

SCIENTIFIC AND METHODOLOGICAL FOUNDATIONS FOR IDENTIFYING THE KEY DRIVERS OF THE MARKETING ENVIRONMENT THAT AFFECT THE SUSTAINABILITY OF THE COMPANY'S BUSINESS MODEL DURING MARKETING STRESS TESTING

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Abstract. In the dynamic technological external environment, the company should understand their own key business model drivers. Traditional instruments for analyzing external factors that influence the organization (SWOT-analysis, Pestel analysis, competitive analysis) in modern conditions are not effective enough, requiring a systemic, integrated methodology for identifying key marketing environment drivers affecting the company's business model resistance. Marketing stress testing is a new tool for a full-fledged assessment of business resistance factors.

The study aims to develop a marketing stress testing method for identifying key marketing environment drivers affecting the company's business model resistance.

In work based on the analysis, the synthesis of scientific and literary sources is systematized by the techniques and approaches to identifying the marketing environment drivers. On the basis of common, private, formalized methods, a stress testing methodology has been developed for determining the marketing environment drivers and their impact on the stability of the company's business model. The concept of stress testing as a new approach to a detailed sequential procedure for systematizing a business model, taking into account the company's marketing external and internal environment, is determined. As part of the marketing stress testing, a methodology for definitions of key environmental drivers was developed for the basis of the procedure for conducting a survey of experts. A method of situational analysis was developed on the basis of procedures for formalizing marketing factors.

The work is provided with a comprehensive methodology for marketing stress testing, which systemically evaluates the driver's marketing environment drivers affecting its durability.

The study's theoretical significance is to improve the stress testing methodology, which is developed using a systematic approach to ensuring the stability of companies, includes the most effective methods for analyzing marketing business factors.

The practical value of the study is to submit a detailed step-by-step guide on the stress testing methodology of marketing among the company, which takes into account the opinion of the personnel as the main component of stability.

Keywords: business model, marketing factors, implementation, situational analysis.

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INTRODUCTION

The challenges associated with the marketing factors among the functioning of the enterprise, such as global epidemics (COVID-19), the release of new technologies and the rapid change in marketing environment of enterprises rapidly leads to the fact that companies are increasingly needing tools to predict and prevent the influence of negative factors in the conditions of VUCA environments. Such tools for determining future risks and bottlenecks of the company that are most sensitive to change the market environment has become a new approach – marketing stress testing (MST) (Musatova & Zhelikhovsky, 2015). To solve the trend prediction problems, formalized methods are used (method of trend extrapolation; methods of correlation and regression analyzes; methods of mathematical modeling); Expert methods of forecasting: (method of scripting; interview method; method of analytical reports); Collective methods (method of questionnaire surveys; method of "commissions"; the method of "brain attacks"; the method "Delphi") (Delphi method and its application, n.d.). To allocate key factors affecting the enterprise, as well as determining the boundaries of their influence in the future, a collective method for predicting the boundaries of the change in factors is selected. The study of the approach of expert assessment to forecasting was carried out by scientists as (Porter, 2016; Zozul'ov & Menkova, 2019a; Zozul'ov, Menkova, 2019b). Kornilova & Palet (2010), Abdurakhamonov (2020), Musatova & Zhelikhovsky (2015), Armstrong & Brodie (n.d.). In their works, they described in detail the use of the method of expert estimates to solve forecasting problems, in particular Delphi method. Thus, it was decided to use an expert assessment to determine key market drivers.

Methods for analyzing and identifying key market drivers are designed and described in the studies of Kotler & Keller

(2018), McDonald (2007), Drucker (2015), Porter (2016). Nevertheless, modern dynamic conditions of the external environment requires the development of a scientific and methodological toolkit for determining the marketing environment drivers, combining qualitative and quantitative methods for determining the level of stability of a business model, risks and developing recommendations for their reduction.

Problem formulation

Formalization and descriptions of the procedure for conducting expert assessment methods for information on key market drivers for developing a marketing stress testing method.

Methodology

The theoretical and methodological basis of the study was scientific works that consider the methods for determining the factors of the external and internal marketing environment of the company. General scientific and special methods of research of economic theory were a methodological basis for work. The methodology for the work is based on the method of scientific knowledge and synthesis, abstract logical methods of justifying the tasks, summing up and summarizing the results. In the process of developing methods for determining factors, researchers used methods of comparative analysis and synthesis to identify the weak and strengths of each method; For visual illustration, graphic methods are used by constructing diagrams in relation to the developed technique.

