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СЦЕНАРНЕ ПЛАНУВАННЯ КЛІЄНТООРІЄНТОВАНОСТІ ПІДПРИЄМСТВА

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Анотація. Клієнтоорієнтованість виступає запорукою міцної конкурентної позиції підприємства. Особливо актуальним для газорозподільних підприємств дане поняття стало в останні роки (через запровадження конкуренції на ринку газу). Такі зміни не тільки змусили підприємства змінити свій підхід до функціонування, але й продемонстрували, що навіть монопольні ринки, які звикли до повної стабільності, сьогодні зазнаватимуть значних перетворень та непрогнозованих змін. Саме сценарне планування покликане для врегулювання та прогнозу зовнішньої нестабільності. Проведено аналіз розвитку клієнтоорієнтованості газорозподільного підприємства, обґрунтування доцільності впровадження заходів для підвищення рівня його клієнтоорієнтованості.
У даній науковій роботі сформовано визначення «клієнтоорієнтованість», «рівень клієнтоорієнтованості»; проаналізовано сучасні методи оцінювання рівня клієнтоорієнтованості; дослідження особливості сценарного планування як однієї з основних технологій стратегічного управління; проаналізовано та оцінено рівень клієнтоорієнтованості АТ «Івано-Франківськгаз», розроблено сценарії розвитку клієнтоорієнтованості товариства, досліджено ефективність кожної із запропонованих альтернатив та виокремлено сценарій впровадження сучасних методів навчання в товаристві як найбільш ймовірну та ефективну альтернативу для розвитку клієнтоорієнтованості АТ «Івано-Франківськгаз». На підставі проведених наукових досліджень та опублікованих наукових робіт було виокремлено клієнтоорієнтованість, як один з основних шляхів забезпечення конкурентоспроможності «Івано-Франківськгаз».

Для реалізації зазначених завдань використано методи аналізу та синтезу, метод індексу NPS, метод дерева рішень, аналітичний та графічний методи, метод лінійного прогнозування та метод наукового узагальнення.

Наукова новизна результатів полягають в такому:
- запропоновано використання методів сценарного планування для вибору та реалізації шляхів забезпечення клієнтоорієнтованості газорозподільних підприємств.
- Практична цінність одержаних результатів набула подальшого розвитку у:
  - оцінювання клієнтоорієнтованості АТ «Івано-Франківськгаз» за допомогою індексу NPS розрахованого за результатами анкетування;
  - розробки сценаріїв розвитку клієнтоорієнтованості для АТ «Івано-Франківськгаз»;
  - застосуванні методу «дерева рішень» для формування сценаріїв розвитку клієнтоорієнтованості АТ «Івано-Франківськгаз».

Ключові слова: клієнтоорієнтованість, сценарне планування, рівень клієнтоорієнтованості підприємства, індекс NPS, розробка сценаріїв, лінійний прогноз, графічний метод, опитування респондентів, газорозподільне підприємство.

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SCENARIO PLANNING OF THE CUSTOMER ORIENTATION OF THE COMPANY

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Abstract. Customer orientation is a key factor for strong competitive position of the enterprise. This notion has become particularly relevant for gas utilities in recent years (due to the introduction of competition in the gas market). These changes not only forced enterprises to change their approach to operations but also demonstrated that even monopoly markets, which are used to complete stability, today will require significant reorganization and unpredictable changes. Scenario planning itself is crucial for the prevention and prediction of external instability.
An analysis of the development of customer orientation of the gas distribution company, substantiation of feasibility of implementation of measures for increasing of level of its customer orientation.

This scientific work formulates the definition of "customer orientation", analyzes the current methods of assessing the level of client orientation; examination of the features of scenario planning as one of the basic technologies of strategic management; analyzed and evaluated the level of client orientation of «Ivano-Frankivskgas» joint-stock company, create scenarios of development of the company's customer orientation, the efficiency of each of the proposed alternatives is investigated and the scenario of implementation of modern methods of training in the company as the most probable and effective alternative for the development of customer orientation of «Ivano-Frankivskgas» is outlined. On the basis of the conducted scientific researches and published scientific works the customer orientation, as one of the main ways for providing competitiveness of "Ivano-Frankivskgas" was determined.

For realization of the mentioned tasks analysis and synthesis methods, NPS index method, decision trees method, analytical and graphical methods, line forecasting method and method of scientific generalization were used.

