NS MATRIX AS A MARKET RESEARCH ANALYSIS METHOD: MAKING DECISIONS ON PRODUCT POSITIONING

НС МАТРИЦЯ ЯК МЕТОД АНАЛІЗУ РИНКУ: ПРИЙНЯТТЯ РІШЕНЬ ЩОДО ПОЗИЦІОНУВАННЯ ПРОДУКТУ

Nikolenko Viktor
Master of Marketing Management, Jr. Lt.,
Reserve Officer at Military Institute of Taras Shevchenko
National University of Kyiv
ORCID: https://orcid.org/0000-0001-5866-2144

Ivanova Svitlana
Associate Professor at Intensive Language Training
Center at Military Institute of Taras Shevchenko National
University of Kyiv
ORCID: https://orcid.org/0009-0001-2759-9370

Ніколенко Віктор Євгенович, Іванова Світлана Сергіївна
Київський національний університет імені Тараса Шевченка

Market research plays a crucial role in the success of businesses, whether large or small. It provides valuable insights into customer preferences, market dynamics, and competitive forces. By thoroughly understanding the behaviors and demands of their target audience, businesses can make informed decisions that enhance product offerings, optimize marketing strategies, and reduce risks. This research evaluates the strengths and limitations of traditional market analysis models while introducing the innovative NS Matrix model, aimed at simplifying and enhancing market research processes for companies of all sizes. The goal is to offer businesses a more efficient, accessible, and comprehensive approach to analyzing market trends and consumer behavior, ultimately supporting strategic decision-making and business growth in an increasingly competitive environment.

Keywords: market research, market segmentation, competitor analysis, consumer surveys, focus groups, social media listening, market forecasting, trend analysis, Porter's five forces, benchmarking, environmental scanning, data analytics, big data, qualitative research, quantitative research, ethnographic research, consumer behavior, market trends, strategic planning.

Маркетингові дослідження є важливим інструментом для забезпечення успіху бізнесу на сучасному ринку. Вони дозволяють отримати важливу інформацію про потреби споживачів, конкурентні стратегії, динаміку ринку та загальні тенденції, що дозволяє підприємствам ухвалювати зважені рішення і успішно позиціонувати свої продукти. У статті розглядаються основні методи маркетингових досліджень, що використовуються сьогодні, зокрема SWOT-аналіз, PESTEL-аналіз, дослідження конкурентів, фокус-групи та опитування споживачів. Однак, в умовах швидких змін ринкових умов та глобалізації, традиційні методи не завжди є достатньо ефективними для малих підприємств, які не мають можливості інвестувати великі кошти в масштабні дослідження. У статті також пропонується новий підхід – метод НС-матриці, що дозволяє спростити та прискорити процес маркетингових досліджень. Використання НС-матриці дозволяє швидко оцінити позиціонування продукту, його відповідність потребам споживачів та вибір ефективних каналів збуту. Це особливо важливо для малих підприємств, які прагнуть мінімізувати витрати на дослідження ринку, проте бажають мати точні і надійні дані для прийняття рішень. НС-матриця є універсальним інструментом, який дозволяє аналізувати різні аспекти ринку, від аналізу ціноутворення до визначення найбільш вигідних каналів розподілу. Вона допомагає визначити сильні і слабкі сторони позиціонування продукту та виявити найбільш конкурентоспроможні стратегії. Використання цього методу дає змогу малим і середнім підприємствам не лише зменшити витрати на маркетингові дослідження, але й приймати більш точні стратегічні рішення на основі реальних даних. Важливим аспектом є й те, що НС-матриця дозволяє швидко реагувати на зміни ринкової ситуації, забезпечуючи гнучкість у прийнятті рішень. Це робить її ефективним інструментом для аналізу ринку в умовах швидко

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зміюваного бізнес-середовища, що є необхідним для забезпечення конкурентоспроможності підприємства. Дослідження показує, що НС-матриця може бути ефективним інструментом для стратегічного планування та формування політики розвитку компаній у сучасних умовах.

Ключові слова: дослідження ринку, сегментація ринку, аналіз конкурентів, опитування споживачів, фокус-групи, моніторинг соціальних медіа, прогнозування ринку, аналіз тенденцій, п'ять сил Портера, бенчмаркінг, аналітика даних, великі дані, якісні дослідження, кількісні дослідження, етнографічні дослідження, поведінка споживачів, ринкові тенденції, стратегічне планування.