RESULTS

An analysis of scientific and literary sources made it possible to identify and systematize existing approaches to identifying marketing environment drivers:

1. Common to which SWOT analysis includes (Kotler & Keller, 2018, p. 66), as a tool for strategic

management, which are aimed primarily on the external, internal factors of influence on the company's strategy and activity, the main disadvantage of which is the generalization of external threats and opportunities without taking into account the specifics of the company's functioning;

2. Private techniques, such as QUEST-analysis, STEP analysis, Pestel analysis for operational scanning of the external environment on the basis of indicators of economic, political, social, environmental factors, the main disadvantage of which is the lack of estimating possible relations of factors and events of the medium, a detailed analysis of only external factors of the company's marketing environment;
3. According to the degree of formalizations (formal / informal).
4. According to methods: matrix, economic and mathematical, methods of expert surveys.

Marketing stress testing today is a new direction in predicting the sustainability of

the enterprise in a turbulent environment. Due to the specifics of the approach, as well as the novelty of the direction, which was not previously analyzed by scientists, the methodology of expert assessment requires change and adaptation to the specifics of marketing stress testing. The basis of the approach was the Delphi method. For the analysis of expert assessments, the Delphi method was used for a number of reasons. The first reason is the Delphi method is applicable to the assessment and development of the forecast. The method allows to improve the group approach, in which the opinions of individual experts take into account and at the same time the anonymity of opinions and arguments in their protection are preserved. As part of the development of the concept of marketing stress testing, the business model of the enterprise identified the following components.

The concept of marketing stress testing is a new approach to solving above certain tasks has its own methodology, which is formalized and presented in Figure 1 (structural and logical scheme for marketing stress testing).

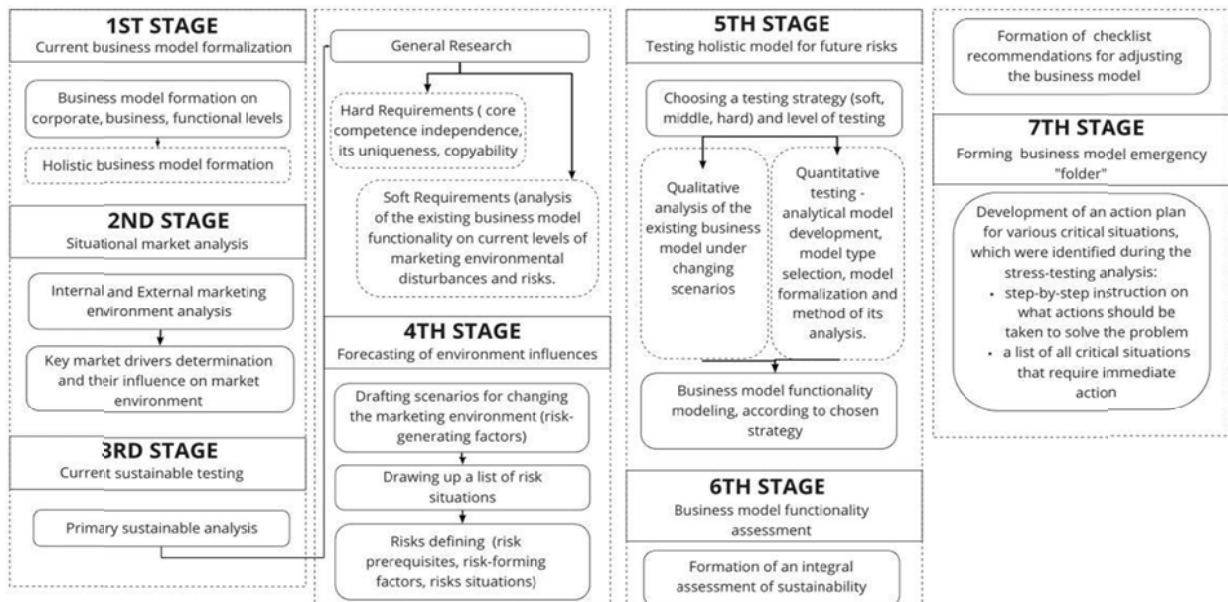


Figure 1. Structural and logical scheme for marketing stress testing Armstrong Brodie (n.d.)

