

**TRENDS AND PRIORITIES IN THE DEVELOPMENT  
OF THE LATVIAN BANKING SERVICES IN THE CONTEXT  
OF EMERGING KNOWLEDGE BASED ECONOMY:  
CASE OF E-BANKING**

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**Abstract.** This article investigates the recent changes in the Latvian banking industry related to the emergence of ‘new economy’ and consequences that it has caused. It analyses an impact of new information technologies in the context of knowledge-based economy facilitating the changes in service strategy of the banking institutions in order to seek the most efficient service model. Knowledge-based economy has an influence not only on the choice of the dominating solutions offered by financial service providers, but it also reflects the preferred choice of them by customer. Moreover, customer demands, priorities and lifestyle are influenced by changes in external environment arising from the transformation of economical structure. These aspects are examined from the angles of globalization and customer trust in conditions of service depersonalization. Beside that, the article emphasizes potentially severe problems of the financial sector development in Latvia and analyzes e-banking services and the perspectives of their future escalation.

**Keywords:** e-banking, Latvia, knowledge based economy, Internet, telecommunication technologies

## **1. Introduction**

The concept of ‘new economy’ or the knowledge-based economy has recently become a very popular term. It is one of the main aims in the Lisbon Strategy – “to make Europe the most competitive and dynamic knowledge based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion by 2010” (Lisbon Strategy 2000). Development of the knowledge-based economy is especially important for the EU new accession countries as it will help to break through the transition period from centralized forms of economic organization (Final Report of the Knowledge Economy Forum 2002:5). Latvia is not an exception – as any other member state it has developed national

Lisbon program for the years 2005–2008 where the creation of knowledge-based economy is among one of the priorities (Skribāne, Neiders 2006). Thus, although Latvia has not yet achieved all goals set up in this program, it is possible to argue that the process of knowledge-based economy started to emerge here.

The concept of 'new economy' in the financing sector is closely connected with changes in supply and demand in the service market caused by the usage of new technologies. Unlike traditional economy, knowledge-based economy is based not only on material values, but for mostly on information and knowledge as the main asset. Rapid development of IT and Internet are creating opportunities to perform more effectively and swiftly, stimulating rapid productivity growth as well as reducing entrepreneurship costs, which, in turn, lead to satisfying consumer needs and increasing the new type demand (Rifkin 2001).

'New economy' overall is characterised by a growing significance of the service-sector and an increase of the value added in this area of an inland economies. Latvia with her rapid development of market economy was not an exception: it was accompanied by an increase of value added in service-sector and its share in GDP. Changes of the GDP structure since 1996 display clearly that one of the main growth factors has been the increase of the service sector with an extension of input from 56.0% in 1995 till 72.9% in 2004 (LR Ekonomikas Ministrija 2004). Retail sector is a dominating branch in Latvian service industry. However, a special role in the expansion of service sector belongs to financing (banking, insurance, leasing deals and other services provided by finance firms). This special role is characterized not only by its share of GDP (>5%), but also by its nature.

The uniqueness of financial sector is determined by several factors. For instance, financial services are provided not only to the end consumers (households that are not creating further value added in industrial and service sectors) but also to other entrepreneurs, thus being repeatedly involved in the value adding process. Moreover, financial services are stimulating stability and development of other national economy sectors (for example, lending services are providing reinforcement of other industries, while insurance services are safeguarding the security of transactions). Furthermore, stability of the financial sector is an indicator of the general economic development affecting foreign investors' decisions, thereby regulating investment flow and activities of the economical collaboration models, which are essential foundations for the conversion in retail, industry and construction branches.

In the last years Latvia has reached a proportion between service and real sector in the total share of GDP (~70:30), typical of many western countries, but it was mainly due to consistent and rapid expansion of retail (its share in GDP has reached 18.1% and in 2003 it grew by 11.3%). Growth of the real sector is smaller, beside that investment in R&D comprise only about 0.4% of GDP (EU average is 1.8%). From these data it can be concluded that the backwardness of the real sector compared with the service sector and consequent structural imbalance will lead to the consistently growing share of service sector, wherewith new, growing needs of the real sector betterment emerge. To provide progression of this evolution, services of financial sector will be needed. Thus it may be forecast that

the annual growth of financial services will be above average and serve as a catalyzing and stabilizing factor in national economy.

Nowadays it has been proved that the terms and development of financial services along with supply and more convenient availability of the new services catalyze economic growth (Hahl, Haukioja 2003). Many other researches have acknowledged relevance of financial system in the development of national economy. For example, empirical study of King and Levine (1993) describes an increase in economic indicators in countries with developed financial instrumentality systems after the World War II. Luxembourg is a typical example – agricultural and relatively undeveloped country at the beginning of the 20th century. Between the world wars metal industry developed there, but after World War II and the steel industry decline in the sixties, Luxembourg step by step chose finance industry as a priority of national economy and at the end of the century this country ranked among the ones with the highest GDP per capita (World Factbook 2006, World Life Quality Index 2005, 2006). Connections between the development of financial service market and such indicators as GDP per capita and productivity growth are very notable in national economy and are statistically tested (Bank of Latvia 2004, Central Statistics Department of Latvia).

