Spring 3-23-2010

MEASURING THE EFFECTIVENESS OF WEB MARKETING IN FINANCIAL SERVICES

Christopher Holland
University of Manchester, chris.holland@mbs.ac.uk

Gordon Mandry
University of Manchester

Liam Ardern
University of Manchester

Kamyar Kharazi
University of Manchester

MEASURING THE EFFECTIVENESS OF WEB MARKETING IN FINANCIAL SERVICES

Christopher P. Holland[1], Gordon D. Mandry[1,2], Liam J. Ardern[1] and Kamyar Z. Kharazi[1]

[1] *Manchester Business School, University of Manchester, Manchester M15 6PB, U.K., www.mbs.ac.uk*,

[2] *Cyprus International Institute of Management, www.ciim.ac.cy*

Email: Chris.holland@mbs.ac.uk

Abstract

Web marketing is now an integral part of a bank's overall marketing strategy. It fulfils two main purposes: (1) it raises awareness of the bank's brand and provides information so that existing and potential customers can conduct detailed research into the bank's products and services, and (2) it is a service channel for customers to carry out banking transactions and account management. A key measure of online performance is the share of unique visitors within a defined market. In this paper we evaluate the leading UK banks' online performance in terms of share of unique visitors relative to their overall market share. In addition, the concept of web visibility is introduced, which is a measure of Internet connectedness. The relationship between web visibility and unique visitors is shown for each individual bank, and the competitive implications outlined. Further research is outlined, in particular to set out an agenda for extending the concepts described here into a more comprehensive analytical framework.

Keywords: banking, Internet marketing, online performance, web visibility

1. Introduction

Web marketing is having a profound effect on the way that banks interact with their customers by enabling new forms of communication and marketing. The strategic potential is to improve every aspect of a how a bank markets itself to its existing and new customers. Although the impact of the web will vary by product (e.g. current account, deposit account, investments, insurance etc.), there is general consensus of opinion that web marketing is affecting every stage of the market adoption process: awareness of bank brands; customer attitudes; lead generation; validation of leads; propensity to buy; evaluation of competing products; the purchasing process; the delivery of the banking service; and finally customer retention. McKinsey (2007), in a survey of leading marketing executives worldwide predicts that by 2010, the majority of consumers will use the web to inform their choice of purchase, a third will carry out a proportion of their purchasing online, and web sales will account for 10% of total retail sales, a 100% increase on web sales in 2007.

As banks increase their investments into web marketing relative to conventional media and other promotional activities, it clearly becomes more and more important to evaluate the effectiveness of these investments. There are two broad levels of web marketing performance data: market-level benchmarks between competitors; and the evaluation of customer attitudes and behaviour, e.g. see D'Ambra and Riceb (2001) who used panel data and OxIS research (2009) which is based on larger sample-based research. This paper focuses on the market-level analysis and proposes a framework to evaluate the performance of a retail bank relative to its competitors in the key areas of unique visitors and web visibility and explains the importance of these variables and how they relate to the broader marketing strategy. Although the focus is on market level insights the authors also touch on the importance of web user interface and business process design for converting prospective customers to sales.

2. Elements of Web Marketing Strategy

Recent statistics on international Internet access show that in the EU, 60% of households have access to the Internet and retail e-commerce is now at 4.1% of retail sales. Within Europe there is a large variance with the leading countries having significantly higher rates of access than the laggards, e.g. Netherlands (80%), Denmark (79%), Sweden (77%) and UK (63%). As a single country the US has the highest overall number of Internet users with over 200 million users online accounting for 70% of its population. Figures for Internet penetration in other countries and regions include Japan (68%), China (12%), India (5.3%) Middle East (17%), Australia (72%), South America (21%) and Africa (4.7%) (Nielsen/ NetRating 2006). Between 2000 and 2007 the growth rates for developing countries indicate that they will soon catch up with the leaders. Compare, for example, the growth rates of India

(1000%), China (620%) and South America (445%) with the US (120%), Europe (206%) and the UK (114%). In the UK, usage patterns of the Internet show that over 40% of online users access banking and financial services websites (National Statistics Office 2007) whilst in Europe as a whole, the figure is nearly 30% (Eurostat 2008).

