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DIRECT AND TRIGGERED MOBILE MESSAGES EFFICIENCY ON DIFFERENT  
STAGES OF SALES FUNNEL, ON ROCKET EXAMPLE.

Bachelor Thesis

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I have written this Bachelor Thesis independently. Any ideas or data taken from other authors or other sources have been fully referenced.

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## Introduction

With the fast-growing number of different Internet services, there are more and more mobile applications being downloaded every year. During the four years time period from 2016 to 2020, the number of mobile app downloads increased from 140,68 to 218 billion (Perez, 2021). Due to huge amounts of new applications, some of them are being unnoticed by the customers who don't use some of the applications, and they are not exactly aware of how the application can fulfill their needs (Zhang, Ha, Liu & Wang, 2018). Exactly at this moment, marketers have to remind customers about their application because sometimes they forget about it.

Internet marketers use two types of messages to communicate with customers: direct and triggered. In mobile messages marketing, a direct message is being created for a specific cohort (segment of users) depending on the purpose of the campaign. Triggered messages – are tailored messages that are automatically sent when a user does a specific action (Goic, Rojas & Saavedra, 2021). Triggered message can be sent in the following cases – the cart was abandoned (when a user added items to the cart but didn't check out), abandoned view (when the user scrolled the items but didn't pick anything), the last session (when a user has not opened the application for a while), etc. Both messages have their pros and cons but what message gives more efficiency to marketers: direct or triggered?

The aim of the thesis is to compare direct and triggered mobile messages efficiency for the acquired customers of the mobile application, on the example of Rocket. The author decided to focus on this topic because of a lack of information regarding the efficiency of the direct and triggered messages on customer engagement on different steps of the customer journey, which will be measured using different KPIs which will be introduced further in the paper. Research tasks for this paper are:

- To compare sales funnels and communication channels in order to reach the customers
- To describe the difference between direct and triggered mobile messages
- To compare how the efficiency of the mobile messages was measured before
- To give an overview of Rocket company and explain how mobile messages boost their competitive advantage
- To introduce the data and methodology is needed for the experiment
- To analyze and conclude the results of the experiment

Successfully implemented customer journey allows companies to convert customers from acquired to loyal more effectively and requires fewer costs. The first part of the thesis will be focused on explaining communication channels on different steps of the customer journey and the difference between direct and triggered messages. The theoretical part includes a detailed description of the direct and triggered mobile notification, events when triggered messages can be used, and segmentation options. The empirical part of the thesis will be focused on the efficiency of the mobile message on two different segments: acquired customers and customer churn on the example of Rocket.

Rocket is a Ukrainian Food delivery company, which was founded in 2018 in Ukraine and operated only in one city. After a successful test of the service company quickly expanded to other Ukrainian cities and to some European countries such as the Netherlands, Cyprus, France, Greece, and Portugal. At the moment of writing the thesis, the company has more than 600 employees and across Europe Rocket mobile app is in the top 10 downloaded apps. The author decided to choose the food delivery market to conduct an experiment because of the fast-growing online food delivery industry and its novelty. From 2017 to 2021 (Statista, 2021) online food delivery industry grew in revenue from 111,778 to 270,317 million dollars. This significant difference during 4 years in revenue marks the novelty of the market and sparks the interest of the author.

**Keywords: Direct message, triggered message, customer engagement, communication channels, customer journey.**

## 1. Direct and triggered messages as a communication method with customers and their efficiency in the concept of the customer journey.

### 1.1 Communication channels to reach a customer on different steps of the customer journey.

Customer journeys visually and chronologically represent customers' actions while interacting with the company, often connected to the emotional indicators (Halvorsrud, Kvale, Følstad, 2016). Some companies have poor brand-to-customer communication due to the absence of clear customer journey understanding when they communicate with potential, acquired, and loyal customers. With a clear understanding of the customer journey managers can adjust strategies to improve all services provided by the company and improve communication between brand and customer (Rosenbaum, Otalora & Ramirez, 2017). The customer journey also can be represented as a sales funnel. Different authors use these definitions interchangeably and it can vary depending on the field where the company operates, the following table represents the comparison of different sales funnel theories from authors. The following Table 1 represents the comparison of different sales funnels

Table 1.