Recent analysis in OECD countries has showed that science, technologies and innovations have significantly impacted efficiency growth and become a new basis for economical development and social welfare. Considerable improvement has been made in management practices, relevant organizational changes have appeared and production methods of goods and services are becoming more rational and innovative. Furthermore, organizational changes and changes in workforce quality helped to overcome stagnation in many sectors, reduce transaction costs, improve communication between the enterprises and encourage cooperation between them (OECD Observer 2000).

The present authors have chosen to analyse financial sector because it is one of the most rapidly developing sectors in Latvia, directly affected by the Information Technologies (IT) and creates significant innovations. To evaluate an impact of knowledge-based economy on changes in Latvian banking sector, Latvian financial market and its role in the national economy have been described. Furthermore, the main factors affecting changes in banking sector are examined and analysis of these recent changes paying special attention to the e-banking services has been conducted within this study.

The article is based on the analysis of statistical data and interviews with leading specialists of Latvian banking and financial market. The survey which included 21 in-depth interviews with banking experts, particularly managers in charge of the development of business technologies, HR and product development for the leading Latvian commercial banks was conducted in 2005 by the authors. The purpose of these interviews was to assess the role of the technologies in the context of the emerging knowledge-based economy and future trends of development of Latvian banking industry. The survey was focused on evaluation and ranging the future business models by the probability of realisation and importance

to the particular business. Beside that the shift of the role of human resources and IT in banking industry in 5 years term was covered in interviews.

## **2. The impact of the emergence of the new technologies in financial services sector**

An impact of technological advances driven by the new economy on the financial industry has been examined in several studies conducted by various researchers. Some authors even argue that product innovations developed in financial services serve as inputs into other businesses: “financing plays a central role in conditioning innovative behaviour in all businesses – particularly among small, young firms in technology-intensive sectors. Dynamic, innovative services are an intrinsic element of a healthy, modern economy” (Gellatly, Peters 1999: 15). Similar conclusion has been stated by Antonelli (1998:181) arguing that “communication and business services industries are becoming the new strategic sector providing key inputs to the rest of economic system”.

Furthermore, Joseph et al. (1999:182) claim that in order to survive “in the electronic age,” banking sector is urged to invest in technology. The effect of technological development on the financial industry in a developing economy has been examined in the work of Angur, Natarajan, and Jahera Jr (1999). The authors analyse the main factors affecting service quality in Indian banking industry and emphasize the role of technological changes in the restructure of banking strategies for commercial and individual services. The main conclusions of this study indicated the vital importance of technological progress in the service quality of banking industry. It may be assumed that these conclusions are applicable to Latvian banking industry as well, because in India “this industry is a major infrastructural component of an economy” (Angur et al. 1999:117) making it similar to the situation in Latvia.

The emergence of new technologies provides different advanced opportunities and poses threats for the actors of financial markets. For instance, a study on electronic systems and credit-scoring in retail banking of the United Kingdom (Leyshon, Thrift 1999) introduces the concept of ‘quantitative revolution’ – a process when banking procedures previously conducted by employees are replaced with technological knowledge systems. These changes create new rules for competition within the industry of financial services: “The barriers to entry to the market have shifted towards investment in technology and a corresponding competence in handling customer databases, marketing and the creation of brands” (Leyshon, Thrift 1999:453). Similar viewpoints are discussed by Uchupalanan (2000) in the study on competition and IT-based innovation in banking services and by Scott and Walsham (1998) in their case study on shifting boundaries and new technologies in the UK banking sector. The latter study examines opportunities of new entrants into retail banking stating that “new technologies have enabled them to cut costs and focus on product differentiation. New entrants have shifted the terms of interaction between the financial service provider and their customer, using information and communica-

tion technologies to make themselves accessible and flexible in ways that broke with traditional banking norms” (Scott, Walsham 1998:183).

At the same time the development of information and communication technologies and a shift of traditional retail banking business to remote service solutions, resulting from the application of new know-how, has an influence on customers’ trust in such a service model. This might become a critical factor for the industry at a certain point (Kallio et.al., 2004, Leyshon, Thrift 1999, Gurau 2001, Joseph et al. 1999). Kallio with colleagues (2004) notes that in the ‘new economy’ trust in financial market participants is determined by several factors, among them the most important being communication culture of consumer and financial institution, ethical aspects, as well as a previous collaboration experience. For example, Bateson (1985) has researched the tendency of bank customers to want to control the transaction process during encounters. According to another study provided by Gummesson (1991), reliability and user-friendliness are important attributes in the evaluation of technology-based services. Moreover, a study conducted in Romania (Gurau 2001) revealed that trust in provided services and loyalty to the bank are among the most important factors of successful introduction and functioning of e-banking in a transition economy. Similar conclusion is driven from the research on service quality in the banking industry of India already cited above (Angur et al. 1999). This study conceptualizes the service quality of retail banking recognizing the implications of culture, marketing and service quality in the country specific context.

