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FROM CORPORATE MARKET RESEARCH TO BANK PROFIT MAXIMIZATION

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The purpose of this article is to study the target segment of the corporate bank market in order to reveal the demand for financial products and to incorporate this demand into solving the problem of bank profit maximization. Instrumental guidelines for conducting market research that allow to study the aspects of the problem specifically dealing with the efficiency of a bank’s cooperation with corporate customers has been developed as a technique for studying target corporate market customers. A target retail trade market sector and a client base of corporate customers including 430 trade network operators functioning in the northwest region of Russia were chosen as objects of research. The article defines the retail market demand potential for bank products, analyses the prospective viability of providing additional bank products to retail market customers, and identifies the corporate customer’s informational portrait. On the basis of obtained results, the problem of maximizing the bank’s extra profit from serving trade network operators. The research is confined to the client base of one major Russian bank operating in the northwest region of Russia; it will be useful to adapt the material of this article to studying target sectorial markets nationwide. The results of market research were used to assess the economic potential (estimated optimal profit) of the commercial bank’s cooperation with trade network operators. This article constitutes the groundwork for organizing effective bank marketing that guarantees a congruity of the bank’s resources and capabilities with the demands and requirements of the market in which it operates.

JEL Classification: M310.
Keywords: customer orientation, effectiveness, financial services, market research, bank marketing, process planning.

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Introduction

One of the factors for a bank to have a competitive advantage is for it to function in prospective segments of the corporate banking market (Doyle, 2008). However, present-day conditions, when banking innovations get ahead of the customer’s real demand dynamics (Hendrix, 2010), create a problem of thorough indices planning for the bank’s cooperation with prospectively growing corporate market customers. The objective of such cooperation is to gain a competitive position and to extend the scope of the client base in a prospective market segment. The feasibility of planned indices of a Russian bank’s cooperation with corporate customers is still pretty low. The margin of error in achieving planned indices varies within the range of 10-15% (Rasskazova and Rasskazov, 2012). The solution of the problem stated seems to lie in preemptive detection of market demands at the phase of banking business planning (Blank & Dorf, 2012). Taking into account the regularity of the connection between the economic importance of a bank’s cooperation with different groups of corporate clients that have real and potential profitability from such cooperation (Payne, 2006), we may say that timely detection of demand from corporate clients for bank products will improve the quality of planning in corporate banking business and increase its feasibility. Therefore this article offers the enhancement mechanism of market research in banking by means of identifying and further accounting for customer demand for banking products and services in the business planning system. The technique introduced will make it possible to use the necessary information to maximize bank profits from cooperation with profitable customers of the corporate market, thus increasing the feasibility of business plans.

Background and sources

Today, offering a wide range of bank products and services is not enough: banks should be ready to respond to the highest demands of their customers (Payne, 2006). Foss and Stone (2002) stress that “business performance cannot be measured just by current value (e.g. sales, profits, cash, headcount, inventory, working capital), for these only tell you about the past and present. Managers manage the future, and in most businesses the present is determined by others (customers who decide to buy now, sales people who are motivated to sell now, workers who are motivated to work now, etc.).” With respect to banking, business efficiency is determined by the strategic capabilities of creating bank shareholder value (Copeland and Dolgoff, 2005), and the growth of client base coverage today will determine the bank’s value tomorrow. The connection between strategic financial goals and factors influencing their achievement is delineated in the
book of Gilligan and Wilson. Therefore, if the business goal of the bank is to create shareholder value, and satisfied clients are the source of achieving this goal (Amoako and Darney-Baah, 2012), then establishing the investigation and analysis of target customers from corporate markets in order to detect their individual demands should become a basic task for bank marketing.

The analysis of sources on marketing planning revealed that the current positioning of a customer’s business depends on the “development of competitive behavior of all adversarial parties and their interaction at a tactical level” (Rubin, 2010), and in time the business customer is forced to adapt himself to external challenges. Therefore, it is very important to accentuate the necessity of planning a customer’s demands alongside with the evaluation of an environment in which corporate customers make their own financial decisions (Turnbull and Gibbs, 1987). However, Turnbull and Gibbs do not provide illustrative examples, and the question of how this can be done remains unanswered. The book by Strauss concentrates upon the necessity to realize a client-oriented strategy accounting for customer needs, but no accent is placed on the financial organization of customers and their financial needs. Later, work by Meidan stresses the necessity and importance of conducting market research within the framework of marketing growth strategy. It also enumerates possible types of strategies for strategic bank marketing. Yet, the market research necessary for such strategies to be fulfilled is mentioned only fragmentarily.

Still, “a bank may decide to pursue a marketing objective of increasing its market share from, say, 10 to 20 per cent over the next three years, rising by 3 per cent each year, through a short-term strategy” aimed at reaching client-base growth of 3 to 6 percent annually (Kenneth, 1990). But, considering that “…the skills of marketing did not fully exist in terms of marketing strategy/planning, product development, precise sales targeting, segmentation and campaign management”, the achievement of this goal seems doubtful (Kenneth, 1990).