The scientific novelty of the results are as follows:
- Application of methods of scenario planning for choosing and realization of ways of providing customer orientation of gas supplying enterprises is suggested.
- assessment of customer orientation of «Ivano-Frankivskgas» by means of the index NPS calculated based on the results of the questionnaire;
- development of scenarios of customer orientation development for «Ivano-Frankivskgas»;
- application of «decision trees» method for forming scenarios of customer orientation development of Ivano-Frankivskgas.

Key words: customer orientation, scenario planning, level of customer orientation of the enterprise, NPS index, scenario development, linear regression forecast, graph method, respondent's survey, gas supply company.

Introduction. The instability of the natural gas market and the significant changes that have occurred over the past few years, force gas utilities to take a new look at their customers. The old relations of the company as a structure that has absolute power in this market and the client as a market entity, that has no rights to choose are changing. This is a completely new type of relationship for this type of market - partnership. Now the customer, the client has not only become a subject of the market, a partner of the company, but also the main ornamenter of the company in the external environment, the consumers of the client define the direction of activity of the modern company. Customer orientation has become the main and unanimous approach to achieving high competitive positions and efficiency of the company's activity.

These changes not only forced enterprises to change their approach to operations but also demonstrated that even monopoly markets, which are used to complete stability, today will require significant reorganization and unpredictable changes. Scenario planning itself is crucial for the prevention and prediction of external instability.

Despite the fact that both the customer orientation and scenario planning are the subject of a significant number of scientific works of domestic and foreign scientists, including: R. Deshpande, J. Farmer, J. F. K., and others, which have been published in the Internet. Deshpande, J. Farley, J.F. Webster, Evert S., Reichheld F., R. Ackoff, Prodan I.O., Riznik J.I., and others, none of the studies have revealed the potential of customer orientation due to the scenario approach.

Problem statement. The aim of research is analysis of development of customer orientation of gas supplying enterprise, substantiation of feasibility of implementation of measures for increasing of level of its customer orientation.
The objectives of the study are: definition of the notion of «customer orientation», analysis of modern methods of assessment of customer orientation level; study of peculiarities of scenario planning; analysis and evaluation of customer orientation level of «Ivano-Frankivskgaz», search for scenarios of development of customer orientation of the company.

For realization of the mentioned tasks analysis and synthesis methods, NPS index method, decision trees method, analytical and graphical methods, line forecasting method and method of scientific generalization were used.

**Results.** Today's scientists have different interpretations of the concept of customer orientation. For example, such scientists as R. Deshpande, J. Farley and J.F. Webster assert that customer orientation is a set of beliefs that prioritize the interests of the customer, while taking into account the interests of the company (owners, employees) and contributing to the development of the company. [1] The American Marketing Association has a similar opinion: «Customer focus is an approach to selling in which the customer's needs and interests are of primary importance» [2].

Another group of scientists - J. W. Farley, F. E. Webster and I. Mann, considering customer orientation as a strategy or a way of doing business, state that it is an initiative of positive emotions in existing customers, which leads to repeated purchases and obtaining new customers on the basis of recommendations of existing customers. [3]

Evert S. asserts that customer orientation is the ability of an enterprise to identify the potential consumers needs and to satisfy them. [4, c. 309]

There are several groups of views on the definition of customer orientation in scientific literature: [4, p. 309-310]

- As taking into account the interests of consumers for the first priority, assessment of customer loyalty;
- As a type of strategic management of the enterprise, the concept of doing business;
- As one of the tools of management, the characteristic of business.

Customer-oriented approach - the concept of business conduct, the main criterion for which is the satisfaction of customer needs, increasing its level of loyalty and achieving joint goals of the company and the customer.

Typically, this approach brings some benefits both to the client (customer), and to the company itself. Let's describe the main benefits for the customer: [5, p. 166].

1. Financial - obtaining bonuses, personal discounts, participation in promotions and gift drawings. [5, c. 166]

2. Psychological - the feeling of specialness and emotional attachment to the company.

3. Social - establishment of new partnerships, friendly relations with employees, an individual approach during the service.

The main benefits of the company are - increasing the level of competitiveness, obtaining additional profits, creating a positive reputation and establishing partnerships with customers, which in turn allows to reduce costs associated with the proliferation of customers and their constant search. [5, c. 166]

Based on the studied definitions, we can suggest the following formulation of customer orientation - the concept of business activity is aimed at satisfying the home interests of its real potential customers in order to establish a loyal, partnership relationship with the aim of securing the company's benefits.