### **3. Main factors influencing changes in Latvian banking industry**

Previous research carried out in the area of the recent changes occurring in banking industry indicated several factors affecting these alterations: development of new technologies, globalization and provision of consumer loyalty in circumstances of service depersonalization. Interviews conducted with leading specialists of Latvian banking and financial market revealed similar aspects thus allowing us to assume that transformations taking place in Latvia are driven by the same forces as in other countries with developed banking industry. However, the actual changes manifested within various e-services provided in banking and financial markets may be country specific. They are analyzed in more detail in the next chapter.

#### *3.1. Development of Internet and telecommunication technologies*

Rapid growth in Latvian banking sector was observed in the years 1999 and 2000, when the biggest number of people was involved in the usage of banking services. As it is inherent to every market in the growth stage, this period was characterized by severe competition which transformed from the product differentiation to price competition. The sharply growing number of clients compelled the banks to pay special attention to distance services based on technology development and its advantages for clients as well as for banking organizations. Market participants who were able to use new technologies in client services (such as cash

point service supply, electronic transfers, phone service and internet banking) were more successful in this rivalry (Latvian Association of Commercial Banks, Monthly Statistics Reports 1993–006).

The spread of new technologies creates the following opportunities as stated by bank managers, the participants of the experts' survey 2005:

- to offer new services using an access to the new telecommunication channels resulting in the gained value for the client in terms of speed, convenience and security.
- to decrease costs because modern access channels and distant services among them are enhancing client self-service, which causes the reduction of banking costs concerned with physical client attendance (infrastructure, premises, human resources, etc.),
- to boost service capacity shifting instantly growing customer base to higher capacity and cheaper self-service channels to decrease the burden at physical client desks,
- to provide service quality standards – in distant services quality is ensured by standard product supply and individual adaptation, whereas where services are provided to physical consumers, the decrease in client flow allows to maximize service standards for individual clients.

Our interviews have also shown that there are structural changes in consumer needs for easily accessible, fast, secure and distant but extensive service models (e.g. e-banking or mobile solutions offering settlement, investment management and other relatively new services to the local market). These models essentially replace less sophisticated solutions and allow to receive services which involve more extensive use of online banking (e.g. risk evaluation in crediting, extending lines or managing portfolios online without a need of physical service by staff at the bank office).

The more explicit tendency of financial service providers to prioritize application of models based on extensive use of recently developed know-how (e.g. advanced scoring models in crediting, direct international settlement solutions etc.), combined with the advanced and accessible IT&C base (e.g. broadband internet, mobile communications – particularly 3G) will encourage further rapid development of e-commerce services and we can expect them to gradually replace traditional financial services. A similar pace of development has been quite typical of the Nordic region banking industries, particularly in Finland and Sweden (SMF Research, 2004) where wide broadband internet access was available to general public earlier than in neighbouring countries. This has created a positive environment for the escalation of the respective know-how and approach to Baltic countries, particularly Latvia where two major banks (total market share of 40% by assets as at 31.12.2006) are pan-Nordic institutions, namely Hansabank and SEB groups.

The recent stage of market development can be characterized as a phase of stabilization: initial accumulation of consumer capacity has come to an end. Supply of selective services for different consumer segments and competition of an evolutionary nature is taking place. Market share is accomplished by swift

response to consumer needs and establishment of the strategy based on the quality concern.

The development of technologies is still an essential element of service quality provision, as well as of service supply for the clients who need only standard banking products. A negative side effect of the distance banking can be the threat of client loyalty crisis – lack of relationships and personal contact may decrease consumer confidence of the bank and virtually received services (Kallio et.al. 2004).

### *3.2 Globalization*

An impact of globalization on the banking sector will be notable for a long time to come as banking is closely connected with entrepreneurship transactions of their clients: already since the end of the 1990s the major part of Latvian banking capital is controlled by foreigners. Acquisition of foreign competences, technologies and client servicing models had helped Latvian banks to adapt quickly to the rapidly growing market demands and provide quality service expected by clients. At the same time the Latvian banks did not feel overwhelming competition pressure from foreign counterparts. It is mostly due to the small capacity of Latvia's market as well as to requirements of entrance barrier for the minimal capital needed to obtain a banking license. After Latvia entered EU, the barriers diminished and if an entrepreneur from the European Economic Zone wishes to provide legitimate services, it can be done with an information note to the supervision institutions (Committee of Financial and Capital Market (CFCM)). Till the end of 2004 CFCM received 44 notices about the provision of financial services from foreign credit institutions. Although these announcements come from well-known Western finance groups, their main goal is to create a legal background for single transactions which can be viewed as exceptions and not regular financial services for a broader public. Thus it may be stated that such transactions are not causing significant changes in the banking sector of Latvia.

