Development of marketing research in the management of consumer decisions in the field of water supply to national economic facilities

Svetlana Savina¹*, Bermet Tulemysheva², Zamira Atakulova², Ainura Isagalieva³, and Aida Ashirbaeva¹

¹Bishkek State University named after K. Karasueva, Bishkek, Kyrgyzstan
²International University of Kyrgyzstan, Bishkek, Kyrgyzstan
³Kyrgyz State Technical University named after I. Razzakov, Bishkek, Kyrgyzstan

Abstract. This study reveals the essence of marketing research and presents a complete proposal for a marketing research program, including an analysis of possible alternatives for various market participants related to the consumption of water resources. The intensive introduction of marketing tools in various spheres of economic life determines the theoretical and practical interest in the algorithmization of planning activities in the field of marketing, the provision of services to the population and companies. Conducting market research allows the company to understand what customers want, the criteria by which they choose management companies and services for the provision of water consumption and sanitation services, the likelihood (or impossibility) of raising or decreasing prices. Consequently, companies can dynamically track any changes in customer needs, which allows them to retain customers and attract new ones. In turn, this provides the company with high competitiveness, market stability and favorable further economic growth. The main goal of this article was the development of marketing research in the management of the formation of consumer decisions. In the process of writing this article, a literature review, data synthesis and analysis, and systematization of the findings were conducted. The results of the study can be applied in the management of the formation of consumer decisions.

1 Introduction

Marketing research is an important tool for determining consumer needs and preferences, analyzing the competitive landscape, and evaluating the effectiveness of marketing strategies. It enables companies to make informed, evidence-based decisions, improve products and services, increase customer satisfaction, and enhance corporate profitability. Without market research, companies risk losing their competitive edge and failing to achieve their goals. Given the relevance of purposeful management of socio-economic systems in modern conditions, we cannot underestimate the role of marketing tools in this

*Corresponding author: savina_doc@mail.ru
process, due, on the one hand, to the possibility of a thorough and comprehensive study of markets, needs, requirements, production is focused on these needs, the quality of products, by contrast, positively affects the existing needs, the formation of demand and consumer preferences.

Marketing consumer research is necessary and relevant for businesses for several reasons.

First, they allow you to determine the needs and demands of your target audience in finance system or another market and tailor products and services to their requirements. Underestimating or misunderstanding consumer needs can lead to market failures [1].

Secondly, market research helps to identify the strengths and weaknesses of competitors and obtain information about the market situation. This allows you to develop effective strategies to promote products in the market [2].

Third, market research provides more accurate targeting and effective communication with potential customers. Such research can show which communication channels are most effective in reaching the target audience.

Fourth, market research can lead to resource savings and business process optimization. They allow you to avoid unnecessary costs of promoting products that are not in demand in the market, and focus your efforts on those products that are most popular with consumers [3].

Thus, market research of consumers is a necessary and urgent task for any business that strives to succeed in the market.

2 Materials and Methods

This article is based on methods of analysis containing analysis of scientific and practical publications in the field of scientific problems, as well as economic methods involved in the analysis of the subject area [4-6].

Marketing research plays an important role in the process of setting goals for organizational development. It helps determine customer needs and preferences, analyze the competitive environment, and assess market potential. Based on the data obtained, companies can develop effective marketing strategies and thus achieve their goals. Without market research, companies may make poor decisions that can lead to churn and loss of customers.

Behavioral marketing research is carried out:
- When selling brand new products and promoting new products;
- Increase customer loyalty and improve the company's reputation;
- Develop effective advertising;
- Control the market situation and stand out among competitors.

To turn market research into an effective business development tool, you need to collect and analyze the most up-to-date information. To do this, conduct detailed research in each area. - Find new markets, promising niche markets, and bring products to market;
- Launch new products, modify existing products;
- Test product ideas and concepts;
- Position competitors and identify mismatches;
- Evaluate consumer loyalty;
- Identifying consumer opinions;
- Verify the quality characteristics of the product;
- Comprehensive market analysis;
● Competitor analysis;
● Evaluate the effectiveness of advertising campaigns;
● Consumer segmentation, including psychographic segmentation;
● Evaluate the long-term growth potential of the market;
● Research brand awareness and perception;
● Assessing brand health;
● Packaging testing (perception, usability, clarity of message, etc.)
● Identify business growth drivers.

There are many others [7].

3 Results

Market analysis showed the weaknesses and strengths of consumer marketing research at the present stage, which are presented below.

