DO ENERGY CONSUMERS RESPOND TO **BEHAVIORAL NUDGES?**

by

Yevhen Holovchenko

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Thesis Supervisor: _____ Professor Volodymyr Vakhitov

Approved by

Head of the KSE Defense Committee, Professor [Type surname, name]

Date_____

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The author wishes to introduce the experiment, which will describe the overall effect of using the different type of messages from behavioral economics on the responsiveness of new customers, who now was disconnected from previous firm and have a chance for lowering their utility bills.

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LIST OF ABBREVIATIONS

- **BMI** Business Monitors International agency
- SSSU State Statistical Service of Ukraine
- WHO World Health Organization
- **IEA** International Energy Agency
- TSO Transmission System Operator

CHAPTER 1. INTRODUCTION

Nowadays, people can choose suppliers of goods and gain profit from daily transactions. For these purposes, people started to choose between energy suppliers, minimizing the costs of monthly utility bills. European governments and institutions created instruments to track the price of goods (gas, energy, water, etc.) which helped customers change suppliers.

With new trends of free change of supplier, customers become the new pushpower for middle-sized and small-sized companies, as they can choose the much lower prices, which small companies can offer, but with a bit higher risks. It makes it possible to contribute to big monopolists on the market, which also occurred in 2016 in Ukraine. After the reformation of the marketplace of natural gas supply, all firms were able to take customers and offer them a lower price than the previous monopolist of customers and gas delivery – "Oblgaz." It pushed the development in the sphere and enabled a lot of infrastructural and technological instruments inside the industry. It helped people realize they can choose the supplier to decrease monthly payments, which is not as tricky as they imagined.

After recent market distribution changes and the government shut down one of the key players, around 8.8 million customers have transferred automatically to the national savior – "Naftogaz." With this opportunity and the company's prices, many small and middle-sized players become viable and able to take customers from the governmental company into their hands by offering lower costs and using behavioral economics strategies.

This research is focused on defining key messages which middle-sized firms can use to influence customers in a particular region and try to obtain them in their database and newcomers. For this case, three types of messages with different emotional backgrounds were used to see the difference in influencing new customers and how the effect of the message can help firms attract more physical users of natural gas. There is such type of messages as positive effect, framing, and negative effect. For each message, the firm made 100 contacts with the new customers and asked them a question to know more about their understanding and previous experience of changing natural gas suppliers.

During the experiment, some issues occurred primarily because the people were unprepared to change supplier once more after they were made to change it for "Naftogaz." It influenced the flow of the experiment and decreased the overall response percentage to the messages.

Overall, the statistics showed that results are pretty much similar to the previous count of people who changed companies of gas supplying, which is around 8% of people who already changed companies before, 8% of people who thought about changing it before and almost 35% of people, who are well informed about the process of transferring to another gas supplier.

CHAPTER 2. INDUSTRY OVERVIEW AND RELATED STUDIES

2.1. Industry Overview

Worldwide known diversification of the gas natural gas industry consists of such sectors as upstream – companies, which are working in exploration, development of already explored of already existed gas wells, and overall production of the natural gas supplied to the market; midstream – companies, which are involved in transactional aspects of the market, which can be mentioned as transportation organization and storing in all forms existed on the market (liquid or gaseous); downstream – distributional companies, which are well known in each country, the final stage of connection of suppliers and customers.

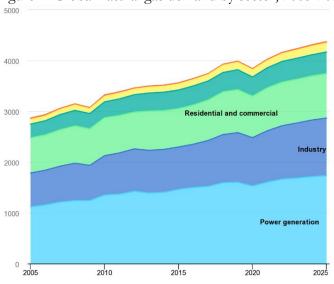


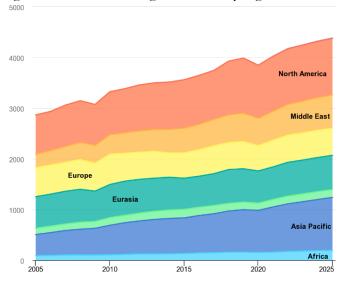
Figure 1. Global natural gas demand by sector, 2005-2025

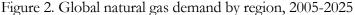
Source: International Energy Agency, Gas 2020 report

The origin of the usage of natural resources by different industries was primarily attached to the cooking sphere or heavy metal industries, in addition to the known sources of light for industries and usual physical customers. Nowadays, with the development of technologies in different spheres of production, such as power generation, which is still one of the most used resources for generating energy, even after hundred years of development of industry development.