However, our interviews have revealed that when more experienced and technologically developed entrants from EU countries operate in the local market, this increases the competition in terms of the chosen solutions. New entrants typically do not favour the traditional physical service approach (development of extensive but high cost branch network), but focus on remote services or profitable niche markets instead. As this model is quite suitable for some major profit segments (e.g. well paid white collar workers who choose the remote service models because they are busy during the normal banking hours etc.) forces the local players to apply to the new rules of the game in order to maintain a competitive edge.

Local 'players' will have to make an effort to improve their service quality provided to special consumer groups (mainly clients with high income, typical users of investment services), to whom potential global 'players' may offer superior services based on distant banking model. Thus globalization will boost technological development and improvement of service quality in the local market. Relevant comparative advantage of local banks is higher consumer loyalty which

is a significant aspect in the market reshaped by 'new economy' (Kallio et.al. 2004).

### *3.3 Consumer loyalty*

As the proportion of distant services increases, consumer loyalty becomes a more significant factor affecting changes in financial industry. It is mainly caused by the rapid development of Internet and telecommunication technologies that transforms many financial services into distance services. Thus a lot of typical local services (for example, banking account payments) may be provided virtually (for example, internet banking). That, in turn, is reducing personal contacts between the providers and consumers of financial services creating a situation of depersonalization. Depersonalization of services can diminish consumer trust in received services and in the organization providing them. Moreover, depersonalization is restricting opportunities of a financial institution to adapt service for individual needs of a client, provide emotional service and use opportunities of supplemental selling (to offer the consumer a particular service to a bigger extent or offer another service). On the other hand, the factor of trust is also a restrictive element for service provider to evaluate the credibility of a distant client, his paying capacity, which is essential for determining solvency and risks. Kallio et al. (2004) note that in the 'new economy' trust in the financial market participants is determined by several factors. The most important among them include the communication culture of consumers and financial institution, ethical aspects, as well as previous collaboration experience (*ibid.*).

Firstly, the basis for consumer trust is interaction convenience and comprehension of service provider about special needs of the consumer. Successful communication and increased trust is possible interacting with 'personal' financing institution, i.e. an institution that is 'familiar' to the consumer. Usually it is a local institution, which is competent in the local market and possesses a stable positive image and brand in the eyes of consumers. Secondly, further trust in the provider of financial services is increased by positive collaboration experience, and thus purchases are being made repeatedly and consumer loyalty is secured for the future involvement in distant relationships. Both globalization and technology development are therefore strongly related with consumer loyalty. Moreover, these factors are relevant for Latvian banking market development not one by one, but in their combination with each other.

The banking sector and the interaction of its elements is constantly transforming the development of most appropriate service groups to satisfy the changing needs of consumers, mainly services based on internet and telecommunication achievements (e-services). These are banking sectors where the most rapid changes are occurring. Moreover, the authors consider that e-services are the most promising direction for the future development of Latvian banking system.



#### **4. General characteristics of e-services and their specifics in Latvian banking and financial market**

It is difficult to give a universal definition of e-services, because due to a wide range of offered products, different supply channel technologies and client profiles, this concept has lost its dividing line. However, one of the main precise and grasping definitions of e-services is given by Burr (1996). According to him, e-services constitute a virtual connection between a client and a bank in order to provide transactions, management and control of finances.

E-services are providing several advantages for banks:

1) Better opportunities to react to market changes and changes in the demand of consumers, as well as creating a stronger brand – banks possessing an advanced e-banking system are perceived by consumers as market leaders. This, in turn helps to create consumer loyalty for a particular banking institution, increasing trust in the services and their quality provided by the bank.

2) Profit maximization due to lower costs of automatic services compared with manual routine. With future growth of the labour costs, differences between banks using e-services and resigning from them will become even more evident. According to research carried out in the USA, standard transaction operation in a bank branch with full human service costs \$1.07. The same operation using phone banking costs \$ 0.54, cash point – \$ 0.27, internet banking – only \$ 0.015 (Business Week Online 2001).

Besides that e-services provide several gains for a client as well. For example:

- 1) reduce costs of banking services,
- 2) increase service convenience and save time,
- 3) provide fast and perpetual connection with the bank,
- 4) provide a more successful management of the cash flow by accelerating the cash flow turnover, bettering efficiency of transaction procedures and finally providing a client with an instrument of finance management.