Marketing stress testing is a process that implies a detailed sequential

procedure, providing for the formalization of a hierarchical system of business models

of the enterprise, conducting a situational analysis in order to identify possible initiations in the company's environment and the possible boundaries of such excitations. The formation of a system of indicators determine the stability of the business model of the enterprise, carrying out modeling to determine the scenario of the development of events and the trajectory of development of companies, allocating weak places in the system of business models of the enterprise and the limits of its functionality, the formation of proposals Armstrong, Brodie (n.d.).

The structural and logical scheme for conducting marketing stress testing consists of seven stages:

Stage 1 – The formation of a flow business model of the enterprise was presented in the previous works of the authors Armstrong, Brodie (n.d.);

Stage 2 – Situation Analysis and Definition of Key Market Drivers;

Stage 3 – Testing on the current sustainability and determination of narrow places of the company;

Stage 4 – Creating Scenarios of the Company's Market Environment;

Stage 5 – Testing the holistic model of the enterprise for future risks;

Stage 6 – Assessment of the functionality of the model;

Stage 7 – Forming a red project folder. Within the framework of this work, the structural-logical block "Stage 2: Key determinants Market drivers and their influence on key competencies core (KCC) are considered in detail. Stage 2 MST Methodologies consists of two components: situational analysis and determination of market drivers. In this paper, the procedure will be described in detail. Definition of market drivers and choosing the most defining factors of influence on KCC.

Marketing stress testing is a procedure that allows predicting the

stability of the company in a turbulent environment for a certain period. This methodology using for forecasting the change in factors and the determination of the significance of the influence of these factors on the company's KCC, which in turn will determine whether the company will be resistant to the change in these factors. The boundaries of changes in these factors play a key role in the process of forming the risks of the enterprise. The correct definition of these borders is the main component in the framework of the implementation of marketing stress testing.

To solve the task of determining key market drivers during marketing stress testing, a procedure for conducting a survey of experts was developed, which is presented in Figure 2.

Stage 1. Formalization of market environment factors. The first stage of obtaining information is situational analysis. As part of the situational analysis, an analysis of the internal and external environment of the enterprise carried out. All information received during the market research formalized and given to a unified system for determining indicators. The procedure for formalizing marketing media factors presented in Figure 3.

Analysis of the internal environment of the enterprise consists of an analysis of the internal environment of the enterprise, the analysis of business processes of the enterprise, analysis of the company's products including 4p mix, the formation of key competencies of the enterprise.

Step 2. Analysis of the marketing medium includes analysis of mega and macro factors, secondary studies, forming a matrix of risks and capabilities, analysis of the macro and microenvironment, conducting secondary and primary research, competitive analysis of the 5th port forces, forming a matrix of possibilities and risks.