Cheese states, “During the last few years, the banking industry has realized that the matching between customers’ wants and individual banks’ resources will have to be much more carefully planned and directed than has traditionally been the case.” At that, the process of marketing planning itself becomes one of the most difficult ones in solving marketing problems. Managers have to comprehend how all variables interact within the process. They must also formalize plans for their business decisions, irrespective of the importance of their intuition, senses, and experience. Gile’s article provides formalization of the marketing planning process, but it focuses on the non-financial segment of the market and leaves out demands for financial products.

Thus, the analysis of sources on the theme declared has made the author focus on a number of moments that brought forth this article. The first reason was the necessity of
accounting for customer needs and demands in bank planning, for no marketing strategy can be realized without formalized planning. The second reason is the actual lack of examples of step-by-step market research presentation aimed at detecting the current needs of corporate clients. The third reason lies in the insufficient cultivation of skills for improving market research in banking. This factor hinders the development of bank marketing in the field of product differentiation, so as to stress the difference between banks, products, and competitors (Oliya et al., 2012), and market segmentation, so as to supply bank products and services to satisfy different groups of customers (Once, 2000). Finally, the fourth reason is the lack of an unequivocal answer to the question of how to formalize the market research process.

The above analysis became the foundation to compensate for detected drawbacks. To reach this objective, we demonstrate the process of market research formalization. As an example we use the actual current state of the retail market. Then the potential of the target consumer segment in combination with individual supply of the current range of bank products and services necessary for this segment is revealed. Thus, the information platform for profit maximization from initial cooperation is created.

**Research purpose**

To summarize the aforesaid, let’s consider a conceptual scheme (Fig.1) demonstrating that the problem of a bank’s growing need to control the efficiency of cooperation with corporate clients (The Problem case) is caused by the existing distribution of market sectors between banks, the relationships established, and, consequently, growing competition for customer profits in the Russian bank market (The Factor case). The solution of the problem stated seems to lie in obtaining competitive advantage for a bank by means of accounting for demand for bank products and services in planning the corporate client base coverage growth (The Solution case). Here we propose to use the mechanism of bank market research, including the stage of potential customer needs detection, as a strategy toolset. In this way, the innovative approach presented in this article will assist in solving the stated problem by means of achieving directed planning of bank products for target corporate market customer (The Methodology case). In the Result case, we estimate bank profits and the optimal number of clients planned for attraction. The accounting of information concerning the demand for bank products in implementation of this case will provide for the accuracy of this prediction.
Hence, the aim of this article is to detect the corporate customer’s financial needs and to account for them in solving the task of bank profit maximization. Achieving this set goal will provide for an increase in control and efficiency of bank cooperation with corporate customers and assist in creating competitive advantages and a growth in the bank’s stock value.

**Research methodology**

Methodical recommendations on building market research developed by the author were used as a tool in the methodological work for studying the target corporate market. Market research is presented as the process of planning and studying the outlet market and the inner and outer environment of the bank for the sake of obtaining information necessary for making operative and strategic decisions. The recommendations provided take into account the peculiarities of the research problem in question and constitute a methodic toolset for achieving a certain sequence in performing marketing analysis. They make it possible to study problems dealing with the efficiency of cooperation between banks and corporate customers, and are used in this paper to research the target market segment, the retail trade market, and to analyze the client base of corporate customers, embracing 430 TNOs operating in the northwest region of Russia.

So, the practical results tested in this research and presented to the reader is interpreted as methodical recommendations to justify the techniques of satisfying homogenous customer groups and to detect stable distinctive advantages and directions of application necessary to cater to bank resources markets. It should be added that the individual referring to these recommendations should approach the unique peculiarities of the problem in question in a creative manner.
Let us consider the sequence of methodical recommendations step by step.

**Phase 1 – Formulation of research objectives and tasks.**

Formulation of objectives and tasks of market research in a commercial bank is preceded by detecting the target segment and results expected from its investigation. If, for instance, we choose the retail market as a target segment, the expected results will be an increase in bank service sales to retail operators, changes of priorities in using bank products and services, and supply of most the wanted products to the market under research. Thus, the overall objective of research is the attraction of new customers and widening the scope of bank products and services among the target customers of the bank’s corporate market.

**Phase 2 – Collection and analysis of marketing data.**

The efficiency of collecting necessary marketing information, its analysis and summation in relation to the basic components of marketing research, bank products, customers, an markets is achieved by means of detecting competitors, tariff rates, and conditions of bank product promotion. The basic techniques in collecting marketing information in the process are those of collecting inside bank information, as well as that collected from the outside, meaning on the basis of so-called “external” research. The principles of these techniques are as follows.

*The technique of collecting inside information* is based on collecting initial data that is not published in mass media and specially obtained from inside bank sources to examine customers of a particular sector. Within the framework of inside information, the principle of targeted sampling of a bank’s clients and non-clients throughout the whole range of registered enterprises in the region under study is used. The application of this technique makes it possible to answer the following research questions:

1) What characteristics of corporate customer service provide the largest income to the bank?