Introduction. Effective market research helps businesses identify new opportunities, refine their brand positioning, and improve customer satisfaction, all of which are essential for long-term success and growth. It's especially important in dynamic and competitive markets, where staying ahead of trends and adapting to changes is critical. Nonetheless, not many methods of research are affordable for small businesses incapable of investing considerably in market explorations. Besides, not many models allow to form a complex view of product application and positioning regarding distribution channels.

In terms of distribution channels, market research plays a pivotal role in helping businesses determine the most effective ways to deliver products to consumers. While traditional methods like surveys and focus groups can provide insights into consumer preferences, some specific research methods are tailored towards understanding how products reach their customers: Retailer and Distributor Feedback, Channel Performance Analysis, Mystery Shopping and Observational Research.

These methods help businesses identify which channels are most effective in reaching their target audience. They also help maximize their return on investment by ensuring optimal product availability and consumer engagement.

The study aims. To review the advantages and disadvantages of the main traditional approaches to research market environment. Secondly, it proposes the NS Matrix as a new method. The matrix could provide analysts with an affordable and complex solution, bringing about insights and a deeper understanding of product application, positioning and consumer behavior.

Research questions. The specific questions to be answered in this study are:

What are the main methods of market research available today? What advantages and disadvantages do they possess for small businesses? How NS Matrix can become a quick solution to solve product positioning issues?

Method. This research uses descriptive and case study research methods.

Literature review. There are various instruments and methods available for market environment research. These tools help businesses understand the external factors impacting their operations, ranging from consumer behavior to competition and regulatory frameworks. Below are the key instruments used:

1. SWOT Analysis (identifies internal strengths and weaknesses, and external opportunities and threats). Used for strategic planning, assessing competitive positioning, and discovering market opportunities (Gürel, E., 2017).

2. PESTEL Analysis (focuses on Political, Economic, Social, Technological, Environmental, and Legal factors affecting the market). Helps understand broader macro-environmental factors that influence industries and businesses. (Yüksel, İ., 2012).

3. Market Segmentation Research (divides a broad consumer or business market, normally consisting of existing and potential customers, into sub-groups of consumers based on some type of shared characteristics). Enables companies to target specific market segments more effectively. (Wedel, M., & Kamakura, W. A., 2000).

4. Competitor Analysis (studies competitors in the market, identifying their strengths, weaknesses, strategies, and performance). It helps businesses adapt their strategies to be more competitive in the marketplace. (Porter, M. E., 1980).

5. Consumer Surveys and Focus Groups (collect direct feedback from consumers about products, preferences, and market trends). They provide qualitative and quantitative insights into consumer behavior, preferences, and buying habits. (Kelley, K., & Albright, J., 2004).

6. Social Media Listening Tools (monitors and analyzes social media channels to understand consumer sentiment, opinions, and trends). They provide real-time feedback and insights into customer behavior and brand perceptions. (Riley, S., 2020).

In addition, there is a multitude of various methods that facilitate understanding a specific

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market or its segment: Market Forecasting and Trend Analysis, Porter's Five Forces Analysis, Benchmarking, Environmental Scanning, etc.

Their vast advantage over many others is versatility and general approach towards the market subjects. However, these strong sides may appear to be the weaknesses. Apart from that, relevant conclusions may be derived from the use of these methods of research only in case the analyst is strictly following the guidelines and standards. Often, some methods are at risk from that point of view. Among those are SWOT and PESTEL analysis which are frequently performed wrong – with no measurable indicators included or having outdated numbers. Moreover, being too general and too seductive for misuse, the well-known methods require solid investment in most cases. That is totally not acceptable for small entities that may have just been started.

Much more helpful in this case are methods that put an analyst in the field, close to the consumer. For instance, Competitive Analysis (Market Share, Positioning) monitors and analyzes competitors' activities, product launches, pricing strategies, and market share. It helps FMCG companies understand their market position and adjust strategies to compete effectively (Porter, M. E., 1980). Additionally, Shopper Behavior Studies (In-Store Observations) observing consumers in retail stores to understand their purchasing decisions, product preferences, and behavior patterns at the point of sale, help FMCG companies optimize product placement, packaging, and in-store promotions to influence consumer buying behavior (Grewal, D., & Levy, M., 2013).