There is a general trend in banking systems of developed countries – with a growth of a total settling accounts consumption of traditional banking services is shrinking, whereas usage of e-services is growing (Bank for International Settlements Red Book statistics 1993–2007). Among traditional services, the only growing services are those using technologies aiming to diminish consumer's physical communication with service provider, creating opportunities for convenient dematerialized account settling (for example, debit cards, direct debit, regular payments, etc.). Recent statistics in the countries with different banking system traditions and established payment methods acknowledges that transactions with debit and credit cards are rapidly increasing whereas payments with cheques is shrinking even in the USA which is a country with long cheque paying traditions (Bank for International Settlements Red Book statistics 1993–2007).

Although in Latvia the number of account settlings per capita is considerably lower than in other European countries, the development trend is similar to the other countries. In the last years the usage of debit and credit cards has grown

tremendously (see Figure 1). It was induced by a gradual consumer resign from cash payments as well as by increased number of cards used and issued along with strengthening purchasing capacity of population and decline of the ‘shadow economy’. It may be forecasted that in the future the popularity of regular payment services will be determined by their availability in the e-banking platforms. However, even a more rapid growth is expected in the field of e-services with turnovers exceeding traditional services.

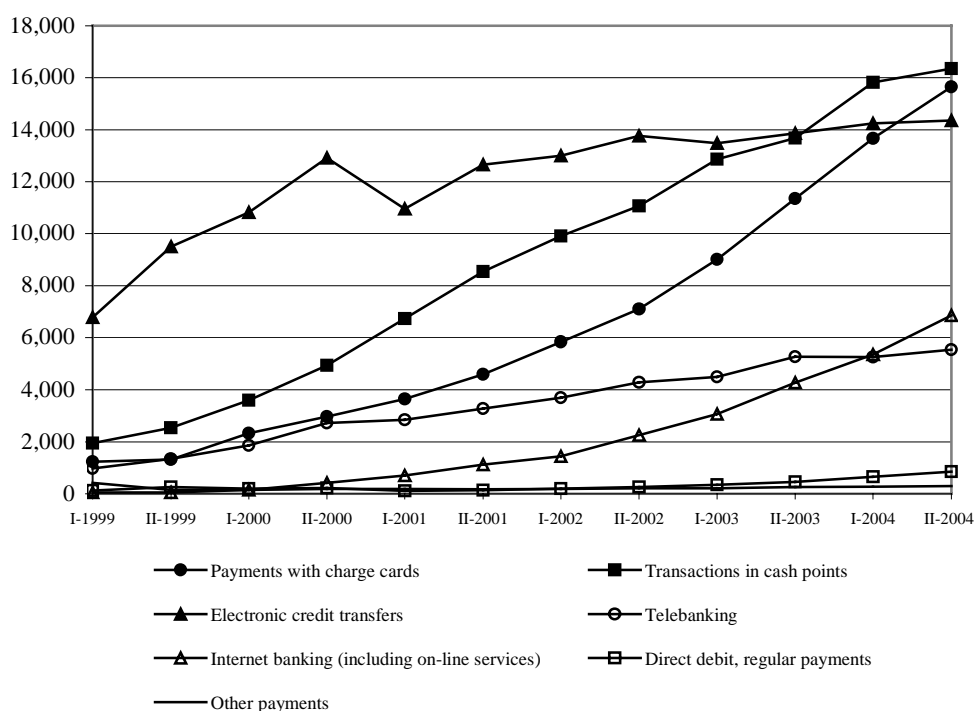


Figure 1. Number of accounts in thousands in Latvia, 1999–2004.

Source: Bank of Latvia

Using the opportunities provided by modern technologies, banks are providing different distant service solutions to their customers. Customers may accomplish different transactions no matter where they happen to be and what the opening times of the bank are. Moreover, computerized solutions are reducing transaction costs of banking services. Rapid changes in information technologies and development of Internet in the last ten years have modified the banking industry as never before. Western banks have established a way to modern e-service technologies in decades, often employing unsuitable technical solutions, whereas the banking system of Latvia with its short history (about 15 years) has a huge advantage – an opportunity

to invent in a short time modern and practically tested technologies, thus avoiding long expensive experiments and failures. In the context of 'new economy', e-services provided by technological development is a future leading force for the whole banking industry which affects marketing and entrepreneurial strategies of the banks. Although rapid economic growth and market transformation caused by the processes of the 'new economy' are usually connected with new, more sophisticated demands for new financial products, new risks, sharper competition and all threats arising from these factors, banks in Latvia are not questioning whether Internet is a threat or an opportunity for a bank. Unfortunately, those banks that decided to protect themselves from possible risks and avoided implementing new technologies now find themselves in unfavourable position. All leading banks possess many distant service channels that provide to their clients different opportunities to use e-services which are not restricted with account settlement (Luštšik 2003:24–36).