**Table 1. Weaknesses and strengths of consumer marketing research**

<table>
<thead>
<tr>
<th>Weaknesses</th>
<th>Strengths</th>
</tr>
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<tbody>
<tr>
<td>May be costly to administer</td>
<td>Can help determine the most effective advertising campaign</td>
</tr>
<tr>
<td>May contain errors in sampling, data processing, or analysis of results</td>
<td>Can help identify the appropriate target audience for a product or service</td>
</tr>
<tr>
<td>May provide only a superficial understanding of consumer preferences</td>
<td>Can help identify new trends and needs in the marketplace</td>
</tr>
<tr>
<td>The results of surveys may be uncertain or inconsistent</td>
<td>Can help develop more competitive products or services</td>
</tr>
<tr>
<td>May not guarantee the successful introduction of a product into the market</td>
<td>Can help figure out the most effective channel for distributing a product or service</td>
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When analyzing the market, it is necessary to consider the factors that influence the market research of consumers:

● demographic factors: consumer characteristics such as age, gender, income, education and occupation.

● behavioral factors: factors influencing consumer behavior, such as lifestyle, consumption habits, motives and preferences [8].

● psychological factors: beliefs, values, perceptions, opinions and other factors that influence consumer psychology; 4.

● economic factors: inflation, unemployment, economic growth, income levels and other economic conditions affecting consumer behavior.

● technological factors: new technologies, changes in production processes and other technological changes affecting the demand for products and services.

● competitive factors: competitors in the market, their products and services, prices and marketing strategies affecting consumer behavior.

● political and legal factors: laws, rules and regulations that affect the production and sale of products and services, as well as changes in policies that may affect the demand for products and services [9].

**Table 2. Positive and negative aspects of methods in market research of consumers**

<table>
<thead>
<tr>
<th>Positive</th>
<th>Negative</th>
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<tr>
<td>Help understanding the needs and preferences of the target audience</td>
<td>Can be expensive and time-consuming</td>
</tr>
<tr>
<td>Allow you to determine the competitive advantage of the company in the market</td>
<td>May be inaccurate due to errors in respondent sampling or survey methodology</td>
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<tr>
<td>Help make individual decisions about marketing strategies</td>
<td>May lead to distrust among consumers, especially in telephone surveys</td>
</tr>
<tr>
<td>Improve the effectiveness of advertising campaigns and promotions</td>
<td>May cause a backlash from competitors</td>
</tr>
<tr>
<td>Help to decrease the risks when introducing new products to the market</td>
<td>May not take into account some factors influencing consumer behaviour (e.g. cultural differences)</td>
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Despite the types of methods used in market research, they all serve as a source of information for informed decision-making [10].

In general, the stages of market research consumer research can be presented as follows:

1. Clarify the purpose and objectives of the research. Decide what information you want to get and what questions you want to ask.
2. Choose the method of research. Companies choose the most appropriate research method to achieve their goals.
3. Data collection. Companies collect data through a variety of digital technologies such as online surveys, social media, and mobile apps.
4. Data analysis. The company processes and analyzes the collected information using a variety of data analysis tools, including big data, real-time analytics, and artificial intelligence.
5. Evaluation of survey results. The company evaluates the results of the survey and determines what information can be used to improve performance.
6. Making decisions based on survey results. The company uses the information to make decisions about marketing, sales, production, etc.
7. Implementing recommendations. The company implements the recommendations from the survey and monitors their effectiveness.

4 Discussion

As consumers grow, the marketplace changes, and digital technology becomes ubiquitous, marketing research methods also change. In an age when more and more people are using the Internet and social media to learn about products and services, the digitalization of consumer research is critical. Digital research allows us to collect real-time data on consumer behavior and make more accurate analyses and predictions based on large amounts of data. In addition, digital research allows you to reach a wider audience, including those in remote areas and those who have limited access to traditional research [10]. Overall, the digitalization of market research can help companies better understand the needs and preferences of their customers and develop and improve their products and services.

One of the main problems in using digital technologies in market research is the lack of knowledge and understanding of the technologies and tools available for data collection and analysis. In addition, many companies are unfamiliar with processing large amounts of data, which can lead to errors and inaccuracies in the analysis of results.

Another problem is the lack of protection for the data collected in digital research. Companies must be prepared to protect their data from threats such as hacker attacks to prevent sensitive information from leaking [11].

