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**KIOSK TERMINALS AS AN OPPORTUNITY FOR
OPTIMIZATION OF THE COSTS AND INCREASING
OF THE QUALITY OF BANKING SERVICES
IN REPUBLIC OF MACEDONIA**

Abstract

The development of the banking sector into the Macedonian market was especially dynamic in the past decade. Banks were continually investing into their business infrastructure with primary accent on the bank branches while their expansion strategies were mostly connected via traditional channels of interaction with clients.

In the previous period although Macedonian banks started and they should continue to focus their attention into retail strategies that allow them to improve their relationship with clients using actual infrastructure into the optimized environment e.g. cost savings. Implementation of kiosk terminals present one of the possible solutions for Macedonian banks in those efforts.

The implementation of kiosk terminals as banking channel provides a range of opportunities for Macedonian banks especially in the retail part of this industry. Models of kiosk terminals used in the financial industry, into their basic functions have included/incorporated most of the banking branch operating services. Although Macedonian banks should expect that the quality of banking services that are not necessary connected with face to face human interaction, via kiosk terminals would be managed into much preferable environment (e.g. Kiosk terminals provide 24 hours unlimited service while/Vs bank branches (that) provide 8-10 hours uptime for services during the bank working days only).

As an integral part of their business strategies, Macedonian banks should evaluate the eventual barriers connected to implementation of kiosk terminals and its influ-

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ence on their business e.g. financial, ethical and legal issues. Inadequate business strategy leads to higher costs and undesirable effects on business. Every bank should create own business strategy based on its own market position and opportunities.

With the optimization of daily operations of the staff in the bank branches, banks should be able to provide a higher quality of doing business for the services that are more efficient into face to face environment especially in the field of advertising. On middle to long term, it may lead to changes into the primary role of the branches from functions connected to basic bank activities into more sophisticated CRM and profit activities.

Keywords: business infrastructure, kiosk terminals, cost savings, quality of services, business strategy, barriers, opportunities, changes into primary role of branches.



Introduction

The past ten years represent a very dynamic period in the activity of the banking sector in Republic of Macedonia. The high degree of trust in the commercial banks, banks policies-based on qualitative concepts, and adequate access of banks management in managing the large number of challenges, enabling the realization of stable banking revenues and high quality banking products and services (nema glagol). Positive events in this field reflect on the improvement of business relations between banks and customers and encourage appropriate economic development in the country.

Most of the services of the commercial banks are realized through the traditional banking channels or the business branches. This is understandable, because the habits of the customers in the Macedonian market were and still are mostly based on traditional principles of communication with commercial banks.

The introduction of the classic ATMs in the last decade, as a self servicing devices and the promotion of electronic banking channels, had some positive effects reflects on reducing of the intensity of usage of business branches to some extent. However, business branches still remain highly congested with a number of activities that could be carried out through alternative channels. Banks branches are extremely important segment in determining the market position of commercial banks, but they are generators of high costs in banking operations. The costs of branches are certainly in some degree integrated in the pricing of banking products and services. The subject of this paper is presenting one alternative approach in servicing the needs of banks customers - via introducing kiosk terminals, which have recently been presented on most of the markets in highly developed economies. Through the elaboration of the issues, the author expects to introduce the topic to the Macedonian market and give a contribution in encouraging commercial banks in implementing this type of advanced technological solutions. The author believes that the introduction of this type of self servicing devices, will lead to a reduction in bank charges/prices and improving the quality of banking services which present a fundamental goal of this research paper. Also within the objectives of the paper, the author believes that will stimulate some positive effects in direction of changing the existing primary transaction banking functions integrated within the business branches and replacing them with advisory functions, which would lead to increased quality of banking services to end users .

1. BANKING INFRASTRUCTURE AND EXISTING APPROACHES IN THE SERVICING OF CLIENTS OF BANKS ON THE MACEDONIAN MARKET

High competition pressure into the banking sector in Republic of Macedonia led to opening of many business branches by the commercial banks in the country. The growth of the number of newly registered business units continued through the past years, with the exception of 2009, when as a result of expectations of the effects of the current economic crisis and already large number of opened business units, bank investments in this domain were reduced to a minimum.