The growth in web usage coupled with the fragmentation of TV and radio audiences has led to a shift away from broadcast media towards investments into web marketing activities such as new trading platforms, paid search and integrated advertising campaigns featuring the domain name of the bank as a key part of the promotional effort. In the UK, for the first half of 2007, Internet advertising grew by over 41% from the previous year to £1.3 billion, and now accounts for almost 15% of total advertising spend compared with 10% for 2006. Other types of advertising spend including TV, press, radio and direct mail all declined (source: Internet Advertising Bureau/PWC survey 2007).

McKinsey (2007) predicts that digital advertising will increase significantly over the next three years, even to the extent that 11% of their respondents in a recent survey indicated that the majority of their advertising budget will be online. The principal reason for these changes is that online advertising is more efficient than other forms of advertising. However, McKinsey also identified several barriers to online advertising, notably insufficient metrics to measure the impact, and internal capabilities. These concerns are also echoed in another McKinsey publication by Grosso et al (2006) who discovered frustration with advertisers at the lack of advertising agencies with a mix of skills to manage traditional *and* digital campaigns. They also identified the lack of an accepted independent metric for digital campaigns comparable to Nielsen TV ratings that makes it difficult to compare campaigns and measure their impact.

So far evaluation in most companies has focussed on analysis of web design, growth in number of hits and identification of the point at which users leave. These are all important measures of performance, but they are inadequate insofar as they tell us nothing about our performance relative to competitors. When we evaluate a company's marketing expenditure, we want to examine our "share of voice" or share of expenditure. In marketing generally we pay ever more attention to market share, and treat it as a critical measure of a company's performance. Not only that but we also try to identify the determinants of market share performance so that we know which levers to pull, in trying to increase our market share. We need some similar data and concepts to help in evaluating our web performance.

With this in mind the authors have developed a set of tools to help a company understand its web marketing performance relative to its competitors. The set is made up of two main components: share of unique visitors and web visibility.

2.1. Web Market Profile of Unique Visitors

By unique visitors we mean the number of individual users who visit a particular website at least once over a fixed period of time. If an individual visits the same website on multiple occasions in this time period, they are still only counted once. Of course, a single user could visit several bank sites and so would be counted as a unique visitor to several websites. The number of unique visitors to a bank's website is analogous to the number of customers who visit a particular bank branch in a specified time period.

Using this measure it is possible to build a market profile that shows the relative differences between the banks in terms of their access to online customers. We realise that this does not equate to sales because there is no way of estimating the sales to a competitor's website. It is however similar to measures of conventional advertising effectiveness such as "saw the ad", "read the ad".

Unique visitors are therefore an important indicator of the level of consumer research into a bank's products and services, as well as being a measure of the volume of online transactions. In marketing theory, the most relevant framework that illustrates the likely marketing impact of online research is the stages of adoption model. Kotler et al (2005) describe five stages in the consumer buying process: awareness; interest; evaluation; trial and adoption. The impact of the Internet will be on raising awareness and interest through online advertising and social media campaigns and individual recommendations, and in online research for the evaluation stage. In addition to these five stages, there is arguably a further stage which could be termed e-service in an Internet context.

The latest research from OxIS (2009) on consumer behaviour regarding online research of commercial products estimates that over 80% of the UK Internet population used the web to compare products and prices online, which demonstrates the central role that the Internet plays in the decision-making process to adopt a new product or service. This extremely high level of online research also explains why marketers are becoming increasingly interested in understanding the nature of channel interaction, i.e. how the Internet and bank branches / retail stores interact with each other. Figure one shows the results of the analysis of unique visitors for the leading banks in the UK.