Indeed, small businesses mostly rely on cost-effective, agile market research methods to understand their customers, competitors, and market dynamics. These methods provide valuable insights without the financial burden of large-scale research projects, making it possible for small companies to make informed decisions and remain competitive.

However, there are still many issues that remain uncovered by each of the methods. They often tackle one or two pain points and do not allow to reveal the whole market picture. Thus,

a researcher faces the need to combine many techniques and the risk of missing details on the way. Certainly, this may lead to incorrect interpretation of results, which is inevitably bound to call forth wrong decisions.

Discussion and results. Understanding the necessity of a short, clear, general, but at the same time complex and specific method of research suitable for small-sized enterprises, we would like to propose the NS Matrix. This model incorporates only three inputs and allows us to make data-driven conclusions about price positioning, consumer behavior, distribution channel, and product application in the market. It is available for all sizes of businesses and combines primary and secondary marketing information collection. NS Matrix has already been successfully applied in the B2B2C market and proven its effectiveness in the decision-making process.

In our case we see the path of goods that includes seven stages: 1) Goods produced by the entity, 2) Markup added (by the producer), 3) Goods at a distributor (this stage is optional as many business models may use distributor services and/or sell directly to KA), 4) Markup added (by a distributor if there is any), 5) Goods at a client (meaning their arrival to key accounts or distributors' clients), 6) Markup added (by KA or distributors' clients and presence of goods in points of consumption), 7) Goods purchased by the consumer. We highlight the stages of adding markup as they are essential for choosing the distribution channel and impacting the final price, which is important from a consumer behavior point of view. Thus, we pay close attention to stages 6 and 4 (2).

For instance, one unit of a soft drink sold at a supermarket or at a cinema has an extremely different value and price for the final consumer. However, it makes a similar financial impact on the producer.

Consequentially, if we revert to the inputs needed for our research, we may need the following:

a) The procurement stock keeping unit (SKU) price for the seller (stage 4 (2));

b) The selling price of goods (stage 6);

Figure 1. Goods transition process from production to final purchase

Source: authors' own work

c) The distribution channel type;

Values (a) and (b) are financial and may not be completely unified. In case goods (e.g, tea leaves) are produced in bulk, then packed by the client (seller) and finally sold to consumers, we may take (a) as a price per kilogram and (b) as a price per a 50-gram package. However, it is essential to align variables within their categories: if (a) procurement SKU price is set for a one-kilo bulk, all the prices considered need to be leveled to price per kg; if (b) selling prices are taken for a 50-gram pack, other prices need to be unified to this volume as well.

Values (a) and (b) need to be gathered carefully in accordance with purity requirements. All the procurement SKU prices need to be found based on a unified approach. Similarly, the selling price of goods demands profound field research to embrace all distribution channels of our interest.

The distribution channel type has to be marked by the specific color; e.g. green for supermarkets, blue for cafes, red for hotels, etc. Alternatively, symbols may be used. This will foster NS Matrix mapping and visualize results quickly.

After the data table is complete and symbols or colors are chosen, it is possible to start creating the matrix. The horizontal axis depicts the range of the procurement SKU price (a), vertical axis shows the selling price (b). After all the points are marked, we find average values of (a) and (b) and draw a cross that is made up by perpendicular lines to corresponding axes.

When the lines are ready, our matrix is divided into four zones that enables us to provide quick analysis. Top right are Fair top enterprises – they have the highest procurement prices and sell products at comparatively high prices, top left are Robbers – the entities purchasing goods at low prices and selling them high; bottom right are Donators that buy high priced goods and sell them at prices below average; bottom left are Fair economy entities that purchase and sell at low prices. Depending on the market specificity, we can draw conclusions about product application, consumer behavior, distribution policy, and many more factors that have the highest value for a fast-moving consumer goods (FMCG) producer.

Let us review how NS Matrix can be applied by the example of the out-of-home (OOH) coffee market of Ukraine.

The first step is to conduct a quick analysis of the environment background. The COVID-19 pandemic that lasted two years has impacted the OOH market consumption tremendously.