The banking system of the Republic of Macedonia in 2009, consisted of 18 banks and ten savings banks. Compared with the previous year, the number of banks was unchanged; with minor changes in the scope of the banking network (number of establishments grew by 19). The number of potential clients on each bank was approximately 112,364 inhabitants, or nearly twice more than the average of EU-27; however this indicator is significantly better than some EU countries, like Bulgaria, Romania, Slovakia, and Czech Republic. The banking network consists of 428 business units (including central banks) and is widespread in almost every city in the country. One business unit in average is covering about 4786 people, which is twice more, compared to the EU-27 average. The geographic concentration of 40% of the banking network is in the region of the capital city - Skopje, which has been drastically covered by banking services compared to other regions in the country. Namely, in the region of Skopje, number of residents per establishment (3381) is the smallest. Most people per business unit still remain in the region of Polog (8,945 residents per establishment).¹⁾

Most of the banks in the Republic of Macedonia within the offers to households and companies have integrated myriad of products and services. The offer of banking products and services through business units of banks in the country and the principles of servicing the customers through the branch networks are well known and they need not to be elaborated separately.

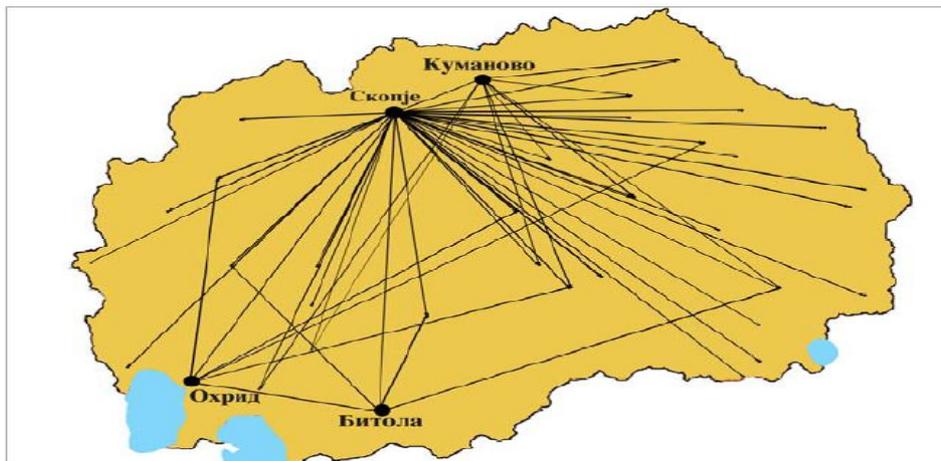
Despite the large number of business units, an extremely important segment within the existing approaches to serve the needs of customers of banks is the large number of ATMs. ATM-s as self servicing devices the Macedonian market are mainly used for withdrawing cash and checking the status of bills related to payment cards. In the previous period, were carried certain updates on the devices of this type by introducing the options for recharging credit on mobile phones. However, the usage

¹⁾ National Bank of Macedonia, Report on Banking System and Banking Supervision of the Republic of Macedonia in 2009, http://www.nbrm.gov.mk/WBStorage/Files/WebBuilder_Godisen_Izvestaj_BS_2009_MKD.pdf_04.08.2010_

of this channel as an alternative way for substitution of the customer needs that are realizing through banks business branches still remains relatively modest in scale.

Figure 1

NETWORK OF BRANCHES OF COMMERCIAL BANKS IN REPUBLIC OF MACEDONIA



Source: National Bank of Macedonia, Report on Banking System and Banking Supervision of the Republic of Macedonia in 2009.

It is important to note that most banks in the current mode of operation have a high quality of service level and competitive access, which certainly results in profitable operations and adequate growth and development. However, business relations through banks branches are mostly conducted in the framework of routine activities, which is reducing the time period necessary for personal approach and strengthening of the business relations between banks and their clients.