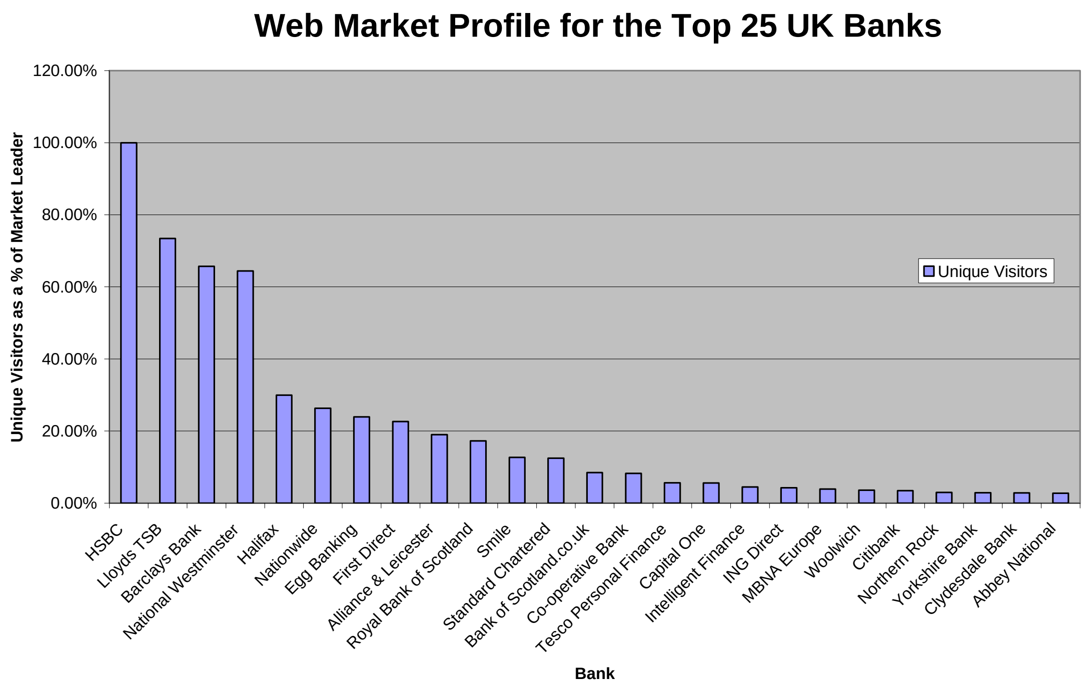

Figure 1. Web Market Profile of UK Online Banking, source Alexa.

From inspection of the graph, we can see that HSBC is over 36% bigger than its next largest competitor in terms of numbers of unique visitors, while Barclays and NatWest lag both HSBC and Lloyds TSB. There is then a significant fall-off to the next group of competitors who would have to more than double their number of web visitors to break into the top four group of banks. Beyond the top ten banks, there is a long tail of banks headed by Smile. Each of these banks typically focuses on a particular product, distribution channel or geographic territory. For example Woolwich is the mortgage division of Barclays bank, Capital One is focused on credit cards and ING Direct markets deposit and insurance products primarily through telephone and Internet channels. The sum of the unique visitors to all of the individual banks gives a measure of the overall online market size though there is one significant limitation to the measure insofar as it is not possible to measure the extent to which unique visitors to an individual bank are shared with those of another bank arising from an individual visiting more than one bank website, either as a shared customer or to evaluate a new product offering.

This steady state analysis is interesting in its own right, but even greater insights can be obtained by carrying out the analysis over time. Then we can see which banks are growing their number of unique visitors and which are falling behind. We can also relate the changes in web market share to marketing activity designed to promote web traffic, and answer questions such as how effective an advertising campaign or sales promotion is in increasing our share of visitors. This is how a major telecommunications company is planning to use the data.

We can further extend the analysis by comparing the relative share of unique visitors with the overall (customer) market share. Table one shows this analysis for some of the top UK banks, where the measure of overall market share is taken as the share of current accounts.

Bank / Performance Metrics	Share of Web Visitors	Share of Current Account Market	Web / Customer Market Share Quotient
HSBC	23%	14%	1.6
RBS Group	18%	17%	1.0
Lloyds TSB	14%	19%	0.7
Barclays	13%	15%	0.9
Nationwide BS	5%	5%	1.0

Table 1. Comparison of Share of Unique Visitors and Share of Current Accounts, Source of Current Account Data, Mintel 2007.

HSBC is outperforming all of the other leading banks in terms of attracting web visitors compared to its share of the current account market. Conversely Lloyds TSB is significantly underperforming on the web relative to their share of the current account market. RBS, Barclays and Nationwide Building Society have almost identical web and current account market shares. In our view, a significant part of HSBC group’s success is owed to its higher number of business users and also its ownership of First Direct, which accounts for 5% of HSBC's overall 23% share of unique visitors. The direct banking model of First Direct has clearly moved away from a purely telephone based service to a combination of telephone and web. The underperformance of Lloyds TSB can be partly explained by its focus on branch marketing, particularly during the early development of web marketing where it sought to exploit its retail dominance of bank branches. However based on the content of Lloyds TSB's current advertising and their linking of tiered interest rates to Internet usage, it appears that they may be adopting a more aggressive approach to web marketing.

