



How Banks Fit in an Internet Commerce Business Activities Model

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Abstract

Banks have started investing in the internet commerce market, by discovering areas in which they have a role to play and can reap the benefits first. However, to define niche markets and decide what to offer, they need a clear and concise Internet commerce strategy. A prerequisite for this, is an Internet market chart where it is shown where and how banks are involved in this new market and which areas have not yet been exploited. This is the purpose of this paper.

The Internet commerce arena has become a very complex world. Millions of sites wait for visitors offering a vast number of products, services and information. The dynamic and flexible nature of the medium as well as its ubiquitous reach have leveraged a great variety of business activities. New intermediaries have appeared in the virtual value chains and new types of business, e.g. the virtual organizations, have arisen as a result of the innovative business models that emerged at the early dawn of the net economy era. The plethora of business activities exploiting the capabilities of Internet as a global, cheap, multimedia distribution/ delivery channel may confuse the newcomers and prevent those willing to enter it due to the lack of a market chart that shows clearly what is happening in this area.

Banks and financial institutions, in general, have established an Internet presence with various objectives. "E-banking will soon mature into an offensive business strategy rather than a passive 'must-have'" [Hirst 1999]. Some banks are there because their competitors have been. Some others prefer a 'wait-and-see' practice. Some are using it as a banking channel, being part of their distribution /delivery management. Very few, however, have set a strategy for exploiting the opportunities offered by Internet. To do this, they need some sort of e-business activities chart, showing the structure of the Internet market in order to decide which business is relevant to theirs and where to invest on. Moreover, decision-makers would like to know what are the Internet business activities in which other banks have been engaged in.

This is exactly the purpose of this paper. To provide a concise, comprehensive way of modeling the Internet commerce market, because its business activities have not been systematically chartered, and, second, identify the role of banks in the Internet commerce world. Examples of current initiatives of banks are given and suggestions are made for possible new areas for differentiation.

THE ROLE OF BANKS IN THE INTERNET WORLD

Initially, banks promoted their core capabilities, being products, channels and advice, through the Internet. Then, they entered internet commerce market as providers / distributors of their own products and services. "The trend toward electronic delivery of products and services is occurring dramatically in the financial service industry (something we call "e-Finance") where the shift is partly a result of consumer demand, but also of a ruthlessly competitive environment" [Geyer 1997]. More recently, due to advances in Internet security and the advent of relevant protocols (e.g. Integriion, OFX, SET etc.), banks discovered that they can play again their primary role as financial intermediators and facilitators of complete commercial transactions via electronic networks and especially via the Internet. However, "financial service organizations are implementing multiple styles of electronic financial services" [Schiller 1997]. Some have chosen a 'direct web presence', others have opted either for 'owners of an financial services organization-centric electronic marketplace', or for 'participants in a non-financial services organization-centric electronic marketplace' [Schiller 1997]. However, this scheme is very abstract and vague and does not support any decision-making process for the banking institutions to define a niche market for them to invest on and compare with their rivalries.

AN INTERNET COMMERCE MARKET STRUCTURE MODEL

The following model charts the Internet commerce market, by distinguishing the types of business activities of the Internet commerce and, thus, categorizing the role that they various participants, including banks, play in this market.

1. Technology providers

The technology infrastructure is an integral part of the Internet commerce edifice. Telecommunication organizations, Internet Service Providers, Web hosting services organizations, Web development software houses and IT integrators are technology providers who have flourished by the presence of the Internet commerce business. A few banks are considering to spin-off their web technology resources and start-up a new business as Internet technology providers.

2. Content providers

The richness of the medium's content has been a critical success factor in attracting a sharply growing number of web sites visitors and commercial users. Content providers are the source of the raw material that flows through the medium and upon which intermediators offer added value. Four major categories of content providers have been identified. For example, banks feed their web sites with their content which usually includes a corporate profile, product and pricing information, rates, some application forms etc.

- *Producers, owners, manufacturers, retailers.*

They possess a good, service, piece of information that want to advertise, promote, sell, distribute over the Internet. Most banks operate a web site with a catalogue of their products and services for promotion and communication purposes. A growing number of banks worldwide offer e-banking/web banking/ internet banking, whereby their customers manipulate their personal finances and execute transactions via the internet.

- *E-brokerage.*

Activities or firms that offer an interface to the end-user / customer for access to various products/services. An e-brokerage activity may be an agent that presents a variety of products (e.g. loans), rates them, makes suggestions and facilitates purchasing (e.g. www.e-loan.com). Or it can be a means to trading (e.g. www.e-trade.com).

