by technology (Wakefield 1999). This director also thinks that physical banks will get smaller, friendlier and more

conveniently situated. Perhaps opening up closer to supermarkets and being part of the Saturday morning shopping. He may be under a misapprehension here, as supermarkets are already into banking and most own or have major control of their own retail sites especially those that are out of town and purpose built. They are not likely to let major banking names open up on or near these sites without some commercial deal that first benefits supermarkets and then their customers. The other thing to consider is the growth in online shopping if more people are banking online they are likely to shop there as well which is likely to include shopping for food and other supermarket goods. Therefore the number of supermarket sites may diminish or they may start offering online access at supermarket cafes. Where people can sit in comfort and browse for supermarket goods. Then while their supermarket goods are being picked and packed by the store they may do other shopping and banking online. This electronic business director also thinks customers will be aggrieved at having to use an Internet only bank claiming there will be no service or loyalty factor. Another rash statement by this e-director, customers want good service and they want consistency of service. They also want to feel in control of their money and not be charged by a bank every time they want to do something with it. The UK manager of Firste Internet-only-bank states in Whitfield that Internet only banking is not impersonal as there is nothing more personal than doing your own banking. He also points out that there will be an extra cost involved for human interaction facilities. These may appear as Webcams or integrated online/call centre services where customers and operators are looking at the same information on screen while interacting by talk phone or video-link. These facilities may attract customers who want a face-to-face element. However, the cost involved is likely to be prohibitive for some time and may create more technical barriers between Internet businesses and customers.

More Internet banking services are appearing in the UK, one of the latest is an existing high street bank, the Halifax. They are planning to launch a stand-alone Internet bank using telephone, Internet, digital television, and mobile-phone-Internet technology (Nicholson 2000). However, they state that they will not be offering high interest rates as a lost leader to draw deposits. They intend to compete on the basis of lower costs saying that their start up costs of £100m are £150m less than the total spent on launching online rival bank Egg. The Halifax also say they are designing a new bank from scratch but they appear to be confused as to what an online bank is. As they expect two thirds of their business to be handled over the telephone with a shift to online transactions later. They are also still talking with British Telecom about a web-type mobile phone network. Like many attempts at online business the Halifax online banking appears to be still a dream of what could be done not what they are

actually doing. This scenario seems to be typical in the UK bank sector. More is being talked about than being done, leaving customers who wish to deal with their entire portfolio of banking needs online with only partial services to choose from. To offer a full online service understanding the nature of electronic commerce is vital. As is the need to plan for the future, innovate and maintain in order to change services to customer needs, which is the key to keeping online customers.

3.2 Understanding the Nature of Electronic Commerce

Butler (2000) states that businesses which understand the nature of risk and have some creative individuals in charge are embracing IT and the potential of electronic commerce in a new way. Banks could do more to embrace electronic commerce, the following eight statements taken from Butler are an indication of what they should be doing and the ways they could be thinking to gain market strength on the Internet.

[1] The big pay off in IT today is not associated with its cost saving role. They come from innovation and the creative use of this medium to reach customers.

[2] The savings are too small to use IT as a cost saving mechanism compared with more imaginative and creative uses.

[3] Embarking on Internet ventures in a big way is like Columbus discovering America, what was his return on investment?

[4] Technology is not sold on its features and excellence. It is sold to most on the "me too" factor and the fact that life would be somehow inadequate if we did not have it.

[5] A new IT related product will be sold on its innovative characteristics and fun factor and there is no reason why this could not be applied to banking related IT products.

[6] Mainstream business management IT should be used as the mainstream way of addressing a business problem.

[7] Technologically inadequate products steal number one spots because of good marketing and selling. Very good technological products also need good marketing and selling but satisfy the needs of customers as well.

[8] Establish whether the electronic commerce technology actually works and whether it represents value for money at some point, to the company and if it creates a reliable service that consumers want.

To gain market strength on the Internet banks need to fully comprehend the way electronic commerce works best and that means seeing things from a customer perspective. Focusing on customer requirements is

something banks have been failing to do since they started automating services, rationalising work force numbers and more recently merging with each other. The emergence and growth of Electronic Commerce should be looked on by banks, as an opportunity redress this balance and make customers and their needs the central focus.