### **5. Analysis of e-services: considering opportunities, threats and possibilities for the future development of Latvian banking industry**

E-services can be based on different kinds of banking. The most widespread are:

- 1) Internet banks (banking services provided on-line),
- 2) Phone banks (call centres and entirely or partially computerized service systems),
- 3) telebanks (electronic transfer systems which are not provided on-line),
- 4) m-banking (banking services based on mobile connections),
- 5) TV-banking

In the Latvian market the most common are the first three solutions, and m-banking is on its development starting stage. TV-banks in Latvia are not employed because of the lack of digital television broadcast.

The popularity of a service is determined by whether it fits the needs of consumers and infrastructure. For example, using the oldest e-service in Latvia – telebanking has not increased in the last years because it is mainly oriented on entrepreneurs and it is gradually replaced by more modern and easily available product – internet banking.

In 2004 the number of transactions through telebanking and internet banking were approximately similar, but in 2005 internet banking achieved a leading position among e-services and the current authors forecast that the internet banking growth trend will continue. The main factors influencing the popularity of internet banking are:

- firstly, increasing variety of different complex services available (in addition to account settlements deposits, investment and loans are obtainable);
- secondly, rapid increase of internet users in Latvia. (The number of Internet users in Latvia grew from 50 000 or 4% of economically active residents in 1995 to 750 000 or 71% of economically active residents in 2004 (Internet Association of Latvia)).

Internet banking in the near future is certainly considered to be a priority for all developing banks of Latvia, as there are no competitors in the field of e-services (in terms of growth, internet banking services can be compared only with plastic money transactions). The major threat for the future growth may be infrastructure – a lack of quality internet services available for a part of inhabitants. However, current analyses predict that the number of internet users in Latvia will continue its rapid growth, making internet banking services even more popular.

The majority of banks of Latvia are already offering a wide range of high quality services and successful technological solutions ranked among the best in Europe. For example, *Forrester Research* in 2000 has placed hanza.net services (Hansabanka) at the 16th position among European e-service solutions. However, authors would like to enhance that the future persistent progress depends on the ability to offer innovative high quality services through internet banking satisfying the rapidly changing sophisticated needs of modern consumers. According to interviews conducted with managers of the leading banks of Latvia, most popular future-oriented services internet banking are:

- 1) Informative services – possibility to review current financial accounts, bank notifications, etc.
- 2) Services of account services – transactions, settlements of accounts.
- 3) Computerized services of traditional electronic account settlement – direct debit and regular payments.
- 4) Investment services – deposits, funds and stock exchange, pension funds, etc.
- 5) Standard lending services – consumption credits, credit lines and managing of consumption limits.

The potentially promising forms of e-services according to interviewed experts are m-banking services (done through mobile connections). As the number of mobile phone users is considerable in Latvia (approximately 1.6 million in 2005) it is believed that m-banking will increase. The most popular m-banking services by far are e-services via SMS (mostly informative – information about account transactions, etc.). However, it is possible to develop more interactive usage of this regime.

According to Luštšik (2003), other possibilities of the usage of mobile connections in terms of e-services (for example, WAP protocol) are restricted by several factors which were already discussed in this article as the main factors affecting changes within the banking industry:

- 1) Technology, as data input in mobile phones is usually inconvenient and the possibility of failures is relatively high.
- 2) Costs, as the speed of information exchange is low and relatively expensive – even the most swift transmissions of mobile connection data, for example, GPRS, provide considerably lower speed comparing with broadband networking, but the price is much higher.
- 3) Consumer loyalty as high security risk, which is affecting trust in the provision of service is restricting opportunities of financial information exchange.

Nevertheless, mergers of mobile connection means with computer technologies, which will enable to regularly use internet banking in the mobile connection environment without special development of m-banking in the near future, are considered to be promising and development boosting factors for m-banking. For example, Blackman (2004:262) states that "it is increasingly difficult to discern the difference between a computer and mobile phone".

On the other hand, the future development of telebanking is viewed as potentially threatened because of a restricted segment of clients and comparatively high level of inconvenience in usage. As a result it can be presumed that this service will be redacted into typical service for entrepreneurs (B2B).

Phone banking services were never too popular in Latvia and in the future their growth is not expected. According to the forecasts of the research authors these services will remain as supplementary services for informative inquiries, until internet banking and m-banking services will substitute them.

In some countries (Great Britain, Ireland, etc.) digital television through which it is possible to identify the user and offer simple standard services is currently used as a platform for e-services. In contrast, in Latvia digital television solutions are neither currently very popular nor available and in the future a rapid growth of these services is not expected either.

At the same time we should underline that several traditional banking services in the next five years are likely to lose their popularity, because of the competition from new, more promising channels. Accordingly, it can be suggested to banks to refrain from significant investments into account settlement delivery channel system development (these channels are cash transactions and account settlement transactions in cash points).