2. NOTION OF KIOSK TERMINALS AND SPHERES OF THEIR APPLICATION

There is no universal definition that integrates all the aspects of kiosk terminals and their role in the modern world. The key reasons for this is the large number of functions that can be realized through them, and continuing developments into this growing industry.

Kiosk terminals are self servicing banking devices that provide an adequate user interface for the users of banking products and services. They are produced in different sizes and shapes, depending on the needs of final users and the different spatial conditions for their setting. Globally, the implementation of this type of devices is not limited exclusively within the financial sector.

Over the past decade, suppliers have placed increased focus on the flexibility on their manufacturing efforts. Although start-ups often emerge to develop solutions for a particular application or vertical segment, most kiosk suppliers of all sizes assert the capability to design and develop solutions for practically any application. This solution-development flexibility has defined the kiosk industry and facilitated a competitive landscape that has prevented significant market consolidation by any one supplier.²⁾

Apart from the commercial banks, devices of this type are used by many companies, medical facilities, retail and other industries where the need appears possibilities for interactively servicing clients / customers. For example, some companies use kiosk terminals for collecting data on applicants for employment. This certainly is not adequate to the labor market conditions in Republic of Macedonia, but for certain corporations, that receive annually 10 million and more applications, of course it is more rational to apply this type of equipment in its operations. Kiosk terminals within their wider application are primary used as:

- Kiosks for tickets;
- Sales kiosks;
- Human resources kiosks;
- Internet kiosks;
- Financial Kiosks;
- Kiosks for carrying out the orders and so on.

Figure 2

VIEW OF THE LARGE NUMBER OF MODELS OF KIOSK TERMINALS



Source: www.kiosk.com.

Research conducted by Summit Research Associates (Kiosks and Interactive Technology, Seventh Edition), presents an optimistic picture of continuous growth

²⁾ Rezendes Christopher, Liard J.Michael, *Kiosks for Self-Service and Interactive Applications: Technical and Vertical Market Analysis*, Automatic Identification and Data Collection Practice, Venture Development Corporation – VDC, January 2006, p.10.

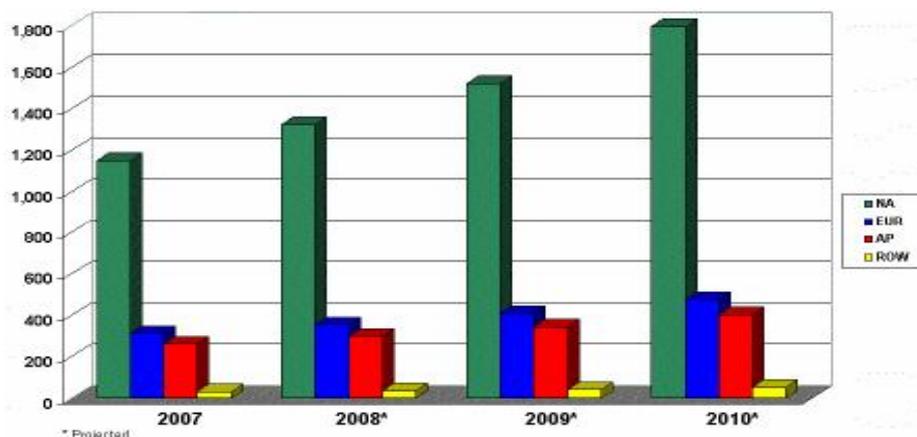
and development of kiosk terminals industry worldwide. Summit projected that the number of installed kiosk terminals will be increased by 1.76 million devices by the end of 2007, and more than 2.73 million at the end of 2010. According to the research from the same source, the expansion will continue in all major world regions, while the main activity will be present on the market in North America - primarily the United States. Summit estimates that North American region will grow to nearly 1.8 million devices by the end of 2010. These trends are represented in the figure 3 below.