4 An Internet Survey of Online Banking Services

4.1 The Survey

The aim of the survey was to compare the online services offered by 12 UK banks with 12 online banking services in the US. The survey also aimed to look at these sites purely from a consumer perspective. It is recognised that access speed may vary due to the time of day or other factors such as modem speed. However, consumers are likely to access web sites when they feel the need to do so, at any time. Therefore it was not considered relevant to look at this factor in detail. We deal mainly with general access and what would be considered general consumer behaviour, which is to access sites on demand and have an efficient, productive visit resulting in customer satisfaction. The scoring criteria, deals mainly with quality of web sites, information availability and the range of services being offered. UK banks were chosen

from a list at [http://www.mylesrix.demon.co.uk/banking/index.html] and US banks were chosen from [http://www.ffiec.gov/cgi/bin/pbisa60.dll/nic_prod/uo_extract_top_bhcs/getinfo?ai_top_bhcs=1] and US online banks from [http://www.onlinebankingreport.com/resources/]. Information was obtained by testing the services available as much as possible without opening actual accounts. Each web site was scrutinised for approximately 15 minutes while a search was undertaken to look for information and product availability. If information could be not found within the 15 minutes, it was assumed no service or information was available for the particular topics under scrutiny. Results for the first section of the survey have been converted to average scores for the two countries and are shown in **Figure 1** along with the scoring criteria. Analysis dealing with product availability is shown in **Figure 2**. The sites were also measured against what could be considered a full banking service (results shown in Figure 1). In this research full banking is defined as being able to apply for all services and products listed in Figures 1 and 2 online. Information was also looked for that indicated application decisions would be made and returned to customers online in real time (result shown in Figure 2).

	1	2	3	4	5	6	7	8	9	10
	Total site access speed	Speed and ease of navigation	Availability of relevant information	Customer Service rating	Look of web site (Viewability)	Full contact details easily available	Corporate information easily available	Scale of Full online banking service (score 5 = Full)	Overall Service Score	% of Possible Maximum Service Score
US Average	3	4	4	4	4	2	1	3	22	54%
UK Average	4	4	3	2	3	3	3	2	22	55%
In columns 1 to 3 and 6 to 7 scoring is determined by the amount of time taken to access services or information. The longer it took the lower the score. If Column 1 & 2 access was below 7 seconds = high score, up to 35 seconds = medium score, between 36 - 75 seconds = low score.										
Column 4 is rated on how helpful the available information appeared to be; poor quality of available information, lack of helpful information or hard to find information resulted in low score.										
Column 8 (Scale of full online banking service) was rated by the number of services and products available but was heavily influenced by the availability of online applications and credit decisions being made online. The lower the number of online services resulted in low score.										

Figure 1 - UK and US Bank Web Site Service Rating

	1	2	3	4	5	6	7	8
	Apply for current account online	Apply for savings account online	Apply for mortgage or loan online	Apply for insurance online	Apply for credit card online	Products Available Score	% of Products Available from the 5 sought	Credit decisions online
US Score Totals	10	10	10	5	11	43	86%	12
UK Score Totals	6	6	5	3	7	27	54%	4
Scores in columns 1 to 6 and column 8 are out of 12, which relates to the 12 banks that were surveyed								

Figure 2 - UK and US Bank Web Site Product Availability Rating

4.2 Analysis of the Survey Results

Figure 2 columns 1 to 8 show average scores out of a possible total of 5, in the scoring method 4 was considered good and the US scored the most 4 ratings. Speed of access and navigation, availability of product/services information and viewability was relatively the same in both countries and they both scored reasonably in these categories. There was little difference between the percentages of possible maximum score; the UK average of 54% almost matched the US at 55%. US sites scored lowest in the categories regarding display of full contact and corporate information. For customer service the UK scoring was much lower at 50% less than the US. Neither country managed a high rating for Scale of Full-Online-Banking but the UK score was lower. Despite some category differences, overall these average scores indicate that both countries need to improve with the UK particularly needing to pay more attention to the availability of products/services information and viewability of their web sites. Full contact and corporate information was lacking in both countries and when it was there was not always easy to find.