Thus it may be concluded that the most promising direction of e-services for the banks of Latvia is the supply of banking services using internet banking and m-banking. These service sectors are expected to grow in the nearest future and the number of people using them will accordingly increase. The main cause for these changes in service provision is development of technologies inherent to the 'new economy'. Accordingly, successful competitiveness of Latvian banks in the local market depends on the ability to supply possibly wider range of services.

As most banks have already developed the basis for the administration of e-services and the number of clients is considerable, it is possible for banks to play a role of e-service agents for the state. Currently the only element of the state and social e-services in Latvia is an option offered by several banks to choose managers of the second level pension funds. As an additional source of economical gains as well as supplementary service for residents in many other developed countries is the administration of income declarations and social insurance documents through e-service systems of the private banks. At present state institutions are refraining from using the banks' successfully developed e-services. However, we argue that this sphere is suitable for 'enterprise-government' (B2G) and 'government-consumer' (G2C) relationship building as an implementation is possible without excessive investment of state funds in relatively short period of time.

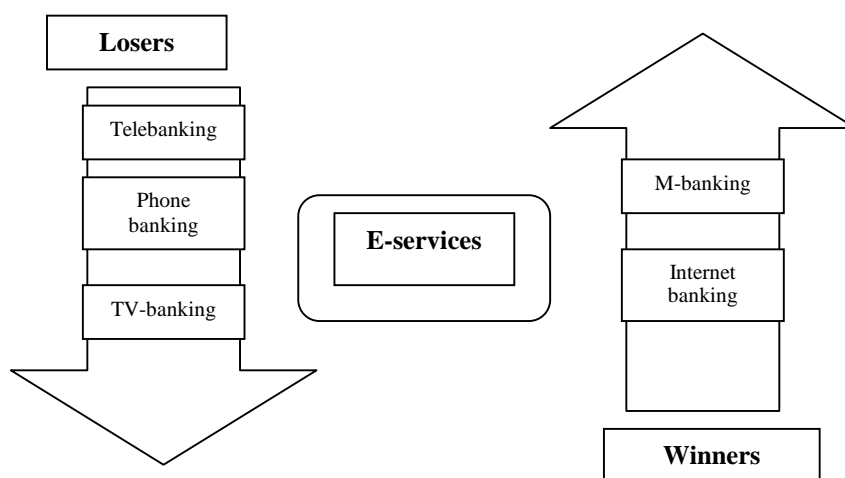


Figure 2. Winners and losers in banking e-services of Latvia in the coming 5 years.

To grant continuous supply of services in accordance with the requirements of the 'new economy' rules dictated in the market, banks in Latvia are facing several restrictions:

- 1) infrastructural constrains arising from the development of on-line broadband transmission;
- 2) limitation of legal nature – supply of e-services and confidence of the society about these services is restricted by the lack of legislation concerning electronic signature in Latvia.

Furthermore, the deficiency of recognized and functioning conception of 'e-Latvia' is also considered as a restraint for the development of e-services.

Recognizing a great significance of banking sector in national economy, the government should play a leading role in diminishing these restrictions. It would contribute to general growth of national economy as well as secure Latvia as a developed country in terms of banking services and attract more foreign investments.

## 6. Conclusions

This article introduced the recent changes evolving in Latvian banking industry in the context of knowledge-based economy driven by the implementation of new technologies and practices. Literature review of the previous studies conducted by various scholars indicated three major factors influencing the changes in banking industry: development of Internet and telecommunication technologies; globalization as a force leading to cost reduction and transformed competition rules within the sector; and consumer loyalty. The interviews conducted with the leading Latvian

specialists from the financial and banking sectors revealed similar aspects affecting shifts in service priorities. Moreover, the study has proposed that new entry conditions will be suitable for the actors of financial markets in the very near future and e-commerce services will gradually replace traditional financial services. The future development of the banking sector depends on the success in implementing and governing of e-services. It is proposed that in future five years the most perspective e-services will be M-banking and Internet banking. On the contrary, the development of telebanking, phone banking and TV-banking is not expected. However, it is evident that more studies should be conducted on the effects of technological innovations on financial services investigating new opportunities for actors of financial markets and priorities and preferences of consumers taking into account changes in the traditional structure of the local economy.