The current world crisis, the worst in the last 70 years, resulted in high re-evaluation and reduction of all types of economic activities. What will be the impact of these events on the kiosk terminals industry? Summit states that certain projects may be delayed or stopped. Funding for new projects and expansion of existing initiatives can be a real difficulty. However, Summit believes that the financial crisis will have adverse effect on the kiosk terminals industry, and it can lead to a “mini boom“ of this industry. Kiosk terminals allow replacement of personnel which is expensive for hiring, training; management and exchange. The introduction of this type of devices could provide significant savings for the companies.³⁾

Figure 3

GLOBALLY INSTALLED DEVICES AND PROJECTIONS 2007 - 2010

In thousands of units



Source: Summit Research Associates, Inc., **The Solution to Challenging Times: The Integrated Approach**, A Summit Research White Paper, October, 2008, p.2.

³⁾ Summit Research Associates, Inc., *The solution to Challenging Times: The Integrated Approach*, A Summit research White Paper, October, 2008, p.2. (<http://www.pfusystems.com/kiosk/downloads/whitepapers/SummitResearch%20WhitePaper%20The%20integrated%20approach.pdf> 04.08.2010).

Therefore, attention in this paper is focused on kiosk terminals that can be applied by commercial banks or so called financial kiosks and the sphere of their application in this field of operations. Into the following part are presented the advantages of introducing of this type of devices on the Macedonian market.

3. BENEFITS FROM THE INTRODUCTION OF KIOSK TERMINALS IN THE BANKING SECTOR IN THE MACEDONIAN MARKET

Today banks are transformed into marketable financial institutions by offering a wide range of products such as insurance, loans, investment funds, credit cards, and other services within value channels. The need for self servicing banking terminals, is arising from: ⁴⁾

1. Increase of the number of services offered by the banking institutions;
2. The need to provide each customer to come out from the bank with the highest possible volume of sales;
3. The difficulties in finding and retaining highly qualified staff;
4. The innovative competitive strategies that reduce the waiting time and increase the time for presenting services.

The main goal of the operation of the banking sector across all market economies is providing quality banking services at lower costs and higher profits. Through the introduction of kiosk terminals by the commercial banks in Republic of Macedonia, there should be a significant impact on the operations of banks and the interaction with their customers. In the following section the focus will be given to the benefits for banks and their customers arising from usage of kiosk terminals as specialized banking equipment. Also, the attention will be focused on the impact of the costs of the banking sector via usage of kiosk terminal devices.

The introduction of kiosk terminals is an advantage for commercial banks. The high costs of opening business branches, staffing and regular maintenance through the introduction of kiosk terminals will be undoubtedly kept to a minimum level.

Financial kiosks enable banks to offer customers new, practical and 24 hours available channel to perform most of the activities that customers perform in the business branches. Within the financial kiosk terminals, as commonly present we can specify the following functionalities:

- Execution of deposit transactions (in this type of activity payment cards can be used);
- Physical disposal of assets (cash);
- Execution of transfers of funds and payments using credit cards;

⁴⁾ www.intellvisions.com/downloads/files/iservesbt.pps_04.08.2010.

- Payment of bills;
- Withdrawal of cash;
- Preview / review of the accounts;
- Electronic recharge to the credit of mobile phones;
- Inspect and payment of overhead costs;
- Repayment of borrowings and credit cards;
- Implementation of different types of orders in domestic and international payment operations;
- Other banking functionalities.

Kiosk terminals, allowing exceptional flexibility in terms of authentication of clients represents an additional advantage. Different types of transactions can be authorized by entering a PIN code, digital signature, finger footprint and other methods. Expenses in transactions processing via kiosk terminals are drastically cheaper than the costs of their processing over the counter.

According to other research, the top 10 reasons that should be considered about kiosk terminals in the banks are:⁵⁾

1. Migrating customers from teller-based transactions to on-line banking reduces costs.
2. Enhance customer satisfaction by providing needed Web-based services in the branch office.
3. Increase revenue and “share of wallet“ by offering additional products and services via cross-sell and up-sell opportunities.
4. Acquire new customers via sign-up/opening an account.
5. Educate new and existing customers about service & product offering.
6. Initiate and provide rewards in the form of loyalty.
7. Provide service 24 hours a day, 7 days a week, in centralized locations.
8. Learn more about customer preferences by collecting vital data.
9. Provide additional training and educational services to employees.
10. Bridge language barriers with non-English speaking customers.