#### *Comparison of sales funnel theories*

Author/ theory	Steps	What lacks?
Geyser W. 2021	Awareness and Interest, Desire, Action	Retention and referral stages, Churn stage. Author combines awareness and interest into one stage.
Brooke K. 2021	Awareness, Interest, Desire, Action	Retention and referral stages, Churn stage
Teamleader, 2021	First touch, Solving the problem, Decision, Action.	Retention and referral stages, Churn stage
AIDA	Attention, Interest, Desire, and Action	Retention and referral stages, Churn stage
The Pirate funnel	Awareness, Acquisition, Activation, Retention, Revenue, Referral	Churn stage

Source: Compiled by the author based on the Geyser, 2021; Brooke, 2021; Teamleader, 2021

The sales funnel proposed by Geyser (2021) contains 3 steps, this approach can be limited to some companies since not all companies operate with one-time customers. Also, a combination of awareness and interest in one stage might create additional limitations for a unique approach to the customers. Using this sale funnel the company can send both direct

and triggered messages, which are explained and compared in part 1.2. In this sales funnel there is no space for retention and referral messages as well as customer churn messages. This sales funnel might not be suitable for the companies that strive for long-term customer relationships. The sales funnel proposed by Brooke (2021) contains 4 steps, this approach has one more step compared to Geysler (2021) and allows to come up with more personalized messages to the customers since awareness and interest stages are separated. This sales funnel allows the company to send both direct and triggered messages but with limitations in terms of retention, referral, and customer churn messages. As well as Geysler (2021) sales funnel this one might not be suitable for the companies that strive for long-term customer relationships.

The sales funnel proposed by Teamleader (2021) contains 4 steps and resembles sales funnels proposed by Geysler (2021) and Brooke (2021). The main difference between Teamleader (2021) sales funnel is that approach starts from the fact that the customer has a problem and is seeking an opportunity to solve it. Customers do not always make a purchase because they need to close a need or solve their problem. Some of the purchases are irrational and they are difficult to explain rationally. This sales funnel allows the company to send both direct and triggered messages but with limitations in terms of retention, referral, and customer churn messages. Similar to the Geysler (2021) and Brooke (2021) sales funnel this one might not be suitable for the companies that strive for long-term customer relationships.

AIDA – attention, interest, desire, and action, the model resembles models proposed by Geysler (2021) and Brooke (2021) but varies from Teamleader (2021). These models have a common lack which is limitations in terms of retention, referral, and customer churn messages. AIDA model might not be suitable for the companies that strive for long-term customer relationships. This sales funnel allows the company to send both direct and triggered messages but with limitations in terms of retention, referral, and customer churn messages.

The pirate funnel – awareness, acquisition, activation, retention, revenue, referral. This model consists of 6 steps and allows companies to seek long-term relationships with the customers, unlike models proposed by Geysler (2021), Brooke (2021), and Teamleader (2021) as well as the AIDA model. Although this model is more flexible for the companies it lacks the churn stage, which allows companies to bring potential customers back to them. This sales funnel allows the company to send both direct and triggered messages but with limitations in terms of customer churn messages. The pirate funnel is shown on Figure 1.