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## References

- Angur, M., G. R. Natarajan, and Jh. S. Jahera Jr. (1999) "Service quality in the banking industry: an assessment in a development economy". *International Journal of Bank Marketing* 17, 3, 116–123.
- Antonelli, C. (1998) "Localized technological change, new information technology and the knowledge-based economy: the European evidence". *Journal of Evolutionary Economics* 8, 177–198.
- Bank of Latvia: Monetary Bulletin (2004) Riga: Bank of Latvia.
- Bateson, J. E. G. (1985) "Perceived control and the service encounter". In *The service encounter: managing employee/customer interaction in service businesses*, 67–82. J. A. Czepiel, M. R. Solomon, and C. F. Surprenant, eds. Lexington, MA: D.C. Heath and Company.
- Blackman, C. (2004) "Stumbling along or grave new world? Towards Europe's information society". *Emerald Foresight* 3, 5, 261–270.
- Burr, W. (1996) "Wie Informationstechnik die Bankorganisation verändern könnte". *Bank und Markt* 11, 28–31.
- Business Week Online (2001) *The dynamo of e-banking*. Business Week Online: 04/2001.
- Final Report of the Knowledge Economy Forum (2002) *Building knowledge economies: opportunities and challenges for EU accession countries*. Paris.
- Forrester Research (2000) *Best of Europe's Net Banking*.
- Gellatly, G. and V. Peters, V. (1999) *Understanding the innovation process: innovation in dynamic service industries*. Ottawa: Micro-Economic Analysis Division.
- Gummesson, E. (1991) *Qualitative methods in management research*. Thousand Oaks, CA: Sage.
- Gurau, C. (2001) "E-banking in transition economies: the case of Romania". *Journal of Financial Services Marketing* 6, 4, 362–378.
- Hahl, J. and T. Haukioja (2003) "New economy and its challenge to financial intermediation and banking". *The Finnish Journal of Business Economics* 2, 264–287.
- Joseph, M., C. McClure, and B. Joseph (1999) "Service quality in the banking sector: the impact of technology on service delivery". *International Journal of Bank Marketing* 17, 4, 182–191.

- Kallio, J., N. Mallat, T. Riipinen, and M. Tinnilä, eds. (2004) *Trust in the new economy – the case of Finnish banks*. Helsinki: Helsinki School of Economics.
- King, R.G. and R. Levine (1993) "Finance and growth: Schumpeter might be right". *Quarterly Journal of Economics* 108, 717–738.
- LR Ekonomikas Ministrija (2004) *Ziņojums par Latvijas tautsaimniecības attīstību*. [Report on the development of economy of Latvia.] Riga: LR EM.
- Latvijas Komerčbanku asociācija (1993–2006) *Mēneša banku statistikas pārskati*. (Latvian Association of Commercial Banks, Monthly Statistics Reports 1993–2006.) Riga.
- Leyshon, A. and N. Thrift (1999) "Lists come alive: electronic systems of knowledge and the rise of credit-scoring in retail banking". *Economy and Society* 28, 3, 434–466.
- Luštšik, O. (2003) *E-banking in Estonia: reasons and benefits of rapid growth*. Tartu: Tartu University Press.
- OECD Observer (2000) *Science, Technology and Innovation in the New Economy*.
- Rifkin, J. (2001) *The age of access: the new culture of hypercapitalism, where all of life is a paid-for experience*. London: Tarcher.
- SMF Research (2004) European Online Banking Survey.
- Scott, S., V. and G. Walsham G. (1998) "Shifting boundaries and new technologies: a case study in the UK banking sector". *Proceedings of the international conference on information systems, 13–16 Dec 1998, Helsinki, Finland*. Helsinki.
- Skrībāne, I. and L. Neiders (2006) "Latvijas ekonomikas konkurētspējas problēmas". [Problems of the competitiveness of Latvian economy.] In *Latvijas ekonomikas un pārstrukturizācijas ietekme uz uzņēmējdarbības konkurētspēju un iedzīvotāju dzīves kvalitāti*, 9–81. [An impact of economy of Latvia and restructuring on the competitiveness of entrepreneurship and inhabitants' quality of life.] R. Škapars and Ē. Šumilo, eds. Riga.
- Uchupalanan, K. (2000) "Competition and IT-based innovation in banking services". *International Journal of Innovation Management* 4, 4, 455–489.

#### Internet sources

- Lisbon Strategy. European Council.  
[http://europa.eu.int/comm/lisbon\\_strategy/index\\_en.html](http://europa.eu.int/comm/lisbon_strategy/index_en.html)
- Internet Association of Latvia.  
<http://www.lia.lv>
- Central Statistics Department of Latvia databases.  
<http://data.csb.gov.lv/dialog/statfile16.asp>
- Bank for International Settlements Red Book.  
<http://www.bis.org/dcms/fl.jsp?aid=6&pmdid=3&smdid=16&tmdid=385&fmdid=0&tid=57>
- World Factbook - Luxembourg. Central Intelligence Agency (19 December 2006).  
<https://www.cia.gov/cia/publications/factbook/geos/lu.html>
- World Life Quality Index 2005 (PDF). Economist Intelligence Unit (2005).  
[http://www.economist.com/media/pdf/QUALITY\\_OF\\_LIFE.pdf](http://www.economist.com/media/pdf/QUALITY_OF_LIFE.pdf)
- Bank of Latvia.  
<http://www.bank.lv>
- Finance and Capital Market Commission of Latvia.  
<http://www.fctk.lv>
- Association of Latvian Commercial Banks.  
<http://www.bankasoc.lv>