2) What data can be helpful in analyzing the efficiency of a bank’s work with a particular group of clients?

3) What will the results obtained be used for?

Answering these questions will, in turn, make it possible to (1) determine the characteristics and informational portraits of the clients in the sector under study (question 1); (2) compose an analytical review on the results of the bank’s work with a particular group of customers (question 2); (3) clarify customer preferences concerning specific types of bank services (question 3); (4) estimate the economic potential of a bank’s cooperation with a
particular customer group, entailing the elaboration of a targeted program and model business proposals for clients (question 3).

The “external” research technique presupposes a systematic collection and analysis of published information in the whole range of known external media, such as the Internet, materials of the Central Bank of the Russian Federation, newspapers, magazines, as well as internal bank data, such as accounting documents, a client base, customer credit documents, etc.

**Phase 3 – current market analysis**

An analysis of the current state of the market presupposes a constant observation of the changing situation. Its role in achieving the overall effectiveness of research is paramount. At this step we conduct sectorial analysis, segmentation (classification) of homogenous market groups, competitor analysis, determination of competitive advantages of the bank, and its positioning on the market.

As a result of determining the current state of the market we have: (1) a system of collecting and analyzing environment data; (2) a well-formed and periodically renewed client database of the sector under study, indicating information gained in the course of Phase 2; (3) detection of situation changes; (4) the bank’s market positioning; (4) a forecasting of the researched sector’s development.

**Phase 4 – client base analysis**

The methodical aspect of client base analysis is research and building of the client base, taking into consideration both external competitive environment conditions and internal conditions, connected with the necessity of cutting a bank’s operational costs. Besides this, client base analysis includes parameter determination and analyses of the client base itself, with the view of quantitative improvement of these parameters. Thus, the objective of client base analysis is to extract useful information from the massive of collected data and to substantiate the conclusion for a bank’s activities.

The parameters of the client base include: (1) the sum of remainders on settlement and current accounts of the customers, (2) the structure of credit turnovers, (3) the client base’s “instability”, expressed by its striving for renovation, (4) direct income brought in by the client base, (5) overall economic result of the client-base service activities, (6) the extent to which customers use the spectrum of bank services offered.

The implementation of this phase will make it possible, firstly, to work out a quantitative estimate of the client base parameters. Secondly, it will enable us to determine the demand potential for bank products. Thirdly, it will facilitate the detection of logical patterns in bank
customer characteristics and the creation of informational portraits for those customers whose cooperation is mutually beneficial. Fourthly, it will sanction access for the identification of potential credit borrowers among customers with a “good payment history”. And, finally, it will permit one to guarantee the completeness and reliability of information collected. Additionally, customer research will result in customer segmentation (classification) with respect to bank products showing current, planned, and actual amounts of operations for the period described.

The execution of the first four phases of market analysis results in rigging-up an analytical review of the market in question, approximately containing the following:

I. A classification system of the enterprises within the market under study;
II. General results of market research of the northwest federal region market that is under study;
III. Basic characteristics of the sector under study;
IV. A client-base analysis of the northwest federal region’s market;
V. Planned revenue from promoting bank products in the northwest federal region market.

Phase 5 – executive decision-making

The foundation for executive decision-making may lie in revealed competitive advantages for the bank, the bank’s potential in cooperation with researched homogenous customer groups, and analytical review containing the following information:

- results of basic qualitative and quantitative characteristics of the sector researched;
- positioning maps showing the bank’s positioning in the market under study;
- informational portrait of typical customers;
- analytical report on the results of the operations of the bank’s branch offices with enterprises of the studied sector;
- economic potential of the bank’s cooperation with enterprises of the studied sector.

Determining the bank’s real position in the market under study and allotting priority segments of clients taken into account in developing the bank’s strategy exemplifies strategic executive decision-making. In the field of advertising, such an example may be the determination of a customer’s profile for further promoting targeted services to the market and of the most prospective medium for placing advertisement, as well as estimating the efficiency of advertising activities. In the field of customer services, it will be the adjustment of service standards. In the field of tariff policy it will be the development of a flexible tariff policy for different clients, considering mutually advantageous conditions of establishing cooperation between the bank and a particular customer group (according to their classification). In the field of product policy it will be offering new kinds of services for allotted segments of customers.
Besides, the results of market analysis make it possible to reveal problems demanding further research and decision-making.

**Interim summary**

The proposed toolset is developed to solve compatible research problem clusters dealing with the study of homogenous customer groups in corporate banking business, including the demand for bank products and services, and the typical methodic solution appears to be the detection of demand for bank products and services on the part of the target corporate customer. The research results comprise the list of bank products demanded by the customer and the typical informational portrait is this customer. A detailed representation of the process is given schematically in Fig.2.