The database we are in the process of assembling is relatively new, and insufficient time series analysis has been carried out but as the web becomes increasingly important in a company's marketing activity in terms of new customer acquisition, we expect to see an increase in unique visitors preceding an increase in customer market share, certainly in the areas of the more simple financial products such as car insurance and deposits.

2.2. Web Visibility

Web visibility is defined here as a measure of website connectedness. As well as the number of incoming links to a bank's website, the quality of the links is also important, i.e. the source of the link is important which means that a link from a large, reputable media site such as a newspaper or television company is much more valuable than a link from a small, relatively unknown site. Web visibility is analogous to location on the high street, and is therefore equivalent to the sum of all of a bank's branch locations. A well located bank branch confers several marketing advantages over a poorly located branch, for example convenient access, ability to capture more passing traffic and ease of use. In much the same way, a bank with a high web visibility will have significant advantage over its less visible competitors.

This advantage will stem from two reasons. The first is that a higher web visibility means that a bank's website is easier to find through web surfing than one with a lower visibility. Web visibility also has a significant influence on ranking in search engine results such as Google and Yahoo!. This is because the major search engines, including Google, exploit the link structure of the web in their algorithms for calculating the rank of individual websites that are returned for a particular search (see Langville and Meyer 2007 for an authoritative technical review). Clearly, web visibility is an important element of web marketing and needs to be measured along with the other determinants of web traffic such as media advertising and other marketing activity.

Figure two shows the results of web visibility for the leading banks in the UK. Web visibility is measured using an algorithm that measures the connectedness of an individual website by evaluating the number and quality of incoming hypertext links. The web visibility results are shown relative to the most visible competitor in figure two.

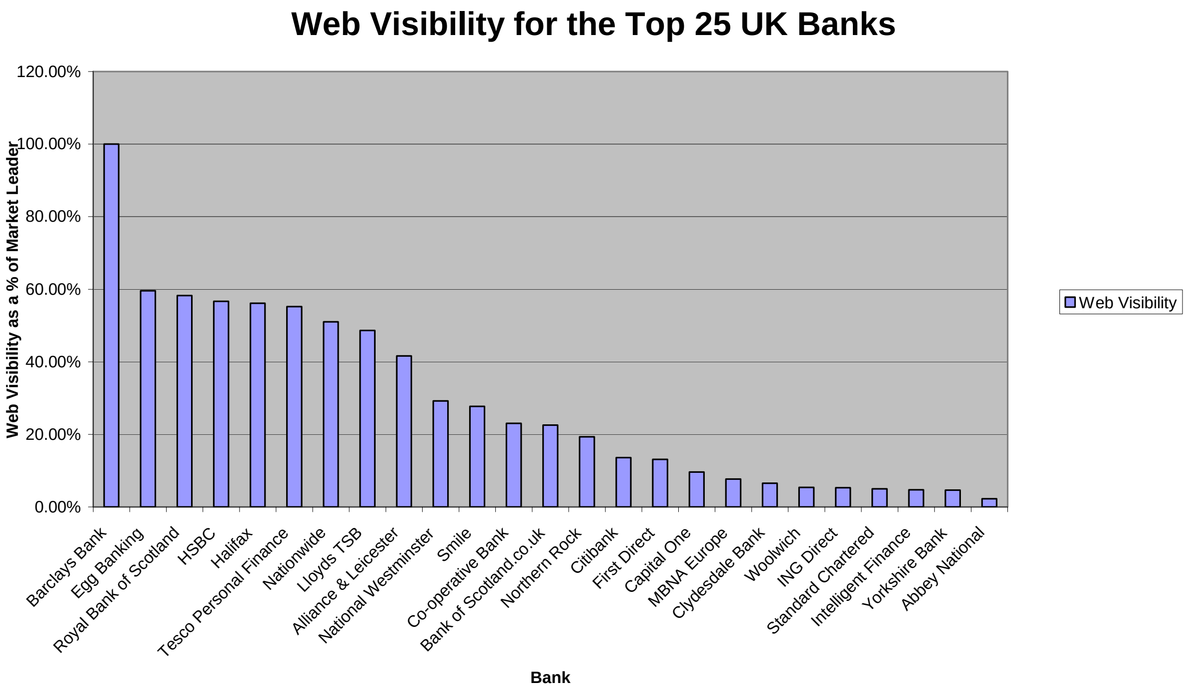

Figure 2. Web Visibility of Top 25 UK Retail Banks. Source: personal research.