On the other hand, we have chemical and other facilities of production type, which is used for warming/hitting purposes, it helps a lot to increase the production possibilities of such companies in different industries, because of the faster energy productivity performed by natural gas. Last but not least is residential consumption as for last fifty years become an essential part of the life of usual customers worldwide the critical resource to warm up flats and small and large factories and firms.

On the global market, there are several dominant countries on the demand side of the market, such as North America and Asia (for the most part, China, and Japan). At the same time, other areas of Europe account for 50% of the market.





Source: International Energy Agency, Gas 2020 report

With the growth of the production of different industries, the consumption of natural gas resources has become more and more common in use in each sector. The most massive increasement, which can be tracked over the last decade, is all about the economic and production growth of the Asia region. One of the downsides of the gas industry is a limitation on transportation. For the large-scale bases, the natural resource, infrastructures such as environmental buildings, transition corridors, and other essential structures must be built.

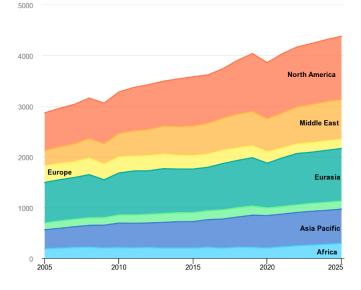


Figure 3. Global natural gas supply by region, 2005-2025

Source: International Energy Agency, Gas 2020 report

By characterizing the region specification of the markets, it is essential to mention that the European market has a sustainably high demand, which is issued mainly by the chemical industry. In addition, the need for a natural gas resource increases with the spreading of the popularity of the decarbonization trend in almost every sector, which makes sense on the market and insurance the transition to specifically this energy resource usage.

But on the other side, as the transitional abilities are limited, the cost of storage and sustainably transporting such a high amount of resources should decrease the demand for gas in the future.

With a demand exceeding supply in Europe and with recent changes in the import market, as the European countries are trying to decrease the amount of gas imported from Russia and its allies, new expected methodologies to transfer to other energy resources should take place, which will consequentially reduce the amount of used gas as an energy resource. But still, according to IEA data, only 40% of gas demand is covered by domestic gas production. With such a high volume of imported natural resources, the Russian region was the central region to buy out the goods. Still, with the last political confrontations, the European area aims to decrease the dependency on the Gazprom resource, transfer to the American supply chain, and develop economic agreements with other countries.

The complex reformation of the gas market started in 2014 in Ukraine. Which aim was to diversify the choices for gas supply for companies and usual customers with better energy security. The main change introduced is switching from the standard Russian collection of natural gas resources to European suppliers, with changing regulations and legislation to the European system, unbundling of transmission gas system, and significant reformation of leading gas supply company – "Naftogaz" of Ukraine.

The start of the diversification program triggered the same processes in Eastern and Southern Europe, showing the diversification of natural resources. A portfolio positively affects the market's security, as highlighted in November 2020 by S&P. Such global changes in the Ukrainian market effects were also neighboring regions, which resulted in changes in the balance of the gas market in the area.

After recent changes in the diversification of the Ukrainian market of the natural gas supply, a big part of the market, which the regional gas delivery company previously covered, now must be covered by other companies, as the government of Ukraine agreed to close the actives of the previous monopolist. With these changes, around 8.8 million customers became free to attract by a big company as "Naftogaz" and the opportunity for middle-sized and small-sized companies to get a more significant client base and become known among people.

2.2. Related studies

As a part of the research, one of the essential sides of the study is to create an arbitrage base to be able to analyze previous information and forecast the future prices of the natural resource, which will show the possibilities of middle-sized companies, which are approximately has a good resources storage before. Primarily, such research is mainly focused on the European regions, among the most significant gas trading hubs, across different regions (North America and Europe) and among different types of goods connected to delivery, such as LNG, natural gas, and renewables.