**Discussion of results**

Russia’s leading bank is Sberbank Russia Public Corporation (Smulov, 2003). Keeping in mind the fact that analyzing the leading institutional structure and detecting problems in its operation permits us to forecast the value build-up factors that will inevitably occur with other structures following the leader, the base of Sberbank was used to analyze the client base. The process of market research is illustrated by a practical example, with the retail market of the northwest region of Russia being the object of research.

This part of the article provides an example of successful banking practice in the field of studying current demand and revealing future demand on bank products and services, using the technical recommendations stated above. The Russian banking market of the northwest region, where Sberbank also plays the leading role in the researched process of institutional structure, was chosen to be the object of banking competitive environment studies. The techniques developed by the author for solving Sberbank’s marketing tasks, and followed personally for two years, were used as tools of analysis. The result of the work presented here is the demonstration of the market research implementation for an efficient solution of the task for maximizing bank profits from services provided to the target corporate market consumer. The time segment of the research corresponds to 2008.

**Terms and Definitions**

In accordance with the accepted terminology of the bank, by “retail trade networks” we mean retail stores operating under the same commercial label (trade name, trademark) and belonging by property rights (leasehold, joint venture, etc.) to a network operator. A “network operator” is
a legal entity possessing and/or managing a trade network and accumulating proceeds from commodity sales of this network on its accounts.

Fig. 2. A detailed elaboration of transition process from market research to the bank’s value build-up factors.
**Competitive environment analysis**

For credit organizations, trade networks are a market niche for developing the retail and corporate banking segments. The basic strategy for most banks in positioning themselves in the retail segment is the development of consumer crediting, car-purchase crediting, plastic cards servicing, and increasing the number of ATMs. Banks specializing in the corporate segment promote, for the most part, such services as account-keeping and cash management, acquiring, cash logistics, and crediting, especially in the short-run.

Table 1 presents the general characteristics of a credit organization according to basic types of activities and priorities in bank services provided for trade networks.

<table>
<thead>
<tr>
<th>Bank Name</th>
<th>Basic types of activities in trade networks</th>
<th>Priority services for trade networks</th>
<th>Market niche</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBERBANK RUSSIA PLC</td>
<td>- ACM (account &amp; cash management) - crediting - trade acquiring - cash logistics - households crediting</td>
<td>- ACM - crediting - cash logistics - trade acquiring</td>
<td>Corporate market</td>
</tr>
<tr>
<td>VTB NORTHWEST PLC</td>
<td>- ACM - crediting - trade acquiring - cash logistics - installing ATMs with cash-in function.</td>
<td>- ACM - crediting - trade acquiring</td>
<td>Corporate market</td>
</tr>
<tr>
<td>MDM ST. PETERSBURG PLC</td>
<td>- ACM - crediting - trade acquiring - cash logistics.</td>
<td>- ACM - trade acquiring - cash logistics</td>
<td>Corporate market</td>
</tr>
<tr>
<td>BALTIYSKI BANK CB CJSC</td>
<td>- ACM - crediting - trade acquiring - cash logistics - installing ATMs with cash-in function.</td>
<td>- ACM - trade acquiring</td>
<td>Corporate market</td>
</tr>
<tr>
<td>BANK ST. PETERSBURG PLC</td>
<td>- ACM - crediting - trade acquiring</td>
<td>- ACM - trade acquiring</td>
<td>Corporate market</td>
</tr>
<tr>
<td>USC (UNITED CARD SYSTEM) PROCESSING COMPANY</td>
<td>- trade acquiring</td>
<td>- trade acquiring</td>
<td>Corporate market</td>
</tr>
</tbody>
</table>
Tab. 1. Classification of credit organizations according to basic types of activities and priorities in bank services provided for trade networks

<table>
<thead>
<tr>
<th>Bank Name</th>
<th>Basic types of activities in trade networks</th>
<th>Priority services for trade networks</th>
<th>Market niche</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAFFFEISEN BANK CJSC, NORTHERN CAPITAL BRANCH</td>
<td>- auto loans&lt;br&gt;- installing ATMs with cash-in function.</td>
<td>- auto loans&lt;br&gt;- installing ATMs with cash-in function.</td>
<td>Retail market</td>
</tr>
<tr>
<td>RUSSKI STANDART BANK CJSC</td>
<td>- consumer crediting&lt;br&gt;- credit cards public promotion&lt;br&gt;- installing ATMs with cash-in function.</td>
<td>- consumer crediting&lt;br&gt;- credit cards public promotion</td>
<td>Retail market</td>
</tr>
<tr>
<td>HOME CREDIT BANK</td>
<td>- consumer crediting</td>
<td>- consumer crediting</td>
<td>Retail market</td>
</tr>
<tr>
<td>PROMSVYAZBANK ACB CJSC, St. Petersburg branch</td>
<td>- consumer crediting&lt;br&gt;- installing ATMs with cash-in function.</td>
<td>- consumer crediting</td>
<td>Retail market</td>
</tr>
<tr>
<td>ROSBANK</td>
<td>- consumer crediting&lt;br&gt;- auto loans&lt;br&gt;- installing ATMs with cash-in function.</td>
<td>- consumer crediting</td>
<td>Retail market</td>
</tr>
</tbody>
</table>

In the northwest region of Russia, the major banks competing in servicing retail networks are Russki Standart CJSC (as of April 4, 2008, the volume of consumer crediting surpassed 140 billion rubles), HomeCredit, Rosbank, VTB24, and Raiffeisen CJSC.