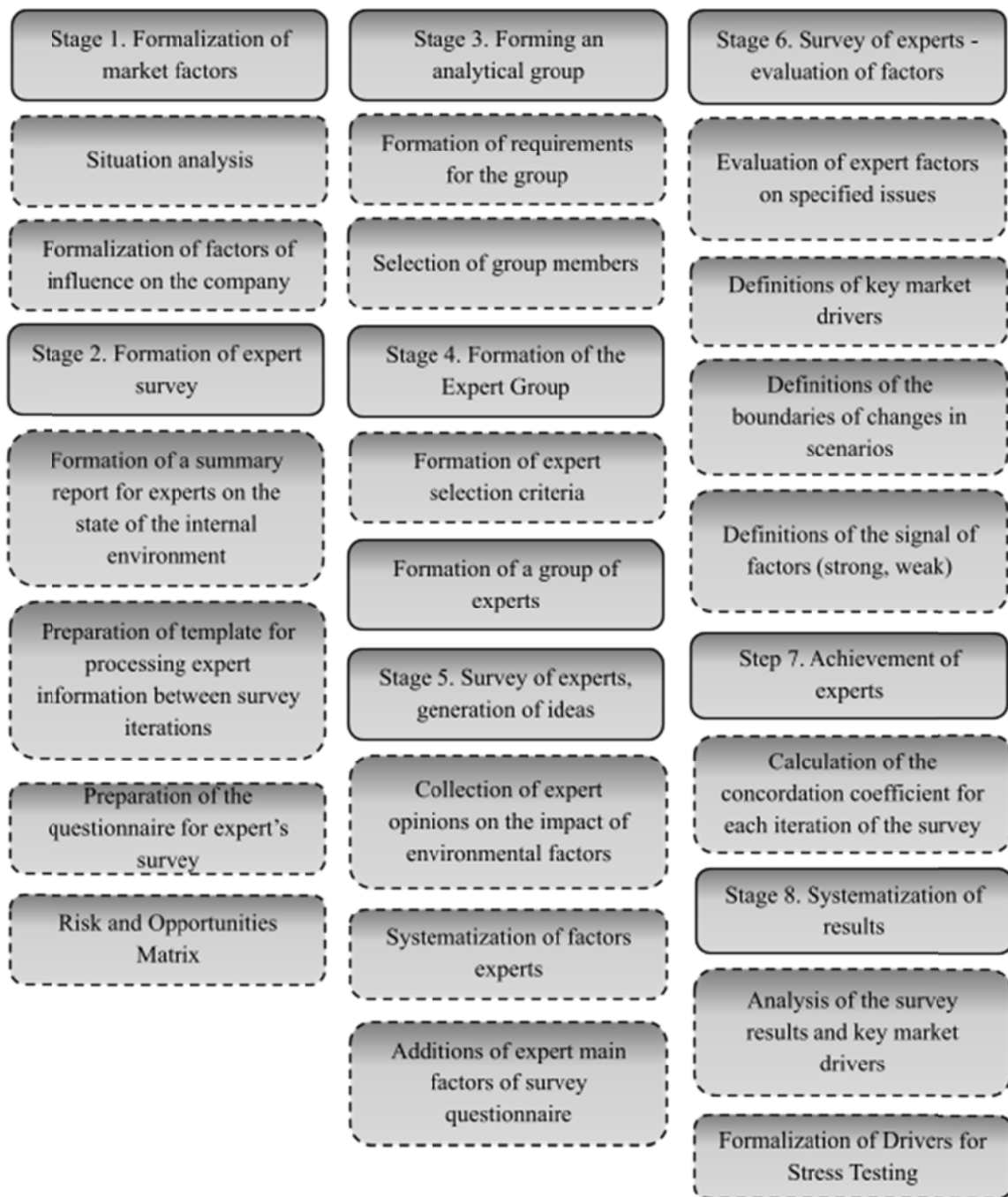


Figure 2. Method of defining key market drivers (developed by author)

Stage 3. The formation of the core of the company's competence includes the formation of criteria for the selection of the elements of the company's competence, the formation of the nucleus itself. Step 4. The formalization of the KCC elements includes the systematization of the KCC elements based on the template for experts. Step 6. Formalization of the list of marketing factors includes systematization of factors based on the template for the evaluation

procedure by experts.

Stage 2. Formation of expert survey. As a result of a situational analysis and formalization of results, a brief report is being made for experts, according to the assessment of the internal environment of the enterprise. The provision of information to experts occurs consistently so that experts can generate their ideas, and not evaluate only in the framework of the already proposed ideas.