Nick Sebastian 2016 studied this question about the efficiency of European natural gas hubs, whose work was based on the arbitrage of the prices for a natural resource with forecasting of possible price downsides and upsides. Nowadays, these studies can't be used appropriately because of the political influence of price formation on the hubs. Still, the methodology and the overall structure of the studies about the limitation of infrastructure and its flexibility. In his work, we can see the inefficiency of European storage allocation and its fulfillment during the year, reflecting recent news about the low level of storing in the most prominent countries perfuming on the hubs in the European region, such as Germany, Spain, and others. It influences the dependency on Russian gas support as well as economic inefficiency with forecasting of possible price downsides and upsides.

With nowadays political situation these studies can't be used in an appropriate wat, because of a lot of political influence of the price formation on the hubs, but still the methodology and the overall structure of the studies about the limitation of infrastructure and its flexibility. In his work we can see well the inefficiency of European storage allocation and its fulfilling during the year, which reflects recent news about the low level of storing in the biggest countries perfuming on the hubs in European region, such as Germany, Spain, and others. It influences the dependency on the Russian gas support as well as economic inefficiency.

As behavioral economics is used to deal with almost each problem in the world, which we are able to justify by numerous articles about scientists and professionals using it to deal with the COVID-19 and economic crisis, to effectively advertise different products all over the world to Europeans, Americans, Mexicans and huge number of other nationalities. The overall possibility of companies to use behavioral tools to find the way to their customers or the way out of bankruptcy makes a huge impact on importance of need in different experiments in a wide range of economical fields.

The recent example may be the usage of insights from the behavioral economics to deal with the mitigation of the spread of COVID-19, which was fully described by the Social Development and Health Promotion Research Center.

CHAPTER 3. METHODOLOGY

There are several steps which will proceed during the research, such as analysis of the potential macroeconomic situation inside Ukraine and how it may influence the middlesized business; accounting of the current status of the given company of gas supply sector with gib amount of natural storage resource; decision-making plan for a company, based on the behavioral economy.

As for economics, which is connected to the decision-making situation, we can define the type of behavior on which we can concentrate – behavioral economics for public utility policies. Such type is a good narrowing for our case as we can find the critical answers for strategies, which our researched firm can use.

After reading the publication on the site of the World Bank about the implications of behavioral economics for Public Utility Policies, we can undoubtedly define such concerns, which would help in our structure of decisions in the competitive market of gas trading in Ukraine:

- Cost-recovery the formation of the price, which will consist of covering the investment of the firm as well as covering the operating costs.
- Expanding-access can the firm charge enough to expand, or is there any type of subsidy, which can help firm to grow.
- Affordability for poor or in our case it is a question of accessibility for people with low technology level or for people, who all life was connected to one supplier.

These primary concerns influence the behavioral economics of utility policies as they are the base for decisions the firm makes on the open market.

The principal methodology in our case is well-known utility experiments, which are used to gain all helpful information about the firm's decision. It is about calls which they can use to attract new customers and connect new suppliers as on the large scale of consumption of the product, which is low-sized or middle-sized business, helping them compete with large companies. We can use two main streams of research to identify the appropriate message for customers, which will respond better than others. The first stream of research is to determine which type of message customers should get to react to faster and in more situations. So, we can locate such a base for our massage in this type of getting a piece of information:

- Regular post advertisement the physical post, according to previous data, is good for different type of people across the region.
- Phone calls with call for a decision and options for people and their business.
- E-mails a good tool to reach people, but in our case the database of customers is old (the origin of it is 2016) and a lot of emails as well as companies need to be proofed.
- Personal contact with each customer face to face, which will help to communicate more effectively, but still is not guaranteed success for the company as for it they will need a lot of resources.

In the such manner of diversification, we need to identify the most valuable tools to reach our customers and, as a result, attract as many customers as possible to our network. The difficulty behind these messages is to choose the most effective, which can be influenced by many different factors, such as:

- The difference in regions, which will mean that regions have different response for a different type of messages.
- Different demography of the region, which will mean that the easier type of massage we use, the better the recall.

All these parts make a different outcome in the customer inflow in the firm's database. Each step can influence a lot the situation with each customer. Previously the form used the face-to-face or the phoning method, which had the best response among new customers because of the possibility of using the personal approach for each present customer.