Customer orientation level is the level and quality of implementation of customer focus approach by the enterprise in its main spheres of activity.

To determine the level of development of the Customer orientation approach of the enterprise the following indicators are tested, which can actually be divided into three groups: [6, p.6]

- indicators that test the customer orientation of the personnel;
- indicators showing whether the company is client-oriented by means of client assessment;
- indicators that test customer satisfaction with the condition of the company.

Methods of determining the level of clienteliness of the enterprise:

1. ALADIS method (Attentive Listening & Accounting for the Degree of Influence on Satisfaction) - respectful listening and accounting for the degree of influence on satisfaction. [7, c.27]

   The method is based on the client's interview, during which he or she answers the questions related to the main shortcomings and problems of the company that the client has previously encountered. At the same time, giving an assessment on a 5-point evaluation scale about the extent of their influence on his/her attitude towards the company. [7, c.27]

2. Mystery Shopping or Real Contacts Audit (RCA) methodology. Mystery Shopping (for offline channels) or RCA (for online channels) calculates the index of customer service (which in turn indicates the level of customer satisfaction). This methodology helps to establish compliance with customer service standards and assess the completeness and reliability of the information provided by the client. [7, c.25]

   Such methodology allows to examine both offline channel and online channel of interaction with customers, as well as to determine the level of service of both the company and an individual employee.

3. NPS - Net Promoter Score (Net Promoter Index). The NPS methodology states that the level of customer loyalty is interdependent with his readiness to recommend the company to other customers (colleagues, relatives, friends, etc.). [9, c. 198].

   The methodology is based on an interview in which the client is asked two questions. The main question is: «On a scale from 0 to 10, how likely would you be to recommend this company's product or service to your friends», where 0 means «I would definitely not recommend it»? Based on these ratings, customers are divided into three groups: [4, p.311; 7, p. 26].

   1. «Promoters» - rating of 9-10 - have the highest level of loyalty, they will be eager to recommend your company to others and support it even during the most difficult times.

   2. «Passive clients» - a score of 7-8 – «passive clients», they are neutral about the company and are reluctant to recommend it to anybody else, they do not feel dissatisfaction, and do not see the positive sides of the company. They will easily switch to a competitor. [4, c.311]

   3. «Detractors» - score 0 - 6 - the most dissatisfied customers not only do not recommend the company to others, but also create a negative image of it.

   The NPS index is calculated as the difference between the percentage ratio of «promoters» and «critics» and shows the level of customer loyalty. The value of the index varies from +100 to -100. If the NPS index is positive, the loyalty level is above average. The value of the index of +50 is considered excellent, but it is difficult for the company to achieve it. [4, c.311]

   Today scenario planning is one of the most effective tools of modern management and strategic analysis. Scenario approach consists in conducting a scenario study, in the course of which there are several alternative pictures of the future or scenarios.

   Herman Kahn, who is considered to be the father of scenario planning, asserts that the scenario is «a set of hypothetical events that occur in the future, created to clarify a possible line of causal and consequential events, as well as the points of their solutions». [10, c.23].

   Scenario planning is a tool of strategic management based on the examination and analysis of several most possible alternatives for the development of the future, and the formulation of actions of the enterprise corresponding to each of the alternatives.

   The methods of developing scenarios include:
1. The method of creating a system of diagrams. This method is based on the use of diagram systems in which the main goals of the enterprise are stated, future scenarios are created for each of the subsystems and the enterprise strategy is formed on this basis.

2. The method of critical fields. Scenarios are formed on the basis of the structure of the enterprise. When developing scenarios, the main critical points of decision-making that can change the structure of the enterprise are investigated. Most often the critical fields are shareholders' meetings, meetings of directors or the supervisory board, etc. In this case scenarios predict possible actions of shareholders and their influence on the enterprise.

3. The Eta method. It is used when working out scenarios of possible events taking into account the domino effect. ETA allows you to indicate whether or not the safety devices, which react to the occurrence of the next ignition event, have worked. ETA allows for a high degree of complexity of the scenarios aimed at identifying causes and errors.

4. The method of «logics of possible development». Scenarios are based on the establishment and analysis of factors of the external and internal environment that influence the performance of the enterprise.

5. Decision tree method. First of all, analysis of activity of the enterprise and environment is performed, on the basis of the received results "decision tree" is created which is formed on the basis of nodes (main, critical events) and blocks linking these events among themselves.