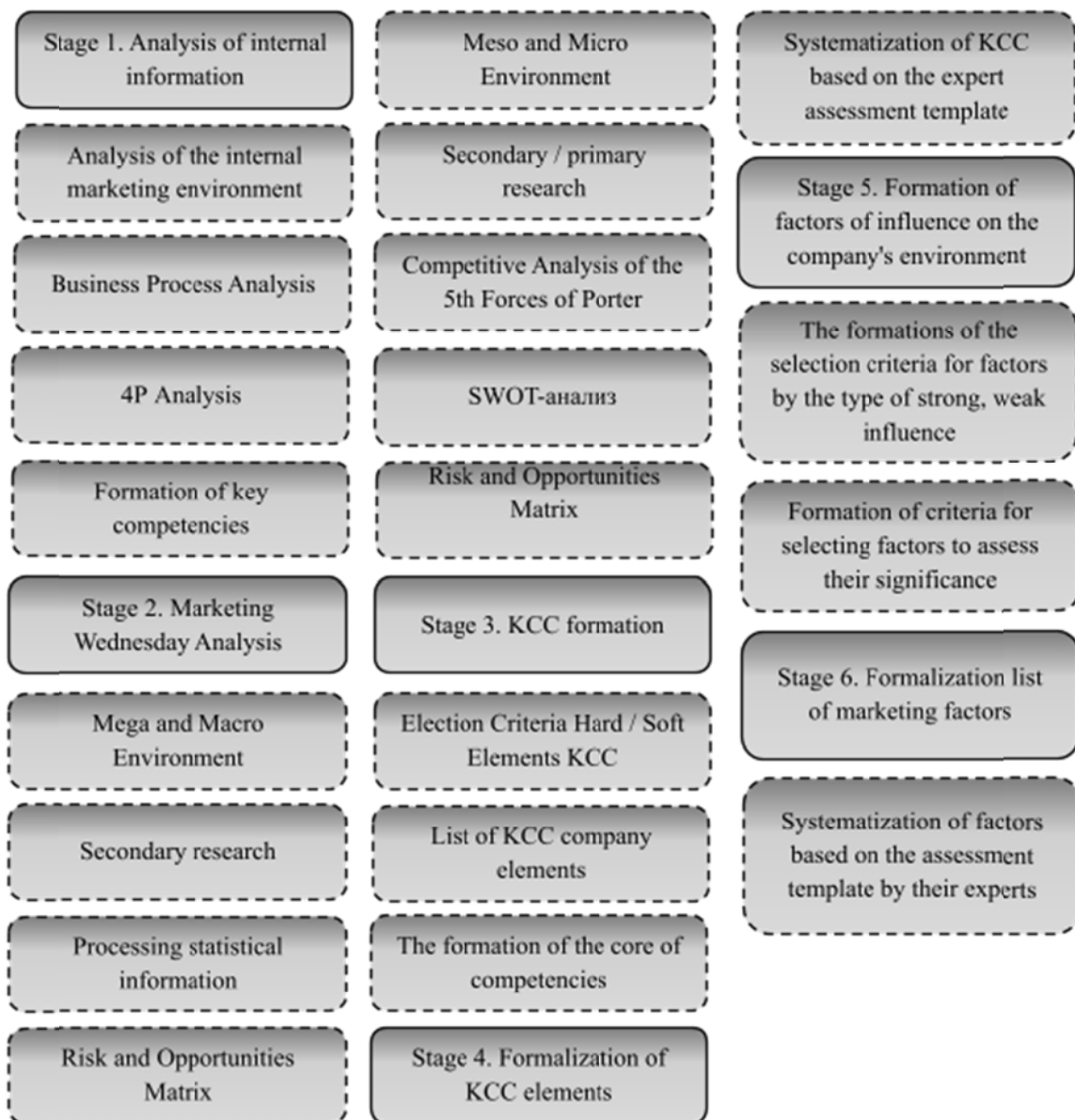


Figure 3. Formalization of market environment factors (developed by author)

The procedure for providing materials to experts. At the first stage, experts are acquainted with Table 4, on KCC. After that, the task of experts to generate the factors that they consider the most significant to influence on the company. After iteration with the generations of ideas, experts provided to Table 8 in which is present as factors that previously analyzed during marketing analysis and those that were generated by experts.

Preparation of a questionnaire for survey experts. As part of the expert

assessment, it is necessary to solve the tasks that subsequently allowed the procedure for marketing stress testing effectively. Tasks that should solved using expert assessment are presented in Figure 4.

Expert assessment solves several tasks during marketing stress testing:

1) Forecast of the boundaries of changing factors. It helps to determine the likely borders of changing certain factors on the market for the better or worse.

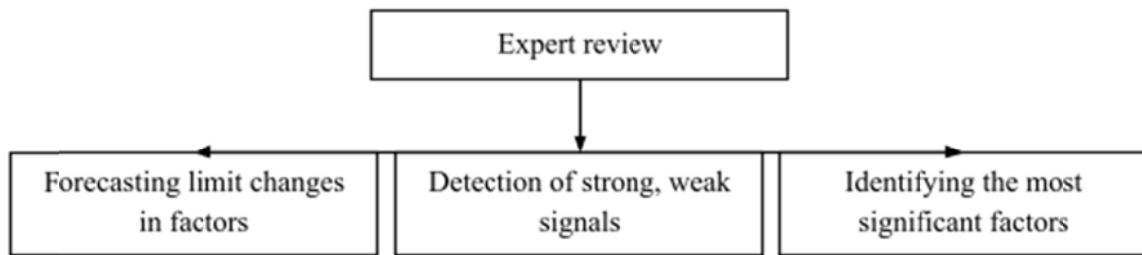


Figure 4. Tasks that the expert assessment in the framework of stress testing

2) Detection of strong / weak market signals. Determination of the direct and indirect influence of market factors on the company.