According to the types of massages, there is a considerable variation of them, and each works differently, depending on the person we are talking to and their behavioral patterns. So, in our case, we can define such massages which we can use to attract more consumers to our firm, which are based on the primary behavioral economics bias usage:

- Framing talking about different outcomes and showing customers, how their choice will influence their behavior.
- Positive drawing the efforts, which will show the satisfactory outcome comparing to the current situation.
- Status quo the option to overcome the resistance to change something even if other option has a better outcome (the key model, by which firms operated before).
- Negative fixating on recovering the lost part of good, customers lost because not contacting with us.
- Temporal discounting decreasing the value of present choice of the customer in further perspectives.
- Loss aversion describing losses more that actual gains from present customer strategy/
- Social norms people are influenced by the behavior of other customers/firms.

As a result, we can have a different type of massages which will help to increase the number of customers on the firm, as customers now are existing on the free market and temporarily transferred to the government institution, which will offer not the best options for customers.

The central hypothesis of the research is that a rightly connected type of messaging with an excellent intentional base can positively affect the customer gain side of the firm.

According to the previous experiments, which were held in the field of behavioral economics and particularly in the field of influence of messages on the behavior of customers and how they react on positive, negative and description messages, we can mention numerous of interesting cases, which were held in fields of marketing, finance, consulting, and advertisement, which are the most common fields for this kind of experiments.

Because of the information we can gather during the reading of such experiment, we are able to amplify their experience and adapt them to modern circumstances and environment of today's world. It helps a lot of companies to find their way to customers and upgrade their marketing strategies as well as sale skills.

The need of the truly working cases and tools is the greatest solver for numerous companies because of the possibility to save money and the most important time, which can play the key role to save the company from bankruptcy.

CHAPTER 4. DATA

After defining the key factors in behavioral economics that are relevantly connected to the topic question and described in previous chapters, before stating the particular type of massage indicated in Chapter 3, the study needs to proceed with the questionnaire, which will show the overall tendency on the current market.

To define the intention of potential customers, such questions were asked during the research, which is based on more than 450 observations:

- Did customer previously change the supplier?
- Did they consider an option to change a supplier in previous circumstances?
- Were they well informed about all advantages and disadvantages of such a change?
- Did they consider it easy to change a supplier in modern type of regulation?
- Would they change supplier for a better tariff in future?

All these questions target customers' information about the procedure of changing the supplier. It gives a complete picture of the potential customers in a particular region and market. As for this study, the marketplace is Kropyvnitskii. As the company works individually with customers, all questions were asked. The anonymous questionnaire marked differentiation between customer names in numbers.

In the past seven years, it has become more accessible and easier to change the gas supplier to satisfy the customer's need for a lower cost. Research on how many customers switched their energy suppliers in Great Britain shows the overall world trends in this sphere. With each year people more and more regularly switch their supplier and with past 4-5 years the number of "switchers" increased in geometrical proportion.

As for the number of switches, which has responded to the number of switchers in Ukraine for the past several years, as in this county, the process of free switching opportunity became available only in 2016, as described in Chapter 2. The overall number of customers who switched to other energy suppliers in the UK was huge. In the Figure 4, you may see the number of customers who changed the supplier in thousands.

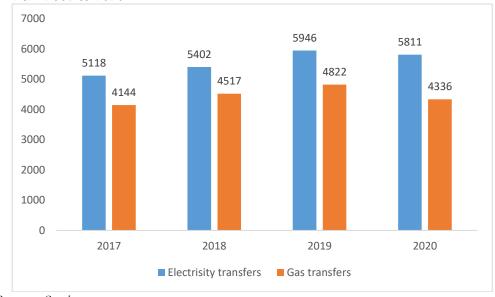


Figure 4. Number of electricity and gas customers switching energy suppliers in Great Britain from 2007 to 2020

Source: Statista

The described situation in Great Britain has an excellent response to the current situation on the market of gas supplying in Ukraine as both countries have similar approaches to the formation of the market share as the UK also has some essential companies, which took the most significant part of the market, while middle-sized and small-sized companies are trying to get a more considerable piece of pie proposing for customers more loyal term in exchange on their trust and long term support.