It is expected that the introduction of this type of self servicing banking terminals would make changes in the basic business functions of banking branches. In parallel with the reduction of the expansion of the branches, there is a high probability that banks should make crucial changes in the use of established banking infrastructure. Part of the possible changes and the projected effects are given into the following section.

⁵⁾ http://www.bankersonline.com/vendor_guru/sourcetechnologies/sourcetek_kiosk.html_06.08.2010.

4. POSSIBLE OBSTACLES AND WEAKNESSES IN THE IMPLEMENTATION OF KIOSK TERMINALS IN THE BANKING SECTOR IN MACEDONIA

Before the introduction of kiosk terminals, as well as before introduction of most other products and services, banks need to make quality business analysis. One of the key roles of such analyses in the field of kiosk terminals is understanding the real needs for installation of this type of devices and create a business plan for the intensity of their market expansion. As an integral part of business strategy, despite the advantages of the introduction of kiosk terminals banks, banks need to recognize the greater number of potential barriers and their possible impact on this part of the business.

Most of the barriers that need to be overcome, have financial or ethical character, while to some extent legal / regulatory restrictions (e.g. Certain types of services through a kiosk devices, principles of authentication of the customers, etc.) are possible.

Within the list of obstacles / weaknesses of a financial nature can be mentioned:

- Investment of funds for the purchase of devices that need to be separated from the bank budgets;
- Promotion of new service channels and increase the costs of marketing;
- Local suppliers of kiosk terminals and quality of support;
- Costs for maintenance of this type of specialized banking equipment;
- Costs for processing transactions and system infrastructure;
- Provision of resources and the level of their involvement in the maintenance lines of kiosk terminals;
- Long time to effect the investments. Probably a period of over several years necessary for changing customer habits in order to effect investments and more.

However, most of the financial difficulties it is objectively to be expected that should be resolved in accordance with previous experience in the field of ATM operations. In this domain of particular benefit are recognizing previous mistakes in order to prevent their recurrence.

Kiosk terminals through its main role should perform replacement of the biggest part of the routine functions of the business branches in the banking sector. This means that some commercial banks should not retain all staff, which is a real problem of ethical character. However, banks will be able to partially overcome this problem by retraining of the qualified staff and providing new job responsibilities.

Quality evaluation of potential barriers during the introduction of kiosk terminals, presents a primary basis for the success of the commercial banks operations in this field. The introduction of kiosk terminals without proper analysis can lead to

failure and high costs of commercial banks. Banks have to balance between these parameters depending on their own market position and opportunities.

5. CHANGES IN THE BASIC FUNCTIONS OF BANKING BUSINESS BRANCHES FROM ROUTINE TRANSACTION FUNCTIONS INTO BANKING ADVISORY FUNCTIONS

Kiosk terminals can be located outside and within the banking branches of commercial banks. Setting of the kiosk terminals provides coverage of rural areas, where there is no economic logic to be opened business branches or bank branch counters., As stated in the previous part of this paper, regardless of their physical location, this type of self servicing banking terminals allows handling of most routine banking needs of the clients, especially services which realization through branch offices, initiate high employee engagement for commercial banks.

In the performance of routine business requirements through bank branches, banks generate high costs and exceptional commitment to employees. The space by the banking commercialist can be used for other types of activities related to customer needs especially for services that cannot be served via electronic devices or their servicing through the electronic channels is extremely uncomfortable.

Banks should use human resources on the most optimal possible way. Kiosk terminals have a wide range of opportunities and advantages in performing certain types of routine banking operations. Previously were discussed their 24 hour availability and the speed of execution of many of the up mentioned bank services and activities. However, regardless of the sophistication of the self servicing solutions, devices of this type cannot participate or can participate very few in the sale of bank products and services.