The difference between the two countries was greater with regard to the ability to apply for products online, and the online availability of credit decisions. Figure 2 shows that from the 5 products sought only 54% of them were available online in the UK banks. With the US banks scoring at 86%, this indicates 32% lower availability of online banking products in the UK. Applying for and receiving insurance quotes entirely online scored low in both countries. Added to which there is 50% difference between the UK and US with regard to applying for a mortgage or other loan online. 10 of the 12 banks surveyed in the US offered online mortgages/loans as opposed to only 5 out of 12 in the

UK. Only 7 of the banks in the UK offered online credit card applications compared to 11 out of 12 in the US. Average scores for the total availability of the 5 products from all banks would indicate that US banks have more to offer on the Internet than UK banks. Credit decisions were assessed in terms of the bank indicating on the web site that they offered this facility. Some of the UK banks were followed through to test if they actually did perform this service. One bank Firtse, did give an online decision but only for a preliminary account, to fully activate the account they want the client to post-mail two utility bills and a photocopy of the applicant's passport. Smile bank also said they offered decisions on line, and they do, but it takes from 4 to 7 days to activate the account. Similar tests were not carried out with US banks as most only offered accounts to US citizens. While some did offer international banking all application procedures for this were paper based.

The results of this survey showed that 12 out of 12 banks examined in the US offered some online decisions and many stated results would only take 60 seconds. However, only 4 banks in the UK offered any type of online credit decision process, a difference of 67%. Undoubtedly the UK banks are lagging way behind the US in adoption of such online methods. Looking at the overall results, the UK banks have some considerable catching up to do if they hope to compete in what is set to be a global market in banking products and facilities. They need to get better at embracing the technology that enables fast, safe, customer-orientated comprehensive banking online. In other words they need to understand the nature of electronic commerce.

5. Conclusion

The results of the survey carried out are intended to give an indication of the current state of Internet Banking from the perspective of the consumer. It is not

a scientific investigation of the products and services offered rather it is a consumer orientated look at what is on offer via information technology from banks. The survey research although modest in scale does however provide a snap-shot of what is being offered by the banking sector over the Internet. From the resulting statistics reported above it is obvious that the US is ahead of the UK in most areas. Banks in the UK should be learning from the US and they should perhaps set up some kind of monitoring of Internet bank sites worldwide. They need to do this to find out what is being offered and what appears to work for customers. Moving away from old strategies and embracing a new, "customer first" attitude is essential as this is the only one that works for successful electronic commerce. The overall culture of banking must change before the take up of online banking will offer adequate, let alone superior, service to customers. Banking companies that give greater attention to what their customers want are more likely to succeed in online banking business ventures than those that think that converted traditional strategies will do the job. Customers hold the key to success and companies must find out what different customers want and provide it, using the best available technology and ensuring that they are acting on the latest, most up-to-date information.

People will not tolerate inadequate web sites; the information must be instantly available and financial decisions must be available online for a whole range of products. It must also be an easy process to open accounts on-line with credit and reference checking happening in real-time. There are many ways to approach online banking business and some companies who don't think "customer first", are likely to fail miserably. There are already well-recorded failures of technology that simply could not cope with unpredicted web site usage. Basic failures are expensive and they have damaged reputations resulting in diminished brand trust. Technology failures lead to loss of custom, often forever. Any bank hoping to make a successful future in online banking must test the technology thoroughly before releasing it on customer access web sites. Unfortunately most banking companies in the UK have failed so far to totally understand what customer-centred online banking is. Even the new banks that are entirely web-based are failing to show sufficient expertise in this sector.

The phrase "Online Banking" should define a fully comprehensive service where all banking needs are catered for online. There appears to be some way to go before online banking provides a full service, at least in the UK. Many high street banks in the UK may not succeed if they do not fully comprehend what electronic commerce can do for them and their customers. US

banks seem to be more aware of what is needed and what customer needs are. At this juncture banking institutions in the UK have failed to lead in this field and they have much catching up to do. They all need to think of strategies that will give their current and new customers superior customer choice and service online. Future planning and innovation is the key as electronic commerce is a fast evolving medium. The most successful electronic commerce vendors design their services and products to attract and retain new customers and to keep those that they already have. They also have strategies that aim to attract competitors' customers, which includes anyone who is surfing or browsing.

People/customers/consumers/users are in control in cyberspace and they have all the power, all businesses especially banks must come to realise this. Banks cannot continue to make managing money difficult for customers. In the very near future, through interactive TV, Internet telephones and the PC all customers everywhere will have more choice of where to put their money and why they should put it there. The Why? being ease of access, safe user-friendly technology, and highest customer service along with a range of products and services that equates to total consumer satisfaction.

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