A special type for e-brokerage is *information brokerage*. Web sites that give access to databases of special interest topics are information brokers (e.g. www.cordis.lu). Downloading can be free-of-charge or not. Some banks' sites act as information brokers because they provide access to rates, indices, economic information and reports pertaining to the whole sector in which they operate in, rather than giving information pertaining to their own organization only.

- *E-services providers*

These business activities are not carried out in brick-and-mortar premises, but they are realized in the virtual world. Usually they provide services for participants of the Internet commerce world (e.g. www.searchpositioning.com)

At its extreme, e-services providers are *virtual organizations*, such as e-banks

www.electronicbanker.com,
www.open-vision.com,
www.firstdirect.co.uk,
www.egg.co.uk,
www.advance-bank.de,
www.sovereignbank.com,
www.amcity.com/houston/stories/1997/09/01/story1.html.

Virtual banks can offer cheaper rates due to the lack of labour and premises costs. The comfort of remote, self-service banking that virtual banks offer augments the quality of service perceived by their customers.

- *'add-on' material providers:*

In this category fall the advertisers and infomediaries ("sole or main source of revenue derives from capturing consumer information and developing detailed profiles of individual customers for use by selected third-party vendors" [Hagel 1997]). Banks advertise their products, such as cards, loans etc. by using banners or other advertisement tricks on other's web pages, paying a fee to the owner of the advertisement space.

3. Context Providers

This type of Internet commerce business is about new intermediaries. They 'accommodate' context in a manner that adds value to its content components. Generally, context providers are e-marketplaces owners. The content scope of an e-marketplace may extend vertically or horizontally, addressing the interests of an industry sector, a user community, a special purpose or it may aggregate material from various general or related areas.

- *e-marketplaces:*

"Marketplaces that connect buyers and sellers are up and running in many product categories, and are creating value by making trading more efficient. [...] There are three types of marketplace: those controlled by sellers, those controlled by buyers, and those controlled by neutral third parties [Berryman 1998]". In most of the cases, e-marketplaces are neutral, i.e. they are set up by third-party intermediaries which host sellers/ merchants. Buyer- or Seller-driven marketplaces are often encountered in e-procurement, where products are asked for or offered, respectively.

Specific applications include e-mall owners, e-auction houses, portal owners, and directory services owners. There are banks that host an e-mall (www.barclaysquare.com) putting forward their brand name as a guarantee for on-line shopping trust. A bank could also serve as an e-auction house because it can assure the securitization of the bidders, but, to the best of our knowledge, no banks have entered into this area yet.

4. Enablers

These are value adders that enable more transactions in the internet commerce market. Typical enablers are payment service providers, clearing houses, and trust guarantors. Banks are increasingly building payment infrastructure with various security mechanisms (SSL, SET etc.) because there is tremendous potential for profit as more and more payments will pass through the Internet.

The challenge for banks is to offer a payments back-bone system that will be open enough to support multiple payment instruments (credit cards, debit cards, direct debit to accounts, e-checks, digital money etc.) and scalable enough to allow for a stable service regardless of the workload.

Certification authorities (e.g. www.visa.com, www.verisign.com, CyberTrust: www.gte.com) enable secure transactions by managing the distribution and circulation of digital certificates, either SET certificates or not. Banks are qualified to play the role of a certification authority first at their customers and then offer it as a service. Security and trust infrastructures are obviously within the scope of banking in its broader sense. An example of such an infrastructure is Barclays' Endorse. "Endorse is a digital signature service enabling individuals and businesses to transact with trust over the Internet. The Endorse smart card creates the Members digital signature, which is used to guarantee the identity of the individual signing electronic data. The signature also protects the integrity of the data by detecting alteration during transmission" [www.endorse.co.uk]. Based on the security and trust ingredients, other enabling services, such as copyright and intellectual property enforcement, can be offered by banks. "Magex secures the distribution of content and processing payments for digital information. Not only does Magex enable the delivery of digital content (music, films, agents, books, commercial information) but also offers persistent protection of copyright and collects the micro-payments" [SemaGroups brochure].

References

Berryman K., Harrington L., Layton-Rodin D, Rerolle V. [1998] Current Research: Electronic commerce: Three emerging strategies. *The McKinsey Quarterly*, 1998 Number 1, pp. 152—159.

Hagel J. III and Rayport J. F.[1997] The new intermediaries. *The McKinsey Quarterly* 1997, No 4, pp. 54-72.

Hirst A [1999] Channel crossings. *The banker*. September 1999, pp. 72-73.

Gandy T.[1999] *The network bank*. Chartered Institute of Bankers.

Geyer J. [1997] Adoption of e-Finance. Research Note SPA-1200-101, *Gartner Group*, 28/5/1997

Schlier F. [1997] Multiple styles of electronic financial services. Research Note KA-900-112, *Gartner Group*, 18/7/1997.