It is interesting to observe that Barclays leads the way in terms of web visibility with a score over two thirds higher than any of its major rivals. By contrast National Westminster Bank is a long way behind the other leading banks. Of note also are the high scores achieved by Egg Bank and Tesco Personal Finance. Egg is clearly using web visibility to compensate for its lack of a branch network while TESCO is leveraging the expertise gained in grocery and online retailing to increase awareness of its financial services offering.

A detailed analysis of how to improve web visibility is beyond the scope of this paper. However the main starting point is to describe and understand the detailed structure of competitor websites' network locations in order to identify areas of competitor strengths that can be emulated and weaknesses that can be exploited. Based on our initial work with companies, links from web 2.0 websites (social networking) are growing in importance because they attract high numbers of users, and the structure and content of these sites are evolving very quickly. In addition, the content on web 2.0 websites can have a direct influence on customer awareness, attitudes and subsequent behaviour because recommendations and criticisms from other individuals have the potential to be widely read and disseminated.

3. Web Visibility and Unique Visitors

Figure three looks at the relationships between web visibility and unique visitors, where scores for each variable are given as a percentage of the market leader.

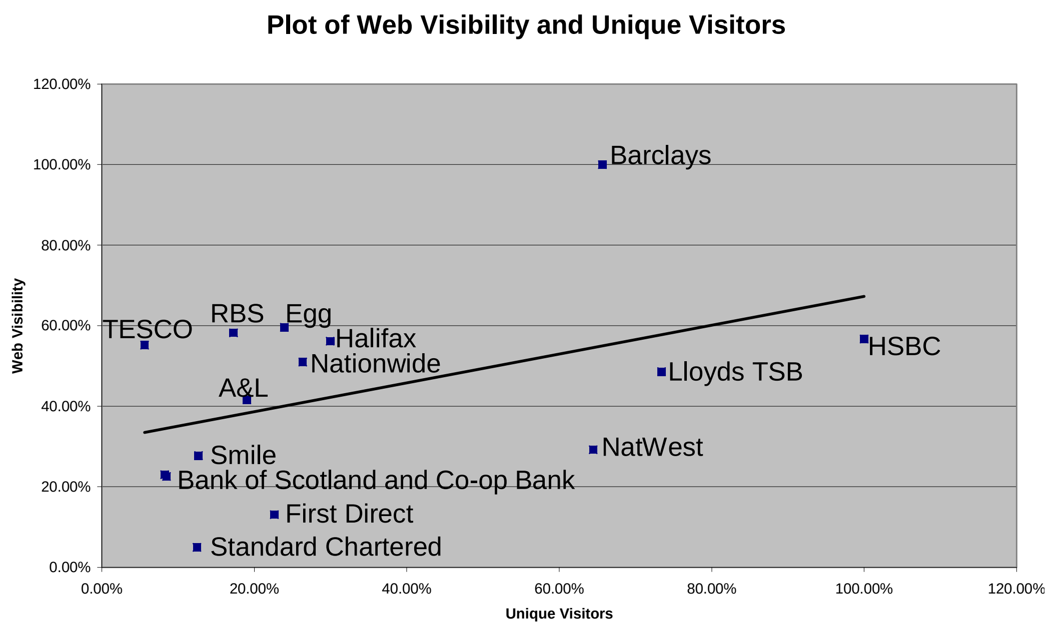

Figure 3. Plot of Web Visibility against Unique Visitors

The line running through the data is the line of best fit. If a bank is above the line, its web visibility is higher than its score on unique visitors, relative to the market leader. This is the case with Barclays, and if we are right in assuming that web visibility is an important element of web marketing, we expect that in a dynamic environment, Barclays will gain new web visitors compared with its competitors, if this situation persists and other things being equal. Over time, these new web visitors will translate into an increase in customer market share, in exactly the same way that effective advertising increases customer awareness, which over time, results in new sales and potentially market share gains. Conversely, National Westminster is predicted to lose web traffic and hence customer market share over time, unless it takes corrective action or compensates for its lack of web visibility in other ways. Furthermore, Lloyds TSB does not appear to have grasped the importance of web visibility in increasing traffic to its website, and hence correcting the imbalance between its share of unique visitors and share of current accounts. So far as HSBC is concerned its web visibility is broadly in line with its very high share of unique visitors.