It should also be considered that not everyone has access to digital technology and may be excluded from the overall sample when conducting research. This can lead to inaccurate results and an incomplete understanding of consumer needs and preferences.
Finally, it should be noted that digital technology does not completely replace traditional research methods such as surveys and focus groups. In some cases, traditional methods can be more effective, especially when studying complex social phenomena [12, 13].

Therefore, the main ways of solving the problems of digitalization of marketing research:

- **employee training.** Businesses need to invest in training their employees in the effective use of digital technologies and tools for data collection and analysis.
- **data protection.** Companies need to ensure that the data collected during digital research is protected. This can be achieved with advanced encryption and threat monitoring technologies.
- **extended sampling.** To avoid incomplete data, companies can use a variety of data sources and research methods, including traditional methods such as surveys and focus groups.
- **data integration.** Companies can use data integration to combine information from different sources to get a more complete picture of consumer needs and preferences.
- **process automation.** By automating the data collection and analysis process, companies can reduce time and errors when dealing with large amounts of information.
- **engaging experts.** By engaging experts in digital technology and data analysis, companies can take advantage of expert help when conducting market research.
- **use of social media.** Companies can use social media to conduct research, analyze user feedback and opinions, and connect with target audiences.
- **using Big Data.** Big data analysis can help companies gain valuable insights into consumer needs and preferences, as well as market behavior [14, 15].
- **use of Mobile Apps.** Mobile applications can be used to collect data on user behavior, as well as to conduct surveys and research.
- **use of real-time analytics.** Companies can use real-time analytics to monitor user behavior and respond quickly to changes in the market.
- **use of geodata.** Geodata can be used to analyze user behavior in different geographical areas, as well as to determine the optimal location of stores and other facilities.
- **use of artificial intellect.** Artificial intelligence can be used for analysis of large volumes of data, automatic determination of trends and prediction of market behavior.

With digitalization, where more and more of people's lives are spent online, consumer marketing research is becoming even more important and relevant. This is due to the fact that today's consumers are becoming increasingly digitally inclined and are spending more time online.

The main benefits of digital market research are:

- **Quickness and efficiency.** Digital market research produces results much faster than traditional methods. For example, surveys and questionnaires can be conducted online, which allows you to get results almost instantly.
- **High data accuracy and quality.** Various software tools can be used in digital research to avoid human error and ensure high data accuracy and quality.
- **Large audience.** Digital market research allows you to reach a large audience, including in different countries and regions of the world. This allows you to get a more complete and objective picture of consumer preferences.
- **Cost-effectiveness and efficiency.** Digital market research is much more cost-effective and efficient in terms of time and financial resources than traditional methods.
- **Big data analysis.** Digital market research can analyze a large amount of data using a variety of tools and technologies, yielding valuable insights and recommendations for businesses.
- Thus, the digitalization of consumer marketing research is necessary and relevant nowadays, when more and more people use the Internet to find information, shop and communicate [9].

## 5 Conclusion

Marketing research is essential to a healthy and successful business in order to answer virtually all questions about the current state of the marketplace, to understand what consumers need, to meet their expectations and how to create products that are in demand.

Initiatives to improve the reliability of marketing research data using digital technology:
- Training company employees in the basics of digital analytics and data management.
- Creating a system for automating the process of data collection and analysis based on digital technologies.
- Application of artificial intelligence.
- Conducting A/B testing to verify the accuracy of marketing research results.
- Using various data sources such as social media, CRM systems and other digital channels to gain more reliable information about consumer behavior and preferences.
- Conducting regular data audits and eliminating errors and inaccuracies identified during analysis.
- Implementing a modern data visualization system to present information quickly and visually.
- Participating in communities of digital marketing professionals and sharing experiences and knowledge.
- Collecting and analyzing feedback from clients and research participants to improve data quality and analysis methodologies.
- Identifying and monitoring key performance metrics for marketing campaigns based on reliable statistical information.

## References

1. U.M. Abdyldaeva, A.Zh. Iskenderova, A. Abdykadyrova, Actual issues of modern economy, 1, 34-38 (2022)
2. M. Logachev, V. Simonov, BIO Web Conf., 83, 03002 (2024)  
   https://doi.org/10.1051/bioconf/20248303002
   https://doi.org/10.1051/bioconf/20248303004
   https://doi.org/10.1051/bioconf/20248305002


15. I. Krasnikova, I. Kulibaba, BIO Web Conf., 93, 03006 (2024) https://doi.org/10.1051/bioconf/20249303006