The downing consumption trend started getting back its position in 2022. However, the full-scale russian aggression kicked back the OOH sales down 60-70% of the pre-war period. The bars, cafes, hotels, and other entities, that had managed to recover, were forced to close once again and for good. The most resilient channel that kept functioning was convenience stores. Coffee corners in grocery stores became little cafes for consumers gathering around to have a conversation over a cup of coffee. It prompted a need to conduct a research determining the role of roasted coffee beans sold to different channels.

There are several international companies supplying the OOH market with roasted coffee. They offer highly standardized products for prices higher than average. Meanwhile, a number of local roasters flood market with either extremely low-priced products or super premium coffee beans. Their main advantage as well as disadvantage are the variability of taste quality.

In order to gather the data, we needed to determine what can be considered our units of measure for values (a) and (b). The field visit we made, revealed that the most popular packaging format used by points of consumption to purchase coffee beans is a one-kilogram pack. Therefore, we indicate price per one-kilogram pack (UAH) as the value (a). The selling price of goods (b) is the price for one americano coffee without milk (UAH) as the most preferable drink served (without any additional ingredients impacting the cost).

During our field research we visited 6 grocery stores (marked plus), 2 liquor stores (triangle), 3 hotel restaurants (square), 3 cafes (rhombus) and 3 petrol stations (cross). The collected data were further organized into the following table (Table 1).

The average detected procurement price is calculated as the average between two maximum values: (a) is: $(a)_{av} = (1600+300) / 2 = 950$ (UAH); the average selling price: $(b)_{av} = (16+60) / 2 = 38$ (UAH).

This data allows us to construct NS Martix (Figure 2):

This way, we can group distribution channels and characterize them with clear visual guidance. **Grocery stores** and **liquor stores** are totally in the Fair economy segment. This indicates that entities that belong to these distribution channels do not position coffee drinks as the valuable product of their main interest. However, they prefer to derive fair profit, providing consumers with product at the fair price. Grocery stores and

liquor stores are to be approached with low-priced products.

Table 1

Complete field visit results values

№	(a)	(b)	channel
1	400	20	grocery store
2	500	18	grocery store
3	700	20	grocery store
4	300	20	grocery store
5	350	25	grocery store
6	350	16	grocery store
7	600	20	liquor store
8	750	20	liquor store
№	(a)	(b)	channel
9	900	50	hotel restaurant
10	1600	60	hotel restaurant
11	1350	60	hotel restaurant
12	700	35	café
13	650	35	café
14	900	45	café
15	1600	45	petrol station
16	1200	50	petrol station
17	950	60	petrol station

Source: authors' own work

Cafes are in the segment of Robbers. It shows that coffee drinks are their main product and source of profit. Cafes tend to purchase low-priced products and put much higher markup on the served drinks compared to those of grocery and liquor stores. These businesses offer more than just a cup of coffee at their point of consumption, embodying added value in something else, for example, ambience, interior, and service. It makes us think about augmented trade offers for such clients. As the producer of coffee, we may include POS materials and other services to our trade offer after a deeper research. It may help engage both potential clients and their customers.

Petrol stations and **hotel restaurants** are almost completely in the Fair top. It means that they tend to purchase high-class product to match consumer desires. However, neither coffee is their primary product, nor they use it as an image element solely. Certainly, petrol stations and hotel restaurants are perfect buyers of premium segment coffee beans.