Egg, TESCO and RBS all appear to be relatively aggressive in their use of the web given their high web visibility relative to their share of web traffic, and the benefits of this stance are already clear in the case of TESCO. Our initial analysis of time-series data covering a six month period after the above data was sampled in March 2007, shows that TESCO has increased the number of unique visitors to its website and has also significantly increased its web visibility relative to the market leader Barclays.

4. Discussion and Conclusions

In addition to investments into the web technology platform, banks are also making significant investments into media and online advertising. As a proportion of overall advertising spend, online advertising is likely to grow to between fifteen and twenty percent of the overall advertising budget, and the majority of customers will use the web to carry out research before making a major purchase. It is therefore vital that banks are able to monitor and track the performance of their web marketing strategy at the market level relative to competitor strategies in areas such as share of unique visitors, search performance and web visibility.

This paper has described two key concepts in Internet marketing: (1) the competitive share of unique visitors and (2) web visibility. These two variables can be used to evaluate the performance of a bank's web marketing strategy against those of its competitors and the concepts have been illustrated with data from leading UK banks. This initial analysis demonstrates the importance of measuring and also *interpreting* the share of unique visitors.

It also shows that web visibility is an important determinant of a bank's share of unique visitors. To extend the concepts into a more general framework, other factors would also have to be taken into account. For example the impact of natural search, paid search and Internet advertising could be measured in addition to web visibility. To relate unique visitors to online sales, the conversion of online visitors to online sales would also have to be considered. A more general framework of this type is shown in figure four.