As for the statistical approach of how big the share of customers, who switched to another supplier within the last 12 months in Great Britain from 2017 to the 2020 year for the first time, and who among that share of customers regular switching to find the best outcome in measure of money and utility, which gives different companies, you may see the percentage overlook on Figure 5.

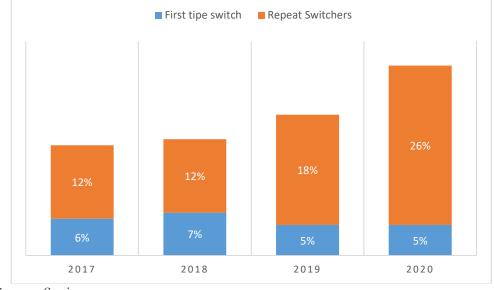


Figure 5. Share of consumers who switched their energy supplier within the last 12 months in Great Britain from 2017 to 2020, by frequency

As an analogy, we have a much bigger spear between the customer base of the big companies such as DTEK or Naftogaz and small-sized or middle-sized companies, which are present in the nowadays market. But since one of the biggest holders of customers was removed from the market and almost all its customers were transferred to Naftogaz, which wasn't able to cover all customers at once, the opportunity for a small company arose.

After pre-research work helped identify the critical factors, the working firm needs to concentrate on. The overall metrics, which were taken from the question stated above, are:

- How well-informed customers are about the opportunities of switching current energy supplier and which benefits they can get after proceeding such operation?
- Do they know the step-by-step instruction, how they can proceed the procedure of switching?
- Do they have intention of switching the supplier?

Source: Statista

All question giving the overall trend of which strategy firm need to operate in their targeting methodology to obtain the biggest number of customers on the market after a lot of customers were automatically transferred to Naftogaz without knowing other option.

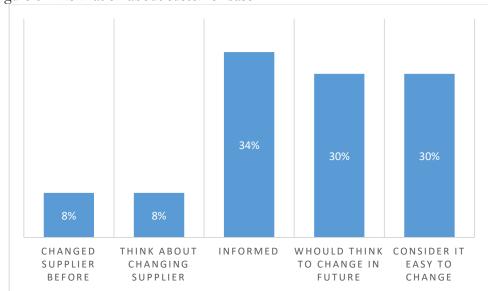


Figure 6. Information about customer base

Comprehensive information about the customers shows the nowadays trend of changing the energy suppliers as two years ago the ratio of the people changing suppliers was lower by 2 percent. About 34% of customers know about the advantages and disadvantages of changing the energy supplier, and more than 30% of customers would think about changing suppliers in the future.

After preceding, the questionnaire company decided that the overall problem they can use to attract new customers is that they don't know the advantages of being attached to another supplier than their previous one and Naftogaz as they were connected to them automatically. They did not have any other information options to consider another decision.

As was described in Chapter 3, one of the most potent tools in behavioral economics about message to the customer is showing the opportunity cost to them. With

Source: Research

this option, the firm decided to focus on such types of massages to send to their potential customers:

- Positive type of message showing the positive outcome out of situation, in which customers changing the energy supplier to the advertised company.
- Framing type of message showing customers the alternative cost of their decision of being still attached to the current energy supplier, with comparison to the new firm.
- Negative type of message describing the overall loss of the customers dew to their attachment to previous and current energy supplier and not contacting us.

After proceeding the 100 advertisements for each type of massage, firm will trach the progress of the current customer, how far he/she goes after receiving the message. The initial stages of involvement:

- Answer the message.
- Denied the opportunity.
- Ask for a corporate proposal.
- Changed a supplier.

CHAPTER 5. RESULTS

5.1. Status of the experiment and overall effects

At the beginning of the research, there was a strategy based on the region where the experiment took place. It occurred in August, and during this time, the firm contacted 300 customers who were previously attached to the previous monopolist – "Oblaz." To make sure that the effect of the messages will be equal to the description, the firm contacted each type of message to 100 customers. The types of messages which were as mentioned before:

Message based on showing customers benefits of joining the firm and how they can earn them almost immediately.