The leaders in the corporate segment are, respectively, Sberbank Russia PLC, VTB Northwest PLC, Bank St. Petersburg PLC, Baltiyski Bank CJSC (Table 2), and USC (United Card System) Processing Company, exclusively providing trade acquiring for trade companies.

Tab. 2. Sberbank Russia’s share in servicing cash flow of trade organizations

<table>
<thead>
<tr>
<th>Credit organization name</th>
<th>Bank’s share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northwest Sberbank Russia PLC</td>
<td>30.7%</td>
</tr>
<tr>
<td>VTB Northwest PLC</td>
<td>22.8%</td>
</tr>
<tr>
<td>Bank St. Petersburg PLC</td>
<td>14.6%</td>
</tr>
</tbody>
</table>
Tab. 2. Sberbank Russia’s share in servicing cash flow of trade organizations

<table>
<thead>
<tr>
<th>Credit organization name</th>
<th>Bank’s share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baltiyski Bank CB CJSC</td>
<td>8.8%</td>
</tr>
<tr>
<td>Raiffeisen Bank CJSC</td>
<td>5.8%</td>
</tr>
<tr>
<td>MMB</td>
<td>3.6%</td>
</tr>
<tr>
<td>Nomos Bank</td>
<td>1.6%</td>
</tr>
<tr>
<td>Gazprombank CJSC</td>
<td>1.6%</td>
</tr>
<tr>
<td>Alpha Bank PLC</td>
<td>1.5%</td>
</tr>
<tr>
<td>Other</td>
<td>9%</td>
</tr>
<tr>
<td>TOTAL:</td>
<td>100%</td>
</tr>
</tbody>
</table>

Notes: Calculation of a bank’s share in servicing the cash flow of trade organizations is done on the basis of trade networks revenue data and payment transactions on trade network accounts in commercial banks.

The tendency of development in the retail trade market is determined by factors of growth for the proceeds of retail networks, for example, a substantial increase in new stores, growth in franchising operations, strict control over operational costs, and an increase in sales volume.

Store groups finance themselves both through equity and borrowed money. Retail networks usually resort to credit lines opened in banks for financing long-term projects. To maintain current liquidity networks, they use short-term loans in the form of overdrafts and non-revolving credit lines with a maturity period not exceeding one year.

Detection of retail network demand for bank products and services

Before understanding what bank products and services are in demand on the part of retail network operators, we should grasp the essence of their activity. Thus, according to the 2003 Russian National Classification of Economic Activities trade networks are assigned Codes 50.X, 51.X and 52.X, providing for wholesale and retail trade of foods and nonfoods, and repairs of cars, motorcycles, and household and personal items. It is assumed that the revenue side of trade networks consists of income drawn from selling goods to customers (wholesale trade), selling
goods to retail customers through stores, and payments received from franchise agreements during the term of validity of such agreements.

The expense side includes the cost of direct materials (payment to suppliers), transportation and handling costs, commercial, general and administration costs, tax payments, land lease payments, and rent and leasing payments.

As a result of analyzing the financial and business operations of trade networks, we form the foundations of the trade networks’ demand for bank services (Table 3). We assign mandatory characters to services forming a standard bank services package, and recommendatory characters to other ones. In addition to this, we correlate each type of service to a category of customers to whom this service is intended.

### Tab. 3. Foundations of trade network demand for bank services

<table>
<thead>
<tr>
<th>Service</th>
<th>Foundations of trade networks’ demand for bank services</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Account-keeping and cash service for accounts in Russian Federation currency incl. Service by Client-Sberbank system incl. Using B-Print system</td>
<td>Need for ACM due to: Receiving income from running business; Necessity of payments to state pension fund, medical and social security insurance for workers, etc. On necessity of remote electronic (full-service informational and payment) customer service Acceleration of paper payment documents input into Bank’s informational system</td>
<td>Obligatory Recommended</td>
</tr>
<tr>
<td>2. Money attraction to deposits (in rubles)</td>
<td>Availability of temporarily redundant financial resources</td>
<td>Recommended</td>
</tr>
<tr>
<td>3. Cash logistics</td>
<td>Need for cash logistics</td>
<td>Obligatory</td>
</tr>
<tr>
<td>4. Cash recounts</td>
<td>Need for cash recounts</td>
<td>Obligatory</td>
</tr>
<tr>
<td>5. Crediting</td>
<td>Need for working capital financing</td>
<td>Obligatory</td>
</tr>
<tr>
<td>6. Project financing</td>
<td>Need for long-term project financing</td>
<td>Recommended</td>
</tr>
<tr>
<td>7. Acquiring</td>
<td>Trade companies need for operations of selling goods through bank cards</td>
<td>Obligatory</td>
</tr>
<tr>
<td>8. Payroll card program</td>
<td>Depending on personal income of managers, sellers, and cashiers, and on the number of top executives; Bank issues necessary number of plastic cards for both services.</td>
<td>Recommended</td>
</tr>
<tr>
<td>9. Opening corporate account (issuing corporate card to company workers)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Money attraction to bills of collection (BC)</td>
<td>Availability of temporarily redundant financial resources</td>
<td>Recommended</td>
</tr>
</tbody>
</table>
Tab. 3. Foundations of trade network demand for bank services