3) Identify the most significant factors in the market. Experts determine the weight of each factor and may subsequently determine the most important evaluation in the context of changing the boundaries of these factors.

The method of determining weak signals carried out in the Quest analysis format, to determine the likelihood of an occurrence of one or another event after which the cross-affected matrix is formed Porter (2016).

Stage 3. Formation of an analytical group.

The formation of an analytical group uses a classic approach to the use of the Delphi method Delphi method and its application. (n.d.), with the presence of two control groups: an expert group and analytical. Analytical group prepares patterns and surveys, and conducts independent calculations for all templates that determine the level of significance. After that, with each iteration, working with experts update the data and calculate the concordance coefficient.

Stage 4. Formation of an expert group. Selection of experts. A certain number of experts selected that form a group. The group should not exceed more than 10 people to effectively calculate the test results.

Stage 5. Survey of experts and

generation of ideas. Before providing experts with information about the already studied market and key factors affecting the company, experts are provided only about the core of the competence and its key elements. At this stage, experts should conduct an independent choice of factors without a preliminary assessment of these factors. Systematization of factors after receiving data on the factors that experts prepared, the factors were added to the list, which were not yet appreciated by experts and form a single list, which is already given to the evaluation of experts.

Stage 6. Expert's survey and evaluation of factors. Conducting expert survey procedures. A detailed questionnaire procedure consists of certain iterations at each stage of which information processed, by analyzing and summarizing the results of the survey of experts.

Generalization and receipt of alternative ideas. After the first iteration, analysts summarize the opinions on each of the expert group factors and give familiar with alternative opinions and arguments. After that, iterations held until the experts take into account alternative opinions, arguments and will not come to a single agreement.

Stage 7. Achieving consistency by experts. The formation of a uniform opinion on all factors that makes it possible to get ready-made results on the table and continue the procedure of stress testing.

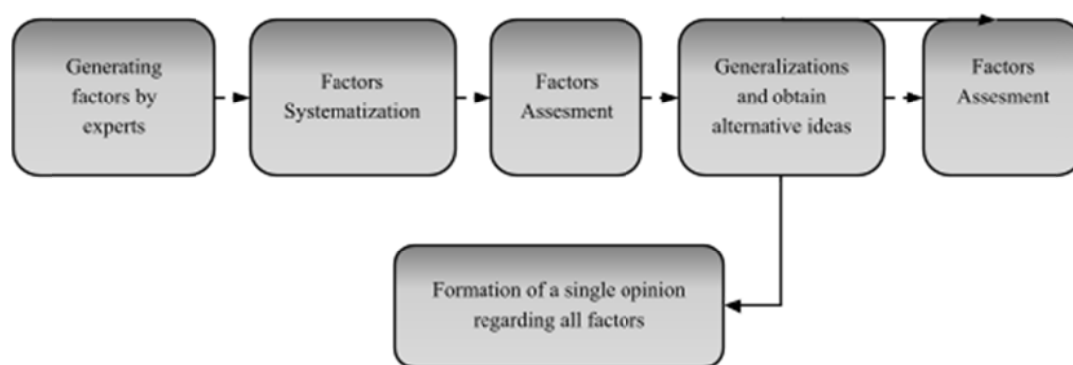


Figure 5. Information processing algorithm by experts

Stage 8. Systematization of results. After conducting a survey, all information on the results is analyzed and is used in the further preparation of the model in which the CKF and ECP are taken into account, which will later be tested for stability, and the borders of the CKF change will determine the sustainability of the company's business model in the market.

CONCLUSION

As a result of the work, general and private, formalized methods for analyzing the company's marketing environment were analyzed to determine the most effective methods for developing stress testing techniques. Based on common, private, formalized methods, a stress testing methodology has been developed

for determining the marketing environment drivers and its impact on the stability of the company's business model. The concept of stress testing as a new approach to a detailed sequential procedure for systematizing a business model, taking into account the marketing external and internal environment of the company, is determined. As part of the marketing stress testing, a methodology for definitions of key environmental drivers was developed for the basis of the procedure for conducting a survey of experts. The method of situational analysis was developed based on procedures for formalizing marketing environmental factors.

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