Message of describing the worst scenario of them joining not the firm but governmental monopolists.

Message of describing possibilities of the customer to choose new supplier and how to do it fast and clear.

All customers were randomly chosen out of an old database of customers of "Oblgaz," which was shown to all firms after the de-monopolization processes in 2016. Nowadays.

For clarification of the experiment, the firm introduced the measurement of the customer's involvement in the firm's proposal and what chances to attract new customers into the unique environment of the firm. Stages measured Involvedness from low response level to high responsiveness.

The first level is all about reaching out to the customer and introducing the company to them, trying to end the initial experiment with a proposed type of message. As the investigation was divided into three groups: Framing type of message, positive effect, and negative effect, the results for the first level of response on each of them were:

Framing – 72%.

Positive – 78%.

Negative – 68%.

The second level of responsiveness was the customers' interest in knowing more about their current status on the market and the advantages they can have if they would instead choose to change suppliers to avoid staying with a current monopolist on the market. At this stage, people want us to introduce our firm to them and know about possible alternatives and where they can see all information about the possibilities. For this stage percentage of customers involved was:

Framing – 25%.

Positive - 32%.

Negative – 17%.

The last stage of responsiveness was the state of people when they were attracted to the introduced firm and wanted to change the supplier, ready to see the commercial proposal from the firm's side. It is the last stage in which firms reach the customer and influence him to change the supplier. At this stage, several customers appear:

Framing – 5%. Positive – 7%.

Such a low level of response to different types of messages is probably connected to another kind of issue that will be described in the next part of Chapter 5. The effect is similar to previous research about how many people are willing to change the current state of gas supply—compared to the European sector, Ukrainians are not used to such a procedure, which in European regions is the more common, physical customers.

5.2. Issues during the experiment

After the experiment's very beginning, many issues occurred in the way of persons who contacted the actual customers.

The first issue was that in the current circumstances on the market, the government, after shutting down the previous monopolist on the market, used the opportunity to transfer people to the "Naftogaz" company, which affected new customers a lot, as they previously did not even think about sharing, or even more did not know about

that opportunity for themselves. It became evident that after proposing a new commercial proposal to join a new firm, they did not want to respond to any type of message as they were too busy or did not want to dive deep into this question as they did with the previous supplier. On the other hand, it helped by showing that customers can freely change the supplier whenever they want.

The second part of the problem was that people who were transferred to another gas supplier are already paid in advance to "Oblgaz," which, unfortunately, can't be assigned with a customer to a new supplier, which makes people frustrated about the current state of things on the market causing the gap in payments of the customers. It affected customers' overall emotional level, making them unwillingly refuse the message.

In addition to the stated issues, which is the ease of contact with customers. As the database of customers is old and phone numbers and email are not up to date, it is hard to find potential customers and reach them. During the experiment, the most efficient way of contacting customers in a particular region becomes the usual phone calling. It helped to reduce the number of refuses during the first contact with a client.

While the experiment proceeds, it becomes clear that in such a difficult period, when clients become unreachable because of the problematic situation in the region and the overall negative influence of war on each industry in the country, even a big burst of clients on the market of gas supply does not influence a lot of gain of clients on the firm. It becomes increasingly challenging to attract new customers and save old ones because of the stability and lowering risks. As far as big and middle commercial clients, physical clients want to be protected from unexpected casualties, which can be present during the supply chain and choose big companies more.

CHAPTER 6. CONCLUSIONS AND RECOMMENDATIONS

6.1. Overall results

After proceeding the experiment such conclusions were made based on the information after 478 contacts with customers:

1. There were a lot of influencing facts during the research. Customers are not ready to communicate as freely as before, which impacts their final decision to change gas suppliers and consider other challenging questions in circumstances of the difficult situation in the country. On the other hand, at a similar level of effort, it may work in another country, such as the UK, with a high level of information and a higher level of customers ready to change. It helped to build a robust infrastructure for people to see the difference in costs for fuels and utility bills they can receive at the end of the month

2. The overall statistics of responses discovered during the experiment are similar to the previously created statistics of customers who willed to change the gas supplier before in the questionnaires described in Chapter 4. It mentions that around 8% of customers changed gas suppliers, more than 8% know all information about the current state of options, and 32% see the information about how to change the supplier. It is much less than in other European regions, influencing the transfer procedure. For example, in Germany, there are many different platforms that can show you the alternatives and their costs, how long delivering firms are on the market, and other helpful information customers need to choose the best option for them.