<table>
<thead>
<tr>
<th>Service</th>
<th>Foundations of trade networks’ demand for bank services</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Money attraction to certificates of deposit (CD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Issuing debentures in securities</td>
<td>Need for issuing debentures in securities</td>
<td>Recommended</td>
</tr>
<tr>
<td>13. Individual crediting</td>
<td>Buyer’s need for consumer credit</td>
<td>Recommended</td>
</tr>
</tbody>
</table>

**Criteria of trade network operators ranking**

We rank customers by degrees of potential for future cooperation. To do this, we use a standard package of bank products demanded by TNOs, including accounting and cash management (ACM), acquiring, crediting, and cash logistics. It follows that the 1\textsuperscript{st} rank (“minimal potential”) includes customers using the standard package, meaning accounting and cash management, acquiring, cash logistics and crediting. The 2\textsuperscript{nd} rank (“medium potential under certain conditions”) refers to customers using accounting and cash management, acquiring, and cash logistics. The 3\textsuperscript{rd} rank (“medium potential”) includes customers using only accounting services, cash management and acquiring. The 4\textsuperscript{th} rank (“maximum potential under certain conditions”) includes customers using only accounting and cash management, and who have an average daily balance on client accounts. The last rank (“maximum potential”) refers to non-customers, meaning TNOs that do not use any of Sberbank’s services.

Criteria for attributing customers to one of these ranks are shown in Table 4. Here each rank is correlated with a targeted extension of a bank’s standard product package recommended for the market segment under study. In other words, targeted service packaging is provided.

Tab. 4. Criteria for attributing customers and non-customers to a particular rank

<table>
<thead>
<tr>
<th>Customer rank</th>
<th>Criteria</th>
<th>Logical pattern</th>
<th>Recommended extension of standard bank product package</th>
</tr>
</thead>
</table>
2nd rank (customer)
1. Average daily balance amount on customer accounts;
2. Acquiring turnover;
3. Amount of cash collected

3rd rank (customer)
1. Average daily balance amount on customer accounts;
2. Acquiring turnover.

4th rank (customer)
Average daily balance amount on customer accounts

<table>
<thead>
<tr>
<th>Non-customer</th>
<th>No cooperation with Sberbank</th>
<th>Attraction to ACM</th>
<th>Extended standard package</th>
</tr>
</thead>
</table>

**Informational portrait of trade networks**

Building the informational portrait of a typical customer is preceded by analyzing customer-bank cooperation indices for 2008, the results of which brought forth the following conclusions:

1. On the whole, the “residue” of trade networks operators on bank accounts is 2%.

2. Credit turnovers of bank customers and network operators tend to decrease in summer (-7%) and reach their maximum in winter (25%). The same tendency is seen with the customer average daily balance: its growth in winter is 25-35%, while summer growth is negative, ranging from -26 to -34%. These figures demonstrate a seasonal factor characteristic for the sector under consideration.

3. The accounts of TNOs and customers credited by the bank show big figures of credit turnover (128 million rubles on the average). This may possibly be explained by the bank’s requirement on allotting credit to maintain a certain monthly credit turnover. The relatively low residues (within 0.8%) of credited clients is explained by a high turnover of working assets and, consequently, a low daily balance (approximately 1 million rubles) typical for this kind of customer.

The comparative residue estimate of non-credited customers and customers who use only ACM shows the same figure within 2.5-2.7 million rubles. Yet, the average monthly fee income
from ACM and acquiring operations for cash-deposit customers (45 million rubles) exceeds that for non-cash-deposit customers (13 million rubles) by 3.5 times.

If the task of the bank is to maximize profits gained from serving the target corporate market customer, then it is convenient to present initial data for its solution as an informational portrait of its typical customer, reflecting the grouping of analytical information as shown in Table 5. This table provides the informational portrait of the Russian northwest region of TNOs, with the customer's grade correlating with the profit gained from cooperation with the bank. Moreover, we establish a foundation for determining ways to further cooperation with each group of customers.