By reducing the volume of routine banking operations via the introduction of kiosk terminals, bank commercialists get the opportunity to focus on personal treatment of clients, realization of interaction aimed at understanding their real needs and guidance to the appropriate bank products and services. Via introducing of the kiosk terminals, bank commercialists will be able to perform some educational activities during their everyday business activities, according to the needs of the customers. Here we should mention that some of the clients require additional information about certain modern banking solutions, other require advises about existing banking products etc. Bank commercialists should be able to provide adequate information's about different type of products and their promotion for excising and potential customers (eg promotion of usage of payment cards in the retail network as a medium for a greater degree of security, in some cases opportunities to obtain certain benefits, etc.). In addition, bank employees will be able to sell the new banking products and services through their promotion to potential users. Those activities without a doubt lead to growth of the sales.

Table 1

CURRENT AND FUTURE MODEL OF BUSINESS BRANCHES

	Current model of branch offices	Future model branches
Role of branches	Reactive administrative center	Proactive center of business relations
Staff	Using 60% of the time in activities unrelated to the personal treatment of clients	Using 80% of the time in sales, consulting and providing access to experts
Strategy	Functioning within a rigid corporate guidelines / procedures	Self adapting to the needs of different segments of customers

Source: Forrester Research, Inc. (Taken and adapted from *Profiting from Branch Banking, Re-engineering the Branch as a Financial Services Center*, Kana, 2003)⁶⁾

In this way, the customers will be able to obtain high-quality banking services; will receive the product / service that best suits their needs, while the banking sector is objective to be expected that will increase its revenues by reducing the need for opening new business branches and growing up of sales of banking products and services.

Conclusion

The banks in Republic of Macedonia in the last decade had invested a lot in the opening of new business branches in order to maximize their market share by offering new banking products and services to existing and potential customers. Banks in R. Macedonia have offered high quality products and services to their customers.

Kiosk terminals can fully replace the most of the services and products that banks perform through their network of branches. This type of self servicing terminals operates 24x7, which is an additional advantage for commercial banks clients in terms of speed and comfort in the realization of their banking needs.

Through the introduction of kiosk terminals in the banking sector in Macedonia, the objective is to reduce the workload of the existing business branches and minimizing the need for acquisition of the market via opening new business affiliates. At the same time, promoting this type of banking services, will contribute the attracting of new customers, that would prefer settling their obligations this way rather than waiting in line for payment before the counters in the bank or post office. However, before the introduction of devices of this type, each commercial bank should create appropriate business strategy for market acquisition according to its own market position and opportunities. Banks should take into consideration the advantages of the introduction of kiosk terminals and appropriate evaluation the possible obstacles and weak-

⁶⁾ Profiting from Branch Banking, Re-engineering the Branch as a Financial Services Center, Kana, 2003, p.2 (http://www.writenetilc.com/Samples/kana_ibm_wp.pdf 04.08.2010).

nesses. Within the strategy some of the key elements that should be evaluated are the financial costs, ethical challenges and the applicable rules and regulations. Regarding the financial challenges of particular importance is the recognition of the habits of the market and the projection of the expected period for investment recovery. It is obvious to be expected that experiences from the introduction of ATM devices, should contribute some of the possible barriers.

Banking business through subsidiaries is a crucial source of profits in the banks operations. Banks must work towards the conversion of the role of business branches through the introduction of solutions from low-income, transaction-cost units in high-value, cost-efficient financial service centers. To achieve consolidated revenue and cost targets, employees in branch offices need to become experts that will combine high knowledge of banking products and the understanding of individual customers and delivering analog needs, personalized and relevant sales and service messages. Through the introduction of kiosk terminals, banks get the an opportunity for conversion of the essential functions of the branches by reducing the volume of routine banking operations and diversion of resources to personal treatment of clients, realization of interaction aimed at understanding their real needs and pointing them to the appropriate bank products and services.

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