3. One of the critical solutions for the firm may be the information program, which includes the firm's advertisement. It will help to convince people, which in addition to the positive emotional status from the positive type of massage, which concentrates on the positive efforts, which customer can gain rather than what he is losing right now not connecting to the system of the form will influence and give all need instructions and comparisons to choose the new firm.

4. Describe the levels of responsiveness for the questions mentioned during the first contact with a customer. The response of the first and second levels of reactions, which are usually associated with a regular description of all information, has a pretty high percentage of customers willing to know more about the possibility of decreasing the payments for utility bills. However, still, they don't want to decide complex and essential decisions. It is all about the uncertainty and risk provided by the current situation in the country and on the market, which is influenced by the European gas trading market. Nowadays, it is the primary gas resource as gathering gas recourse in Ukraine is challenging.

6.2. Experiment procedure

As was stated before the experiment was conducted in Kropyvnytskii, that is important to consider analyzing the results. Potential customers of our company can be divided on 2 groups: individuals (private persons) and entities (legal persons).

The average member of the first group has got following characteristics:

- Middle-aged (about 34-65 years old).
- Middle or low income.
- Household of 2 people.
- Gas consumption: 5 cubic meters per person per month
- Poorly informed about possibilities of supplier's change.
- Characteristic fear of changes.

The average member of the second group has got following characteristics:

- Type of business: bakery
- Size of business: micro- or medium- business
- Scale of business: regional engagement
- Gas consumption: 50 cubic meters per month
- Satisfactorily informed about possibilities of supplier's change.

From the portraits described above an assumption can be made that first two types of messages (framing and positive effect) will be successful, as showing more potential financial value to the customer.

Experiment consists of stages:

- Phone call to potential customer
- Request to pass the questionnaire
- Delivering the message (framing, positive effect, or negative effect)
- Positive or negative answer of potential customer
- Sending the corporate proposal in case of positive response

For purposes of experiment levels of respond of more than 450 participants were divided into 3 categories:

- Answer the message first stage in a communication with potential customer. It means that potential customer answers the phone call
- Passing the survey second stage in a communication with potential customer. It means that potential customer willingly passes the questionnaire about the level of their knowledge of possibilities to change gas supplier
- Denying the proposal third stage in a communication with potential customer. It means that potential customer is not interested in further cooperation
- Acceptance of the proposal third stage in a communication with potential customer. It means that potential customer is interested in our proposal and hope for further cooperation

The following types of messages was chosen:

 Positive type of messages – "Good afternoon, our company's name is There is a good possibility for you to save your money each month, just by changing the gas supplier. It will give you the amount of money which you will save each month by doing just nothing as you will just automatically pay less, they you do right now! We can offer you XXX price, which will give you an opportunity to gain XXX amount of money per year by doing several steps.";

- Negative type of messages "Good afternoon, our company's name is We want to mention to you that you are losing the opportunity to get some free money each month! By not changing the supplier you paying more then you could pay with another gas supplier, which means that you are losing your own money! You can choose us and we will offer you XXX price, which is lower then you usual bill."
- Framing type of messages "Good afternoon, our company's name is We want to offer you a new opportunity – switch the gas supplier and get huge benefits out of it. For doing so, you need to do such steps:
 - o Step 1;
 - o Step 2;
 - Sep 3;
- After these steps you will be able to get XXX amount of profit comparing to your current price for the gas per year."

In average, just 2 thirds of people answered the phone call, that is illustrated on the graph bellow. That insufficient number can be caused by the time the phone call was made or the day of the week. Moreover due to military situation in Ukraine a lot of people had left their houses and had been abroad, thereafter could not answer. Fortunately, the experiment was successful despite the answers` ratio.