**Tab. 5. Informational portrait of typical customer – Russian northwest region of TNOs**

<table>
<thead>
<tr>
<th>Customer rank according to Sberbank cooperation degree (with ACM)</th>
<th>Number of customers, units</th>
<th>Specific monthly balance, million rubles.</th>
<th>Specific monthly credit turnover, million rubles.</th>
<th>Residue</th>
<th>Specific monthly fee income from ACM, million rubles.</th>
<th>Specific monthly income from acquiring, million rubles.</th>
<th>Specific monthly income from cash logistics, million rubles.</th>
<th>Specific monthly interest income (short- and medium-term credits), million rubles.</th>
<th>Total specific monthly income, million rubles.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st rank customers</td>
<td>24</td>
<td>6</td>
<td>128</td>
<td>0.8 %</td>
<td>20</td>
<td>33.030</td>
<td>0.5</td>
<td>5</td>
<td>58.530</td>
</tr>
<tr>
<td>2nd rank customers</td>
<td>25</td>
<td>2</td>
<td>108</td>
<td>2.7 %</td>
<td>16</td>
<td>23.010</td>
<td>0.1</td>
<td>-</td>
<td>39.110</td>
</tr>
<tr>
<td>3rd rank customers</td>
<td>122</td>
<td>3</td>
<td>113</td>
<td>2.5%</td>
<td>13.6</td>
<td>5.251</td>
<td>-</td>
<td>-</td>
<td>18.851</td>
</tr>
<tr>
<td>4th rank customers</td>
<td>259</td>
<td>2</td>
<td>92</td>
<td>2.6 %</td>
<td>13</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>13.000</td>
</tr>
<tr>
<td>Non-customers</td>
<td>430</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total number of trade network operators:</td>
<td>1115</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Solving the problem of conditional optimization**

*How can the results of the conducted market research be used?* Suppose the bank faces a task of determining the number of customers it plans to attract in a future period. To solve it, we use the technique of conditional optimization and maximize the bank’s profit from serving the target
corporate market customer, taking into account the sectorial demand for bank products and services. We will confine ourselves to the standard package of bank products developed for each rank of customers in the market segment under study. Thus, if the targeted standard package (by priority of bank products demand) includes ACM, acquiring, cash logistics and crediting, the input of planning profits from the bank’s cooperation with various ranks of trade network customers is reduced to the following:

Let $a$ signify 1st-rank customers enjoying a standard product package including ACM, acquiring, cash logistics, and crediting;

$b$ stands for 2nd-rank customers using packages including ACM, acquiring, and cash logistics;

$c$ represents 3rd-rank customers using ACM and acquiring;

$d$ is 4th rank customers using ACM only.

The customers of each rank bring the following total specific monthly income: $58,530$ million rubles, $39,110$ million rubles, $18,850$ million rubles, and $13,000$ million rubles (Table V). While solving the problem of integrated product supply for target corporate market customer, the bank set its goal in maximizing profit by every month offering its customers one product from its standard package that is not yet demanded and that is next in priority. So, the customer of rank $d$ moves to rank $c$, from $c$ to $b$, from $b$ to $a$, and the $d$ rank receives the rank of a non-customer. Then the total income of the bank from selling one product to each of customer ranks will be:

$$58,530 \cdot a + 39,110 \cdot b + 18,850 \cdot c + 13,000 \cdot d = \text{Profit}. \quad (1)$$

The structure of future customer distribution within the framework of established ranks is determined according to past experience. Thus, the bank’s share in serving 1st-rank customers equals 6% (24/430), 2nd-rank customers equals 6% (25/430), 3rd-rank is equal to 28% (122/430), and 4th-rank equals 60% (259/430). The demand analysis for the bank products set and evaluation of competitive advantages at the market under study have shown that in the next reference period it is possible to increase the quantitative share in serving TNOs from 38.5% (430/1115) to 40%, meaning that total attraction potential equals 17 customers (1115*1.5%/100%). This, in turn, makes it possible to define the limit of potential customers within the framework of established ranks: 1, 1, 5 and 10 customers, respectively. As a result, the first limitations are formed:

$$a \leq 1, b \leq 1, c \leq 5, d \leq 10. \quad (2)$$

The bank’s expenditures on attracting customers are limited by man-hours, salaries of attraction managers, and costs.
**Man-hours.** The bank’s staff of client managers includes 7 people. Actually, the attraction of 1st-rank customers costs the bank 20 man-hours, 2nd-rank customers requires 45 hours, 3rd-rank customers needs 50 hours, and 4th-rank customers costs 60 man-hours. If we suppose that client managers can devote only half of their working hours (40/2 = 20 hours a week) to this task, it follows that to attract the required 17 customers of the target segment, the bank has only 560 man-hours a month (7 managers*20 hours*4 weeks). So we establish the following limitation:

\[20 \cdot a + 45 \cdot b + 50 \cdot c + 60 \cdot d = 560.\] (3)

**Manager’s salary.** Salary budget depends upon the number of workers (7) and staff list, with pay rates depending on the skill category. The bank employs two 1st-category managers with salaries of 100,000 rubles, two 2nd-category managers with salaries of 70,000 rubles, and three 3rd-category managers with salaries of 50,000 rubles. Thus, the monthly salary budget is a constant, equaling 490,000 rubles (2*100+2*70+3*50).