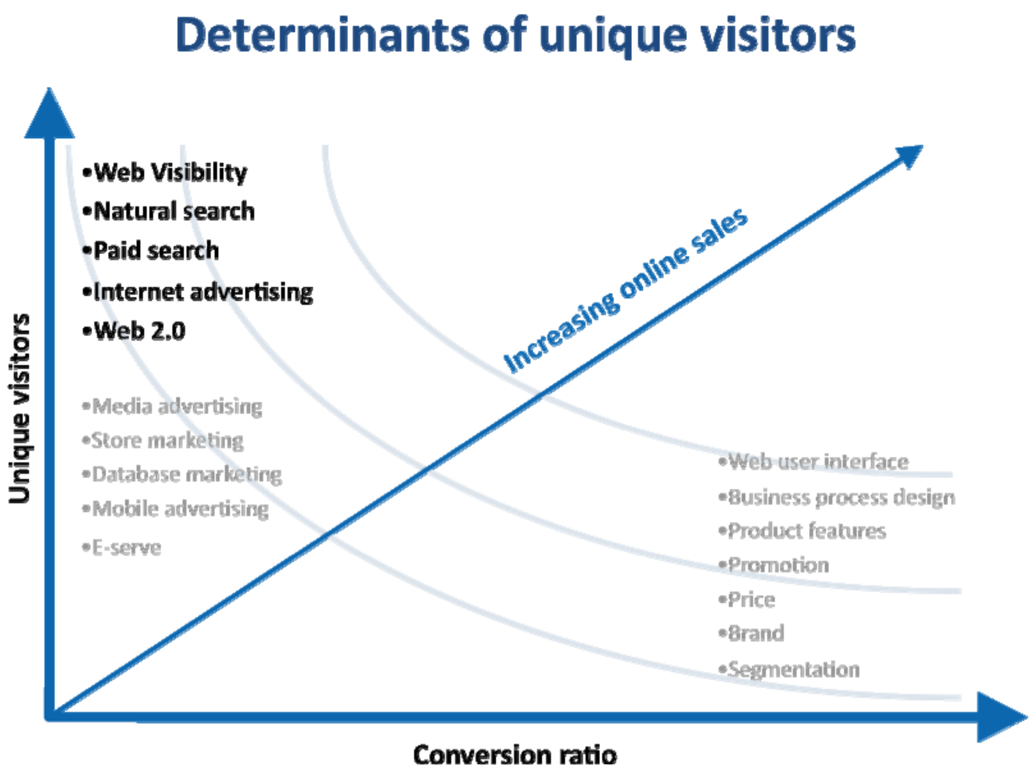

Figure 4. Determinants of unique visitors and online sales framework

It can be seen that unique visitors is a function of a range of other factors in addition to web visibility. Further research is being conducted into the relative importance of search, Internet advertising and web 2.0. The diagram also shows that the relationship between unique visitors and online sales is defined by the conversion rate. That is, for a given level of online sales, each online sales curve defines the possible values of unique visitors and conversion ratio to achieve a particular level of online sales. For example, to achieve 10,000 sales over a time period of one month, then this could be achieved by converting 10% of 100,000 visitors, 20% of 50,000 visitors or 1% of a million visitors and so on.

The analysis can be extended further to other national bank markets, and can also be used to evaluate the commercial impact of price comparison sites and web 2.0 developments. For example, the likely impact of price comparison sites can be measured by tracking their growth relative to the banks websites, and also by monitoring the referral rates to the bank's own site. Similarly, the concept of web visibility can be extended to examine the impact of the social networking sites. (For a related discussion of how bank size measured by *assets* rather than unique visitors is related to market strategy, see Holland and Westwood, 2001).

In addition to tracking the number of visitors to their website and those of their competitors, it is also equally important to manage the conversion from new visitors (prospective customers) to active enquirers of information, to sales and then customer retention. Customer behaviour on the bank's website is partly determined by the user experience which is influenced by the web user interface and the overall design of the business processes and structure of the website. A more detailed discussion of the web experience is beyond the scope of this paper, but it is worth noting that to evaluate the customer behaviour and experience it is necessary to track actual customer behaviour both before and once customers enter a bank's website. Web marketing panel data can be used to track customer behaviour outside of the bank's systems, and internal tracking software can be used to capture customer behaviour once a prospective or existing customer is using the bank's own website. A final note is that it is becoming increasingly clear that in order to succeed in Internet marketing will require increasing amounts of co-operation and understanding between the marketing and Information Technology functions. This observation is also supported by the competitive benefits that have been demonstrated through combining marketing and technological capabilities to develop areas of competitive advantage, e.g. see Prašnikar et al (2008).

5. References

D'Ambraa J. and R.E. Riceb (2001), *Emerging factors in user evaluation of the World Wide Web*, Information & Management vol. 38, pp. 373-384.

Eurostat (2008), Internet access and use in the EU27 in 2008, Eurostat news release, 2 December 2008.

Grosso C., A.G. Shenkan and H.P. Sichel (2006), *A reality check for online advertisers*, The McKinsey Quarterly, Web exclusive June 2006.

Holland C.P. and J.B. Westwood (2001), *Product-market and technology strategies in banking*, Communications of the ACM, Volume 44, Number 6, Pages 53-57.

Internet Advertising Bureau and PWC survey of Advertising (2007), source: www.iabuk.net

Kotler P., V. Wong, J. Saunders and G. Armstrong (2005), *Principles of Marketing*, 4th European Edition, p. 287.

Langville A.N. and C.D. Meyer (2007), *A survey of eigenvector methods for web information retrieval*, SIAM Review, Vol. 47, Issue 1, pp. 135-161.

McKinsey (2007), *How companies are marketing online: A McKinsey Global Survey*. Source: www.mckinsey.com.

Mintel (2007), Retail banking overview.

National Statistics Office (2007), a UK Government publication. www.statistics.gov.uk

Nielsen Netrating (2006), *Internet penetration*, www.netratings.com

OxIS (2009), *Oxford Internet Surveys: The Internet in Britain 2009*, p. 24, authors William H. Dutton Ellen J. Helsper Monica M. Gerber.

Prašnikar J., M. Lisjak, A. Rejc Buhovac and M. Štembergar (2008), *Identifying and Exploiting the Inter relationships between Technological and Marketing Capabilities*, Long Range Planning, vol. 41, pp. 530-554.