Interestingly enough, none of the channels have got into the Donators sector. It makes us leave behind the idea that coffee is exclusively an image-supporting product and can be referred to as an element of expenditures (Figure 3).
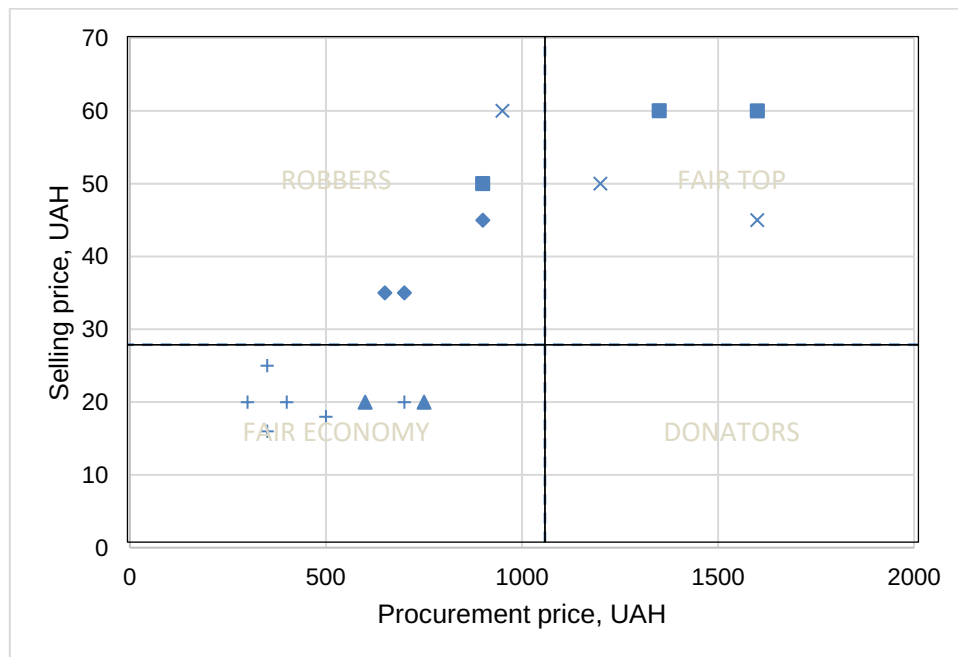

Figure 2. NS Matrix based on the field visit table
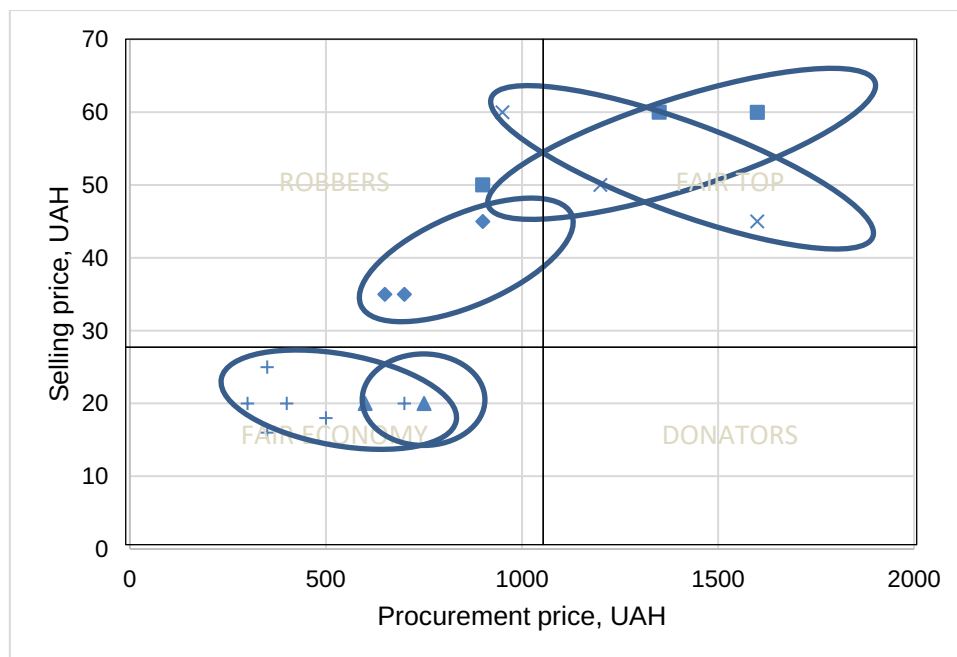
Source: authors' own work

Figure 3. NS Matrix with circled distribution channels segments
Source: authors' own work

Conclusion. NS Matrix model can serve as a powerful instrument that contributes to better understanding of distribution channels and different types of points of consumption. Furthermore, it enables us to come up with insights regarding price positioning and the ideas on perfect trade offers for different clients.

NS Matrix is the model that also facilitates hypothesizing about consumer behavior in different places of consumption and highlights the way of further research. It can be applied in numerous markets and situations which makes it a flexible and quick tool for market analysis.

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