**Costs.** Costs include interest costs of funds raised, the transfer costs for attracting funds allocated to the customer, non-interest costs of conducting nominal account operations, cash logistics costs, and other expenditures (Pict.3). In terms of the depicted potential of customer groups, they form, respectively, 147,000 rubles, 70,000 rubles, 66,000 rubles, and 50,000 rubles, with a limit of monthly expenditures set at 700,000 rubles. Hence the final limitation:

\[147a + 70b + 66c + 50d \leq 700\] (4)

Eventually, the task of conditional optimization is formulated as:

(1) \( a \) – number of 1st-rank customers;  
(2) \( b \) – number of 2nd-rank customers;  
(3) \( c \) – number of 3rd-rank customers;  
(4) \( d \) – number of 4th-rank customers.

Objective function due for maximization:

\[Profit = 58\,530a + 39\,110b + 18\,851c + 13\,000d\] (5)

(2) The following limitations must be considered:

\[1 \geq a \geq 0, \ 1 \geq b \geq 0, \ 5 \geq c \geq 0, \ 10 \geq d \geq 0;\] (6)

\[20a + 45b + 50c + 60d = 560;\] (7)

\[147a + 70b + 66c + 50d \leq 700\] (8)

The solution of this problem is modeled by means of Microsoft Excel, using the Microsoft Excel Solver add-on. It is shown at Fig.3. According to it, the bank is recommended

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2 The presentation design of results obtained from solving similar problems is borrowed from Moore and Weatherford (2001).
to attract customers in the following monthly proportions: *one* 1\textsuperscript{st}-rank customer, *one* 2\textsuperscript{nd}-rank customer, *five* 3\textsuperscript{rd}-rank customers, and *three* 4\textsuperscript{th}-rank customers.

This will lead to maximum profits in attracting and serving only ten customers of the target market segment per month:

\[
\text{Profit} = 58\,530 \cdot 1 + 39\,110 \cdot 1 + 18\,851 \cdot 5 + 13\,000 \cdot 3 = 230\,895\,000\text{ rubles monthly.}
\]

![Table](image)

\textbf{Structure model of monthly income provision from promoting banking products standard package to trade network market (in thou. rubles)}

\textbf{Customer ranks according to degree of cooperation with Bank}

<table>
<thead>
<tr>
<th>Rank</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>58,530</td>
</tr>
<tr>
<td>2</td>
<td>39,110</td>
</tr>
<tr>
<td>3</td>
<td>18,851</td>
</tr>
<tr>
<td>4</td>
<td>13,000</td>
</tr>
<tr>
<td>5</td>
<td>231,322</td>
</tr>
</tbody>
</table>

\textbf{Number of customers (roundoff)}

<table>
<thead>
<tr>
<th>Rank</th>
<th>1</th>
<th>1</th>
<th>5</th>
<th>3</th>
</tr>
</thead>
</table>

\textbf{Total expenditure limits and month-end balance}

\begin{tabular}{|c|c|c|c|}
\hline
\textbf{Total} & \textbf{Expenditure Limits} & \textbf{Month-end balance} \\
\hline
147 & 370 & 66 & 50 & 700 & 700 & 0 \\
100 & 370 & 50 & 490 & 490 & 0 \\
50 & 46 & 51 & 75 & 559 & 560 & 0 \\
\hline
\end{tabular}

\textbf{Profit maximization solution in Microsoft Excel.}

\textbf{Conclusions and Limitations of the research}

As a result of the work done, two problems have been stated and solved. On the one hand, the demand for bank products and services on the part of the target bank’s corporate market customer has been revealed and the informational portrait of a typical client has been developed, which allows us to identify most the profitable bank product market outlet. On the other hand, the results obtained were taken into account when solving the problem of conditional optimization in the bank’s business planning. Moreover, technical recommendations put forward by the author were used as a tool to achieve the objectives of this work.
It should be noted, however, that this technique has a practical limitation, expressed mostly in the necessity of maintaining a close connection between an optimization strategy in bank management and peculiarities of developing priority services for the target segment of the corporate market. The rule of applying this technique implies that we are to detect and recognize the customer’s financial interests in planning his or her further cooperation with the bank. Moreover, even though we can correlate the technique’s content with a typical research (practical) situation, the application and interpretation of market analysis results are limited by considering the unique properties of the problem under question. This, in the first place, is determined by the necessity to keep in mind the specific nature of the market segment chosen for research.

However, the author’s intent is realized in turning the results of market research into actual decisions to satisfy the demands of existing and potential customers belonging to target market segments. As an effect, the proposed approach provides an opportunity to maximize operational profit and increase the efficiency of the bank’s cooperation with corporate customers by widening the scope of the client base and the purposefulness of work with customers, thereby contributing to the bank’s shareholder value and satisfying the needs of potential corporate customers.

References


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