To determine the most effective result calculate the probability of one or another scenario, as well as its NPV.

The article [11] analyzed the conditions and necessity of training the personnel of «Ivano-Frankivskgas» and examined the main hard and soft skills of the employees. It was found that one of the main skills of the staff is the skills of client-oriented approach. According to the research we can understand that customer orientation is the basic element of increase of competitive ability of «Ivano-Frankivskgas».

The analysis of the level of development of customer orientation of «Ivano-Frankivskgas» was carried out by means of NPS index calculated according to the results of the questionnaire, conducted among «Ivano-Frankivskgas» clients of different age groups (the questionnaire is submitted according to the reference [12]).

According to the survey, «promoters» occupy 20%; «neutrals» - 20%; «critics» - 60%.

$$\text{NPS } = 20 - 60 = -40\%$$

Since the value of the index is significant, we can conclude that the company has a low level of service. Among the main reasons for the result, respondents identified: price level, quality and promptness of delivery, quality of advice and reputation of the company.

Thus, the very areas identified by the respondents require improvement and can significantly increase the level of competitiveness of the company due to the development of client orientation.

Based on the obtained results developed scenarios of increasing the level of competitiveness of «Ivano-Frankivsk gas».

Identified problem - low level of customer orientation, caused by problems of development of the personnel management system and general state of the company.

On the basis of the identified problems we formulate three scenarios of the company's customer orientation improvement (table 1).
### Table 1

<table>
<thead>
<tr>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Scenario 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conducting a series of action and case studies</td>
<td>Carrying out capital repairs of the gas transmission network by obtaining additional funds from the state investment program</td>
<td>Development of a plan for restructuring receivables</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Probability: 0.55</th>
<th>Probability: 0.75</th>
<th>Probability: 0.65</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective:</strong> - for the staff to acquire new service skills; - enhancement of professionalism; - increasing the number of positive feedback from the customers;</td>
<td><strong>Objective:</strong> - improving the quality of the gas transportation system; - improvement of customer satisfaction and safety level; - acquisition of 11 million hryvnias of state investments for maintenance of the network; - annual repair of 50 km of the network.</td>
<td><strong>Objective:</strong> - restructuring of 10.50% of accounts receivable and bringing them to UAH 145,575.5 thousand; - informing consumers of the possibility of restructuring their accounts receivable.</td>
</tr>
</tbody>
</table>

| Specifics: The training is initially best suited for employees in the area of supply (competitive area of activity) the number of employees is 75 people. The cost of training is calculated on a hypothetical basis, According to information available on the Internet, the cost of these types of training per person is about 1 thousand UAH. | Specifics: - The safety and condition of the network is one of the most important for the customers; -The gas transportation network of Precarpathia is one of the oldest in Ukraine; - Substantiation of the necessity of state investments; - Elaboration of the Capital Repair Plan for 5 years; - Covering 50% of expenses from the state investment program. | Specifics: As of June 2021, the receivables of Ivano-Frankivskgas will amount to UAH 611,413 million. Development of a detailed restructuring plan and notification of consumers about this possibility. The debt is restructured for up to 12 months, depending on the amount of debt and the level of the client's cumulative income. Normally, the debt must be repaid in equal installments, and the amount of the first installment is 30 to 50 cents. |

| Benefits: 1. Increase professionalism of staff (75 employees) of the sphere of supply. 2. Introduction of modern approaches to training. 3. Responding to emergency situations. 4. Increasing the level of service and advisory services. 5. Increased reliability of the information provided to | Benefits: 1. Organization of measures to improve the state of the networks. 2. Reducing costs of maintenance of the gas transmission network, 3. Reduction of natural gas consumption. 4. Reducing the company to the required amount of work - 50 kilometers. 5. Acquisition of 11 million | Benefits: 1. Restructuring of 10.50% of accounts receivable, which amounts to UAH 17,079 million; 2. Increase in the turnover ratio of accounts receivable. 3. Withdrawal of additional receivables, 4. Reducing costs of court procedures associated with the return of customers' charges. |
customers.
6. Speeding up customer service hours.
7. Increased level of customer loyalty.

**Risks:**
- Incurring training costs = 75 thousand UAH. (cost of action-training) + 75 thousand UAH (cost of trainings). (cost of case-training) = 150 thousand UAH

5. Increased level of customer service and their trust.
6. Improving the level of safety.
7. Increase in the level of customer loyalty.