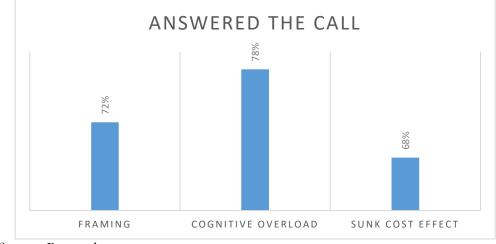


Figure 7. Amount of people answered the phone during the experiment

Source: Research

The next step of experiment implicated conducting a survey on people's overall awareness of their current possibility to change the gas supplier, level of knowledge of the changing procedure, and their readiness and desire to undergo this procedure. Only a third of people passed a questionnaire, which was designed for this purpose. Nevertheless, the results are representative.

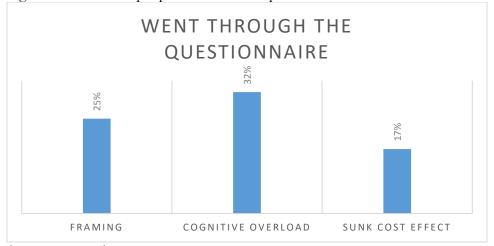
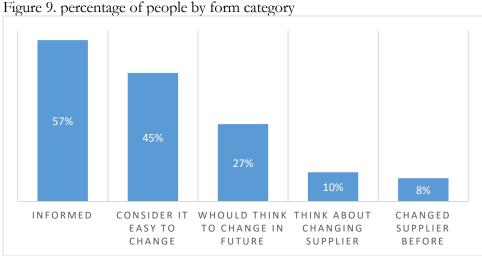


Figure 8. Amount of people answered the questionnaire

Source: Research

More than half of the respondents are informed about the possibility of changing gas suppliers. That means that the topic is of great current interest to some sections of society. A little less than a half consider the change of gas supplier an easy, effortless mechanism. 27 % of respondents would think of switching suppliers in the future, and only 10% think of it now. The conclusion was made that this situation indicates a problem for middle-sized gas companies, who want to attract new customers and be competitive in the uprising gas market. The ways of overcoming this issue can be the subject of the following research. The statistics on this stage of analysis are illustrated below.



Source: Research

The third experiment stage is determinative, delivering the message to the potential client. The messages are different in terms of wording and are believed to have other effects on people's decision-making processes. The types of messages were listed above. The influence of various kinds is illustrated below.

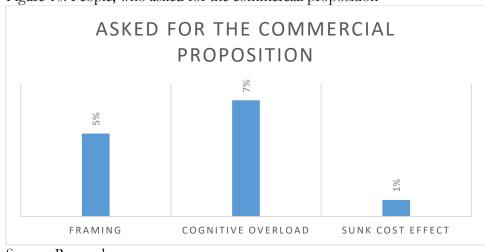


Figure 10. People, who asked for the commercial proposition

Source: Research

However, even though the experiment was carried out thoroughly, it leaves much to be researched for the following experiments. For instance, the influence of articulation, speaker`s energy, time of the day or day of the week on messages' perception.

The overall statistics showed the prevalence of the positive message. The explanation can be that customers tend to compare how much they would gain by switching to a new supplier. So, the financial benefit is the main factor contributing to the potential client's decision.

The overall result of the experiment as we may manage it in new customers, who transferred their gas supply orders directly to us is pretty good comparing to the usual performance of the company. In September of last year the amount of new customers gained was 7, and now it is almost doubled to 13 customers.

6.3. Possible further experiments

After proceeding with the experiment, we discovered that this field of study is unrevealed to us as it needs to be better studied in Ukraine. There is a considerable number of possible experiments which will increase the efficiency of firms that are making gas supply in Ukraine. Foreign practices might be involved in the modern system of advertisement and comparison of suppliers all over Ukraine to give a fair marketplace for each company in the country.

To our mind, such aspects might be involved in future studies to cover more sides of the response of customers:

- As we are heading to the digitalization of the country services as well as their efficiency, the usage of different types of delivering the messages to customers may have a huge weight:
 - o Emails.
 - o Letters.
 - Apps/Platforms online.
- With a further development of the database of customers, the orienteering on certain group of people may also influence the efficiency of the companies.
- Region special and industry special advertisement to concentrate on certain part of the economy to supply to.

All these aspects can help to investigate the special points on and make firms, which supplies gas more specific in their strategies.

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APPENDIX