**Risks:**
- Non-receipt of additional investments;
- incurrance of significant costs 11.05 million UAH.
- Increase in the size of the company's balance.

**Risks:**
- Lack of consumer demand among consumers;
- increase in accounts receivable;
- loss of UAH 7.660 mln.

Formed on the basis of [11], [13], [14].

Evaluation of the probability of the occurrence of the suggested scenarios was made on the basis of PEST-analysis data.

On the basis of the data stated in Table 3.1 we shall form the decision tree (Fig. 1)

![Decision Tree](image)

**Fig. 1.** Decision Tree of «Ivano-Frankivskgas»
(Autors’ development)

Since the results and specifics of implementation of each scenario were analyzed in paragraph 2, we calculate the economic efficiency of the proposed scenarios and choose the most effective and credible scenario for implementation.

**Table 2**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Scenario №1</th>
<th>Scenario №2</th>
<th>Scenario №3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probability</td>
<td>0,55</td>
<td>0,75</td>
<td>0,65</td>
</tr>
<tr>
<td>Planned profit:</td>
<td>-</td>
<td>11,0</td>
<td>17,079</td>
</tr>
<tr>
<td>Planned income adjusted for probability</td>
<td>-</td>
<td>11,0*0,6=8,25</td>
<td>17,079 *0,65=11,10</td>
</tr>
<tr>
<td>Planned loss adjusted for probability</td>
<td>0,150*0,45=0,07</td>
<td>11,5*0,25=2,88</td>
<td>7,660</td>
</tr>
</tbody>
</table>
Economical efficiency of the proposed scenarios.

\[ \text{Efficiency} = \frac{\text{Efficiency}}{\text{Cost}} \]  \hspace{1cm} (1.1)

Scenario 1. Conducting a series of action and case studies
Since it is difficult to quantify the quantitative impact of conducting training for employees in the field of sales, on the basis of research of the American Association of Management [15], we can assert that such measures, in world practice, allow increasing the productivity of employees twofold. That is allowed to reduce the time of customer service, which accordingly increases the number of customers who were given advice. Moreover, in this case, the loyalty of both the staff and the customers will increase.

Scenario 2. Carrying out capital repairs of the gas transmission network by obtaining additional funds from the state investment program
\[ \text{Efficiency} = \frac{11 \times 0.75}{2.88} = 2.86. \]
Since the value of the Efficiency indicator is significantly greater than 1, the company will receive a positive effect from the implementation of this scenario. Besides, we should not forget that this assessment does not take into account the gas transportation system, which will be replaced in this case, in addition, in this scenario we combine investments of the state and the company's costs.

Scenario 3. Development of a plan for restructuring receivables
\[ \text{Efficiency} = \frac{17.079 \times 0.65}{7,660} = 1.45 \]
Since the value of the Efficiency indicator is ˃1, the company receives a positive result from the implementation of these measures.

Conclusion. For realization of the set aim of the research the analysis of customer orientation development of gas supplying enterprise was conducted, the feasibility of implementation of measures for increasing of customer orientation level was grounded. For this purpose the following tasks were implemented: formulated the definition of «customer orientation», «customer orientation level»; analyzed the current methods of assessing the level of customer orientation; examined the peculiarities of scenario planning as one of the main technologies of strategic management; analyzed and evaluated the level of customer orientation of «Ivano-Frankivskgas», developed scenarios of development of the company's customer orientation, the efficiency of each of the proposed alternatives was analyzed and the scenario of implementation of modern methods of training in the company as the most probable and effective alternative for the development of customer orientation of «Ivano-Frankivskgas» was outlined.

The formed scenario approach of the analysis of customer orientation of the company allowed to define the following scenarios of further development:
- aimed at increasing the level of client orientation of the staff;
- focused on improving customer service level;
- spent on obtaining external investments and increasing the efficiency of the gas supply network.

It was determined that the most effective and feasible for implementation is the scenario of the implementation of modern methods of training, which will not only increase the level of customer service, increase the productivity of employees in the field of sales twice, and significantly increase the level of loyalty of both customers and employees, allow you to gain significant competitive advantages and maintain the positions taken in the market, while not requiring significant costs.


References


12. Questionnaire of JSC "Ivano-Frankivskgas", docs.google.com/forms/d/e/1FAIpQLSflsFVLEByg4wXOg5b322XgB8GzCXX7nr6Sr8d5KwhHNqWsg/viewform. Accessed 20 Apr.2022.