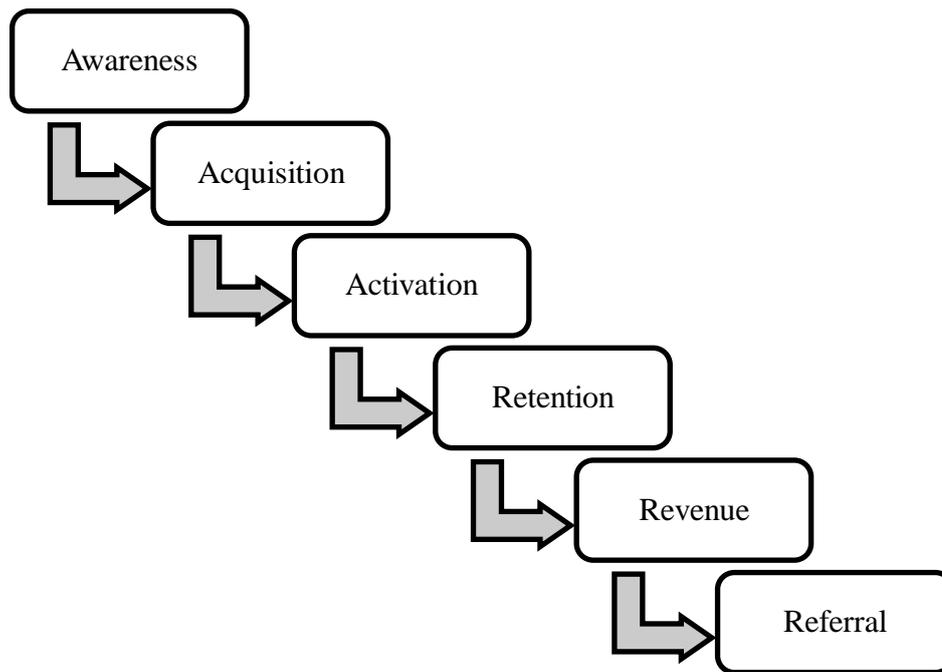


Figure 1. *Pirate Funnel*

Source: compiled by author based on Aktas, 2021.

Figure 1 shows that the first what potential customers see happens during the “Awareness” stage, at this moment catchy ads from the companies are being caught by people. This communication is generally divided into two categories: online and offline. At this stage, it’s crucial to use distinguishing marketing campaigns that will be different from everyone else (Krishna, Cian & Sokolova, 2016) which will provoke mental stimulation based on the visuals used in the campaign. In all communication channels, when a brand sends a message to a customer the brand logo appears, it’s one of the first things that customers see when meeting the brand for the first time. As an example, the importance of the logo visualization was underlined by (Bayunitri & Putri, 2016) who suggest creating unique logos for the companies due to the complexity of distinctiveness between competitors, in contrast (Gustafson & Chabot, 2007) propose that companies put messages instead of the logo as the initial phase of customer awareness.

Depending on the environment of the advertisement, the companies should concentrate on how they will create awareness. During the “Awareness” stage, the focused object is to be clearly distinct from the competitors in terms of logo, ads, slogans, and the communication way. Potential customers should receive “surprise” when they communicate with the brand for the first time, this is the only way they can be converted into loyal ones, if the awareness stage was skipped by the customers, they will not continue the journey with the brand anymore.

After the moment a customer saw an ad, he starts to investigate the company more precisely also sometimes called the discovery stage or acquisition. stage. During this stage, companies must pay attention not only to whether the brand is presented on social media, social responsibility, and good customer experience. loyalty programs but also in the environment where they are presented. Some of them outperform others, for example, Online Social Networks can be used as a catalyst to increase brand awareness (Bernstein, Bakshy, Burke & Karrer, 2013). While customers compare different brands they might pay attention to some specific factors only, for example, high-quality service.

The phase of comparison is combined with the discovery phase or activation stage. During this stage, customers compare brands, products, and product classes to reach a consensus on their needs, they also include the price and utility of what they expect to receive (Corfman, 1987). Some markets don't have high competition but some of the markets have really high competition, which makes it really difficult for the companies to come up with a better offer than their competitors. During this stage all that customers discovered during the "discovery" step will be compared to what competitors can offer, hence it's really important to pay attention to the details during the "discovery" stage (Corfman, 1987).

When the customer compared and evaluated all possible options on the market and chose the company, now it's time for the company to push the customer to make the first purchase. At this step companies use different methods of pushing the customer to make a purchase. In a case, the company is presented online and using the application as the marketplace for the customer, the company "pushes" in via different channels as in Figure 2.

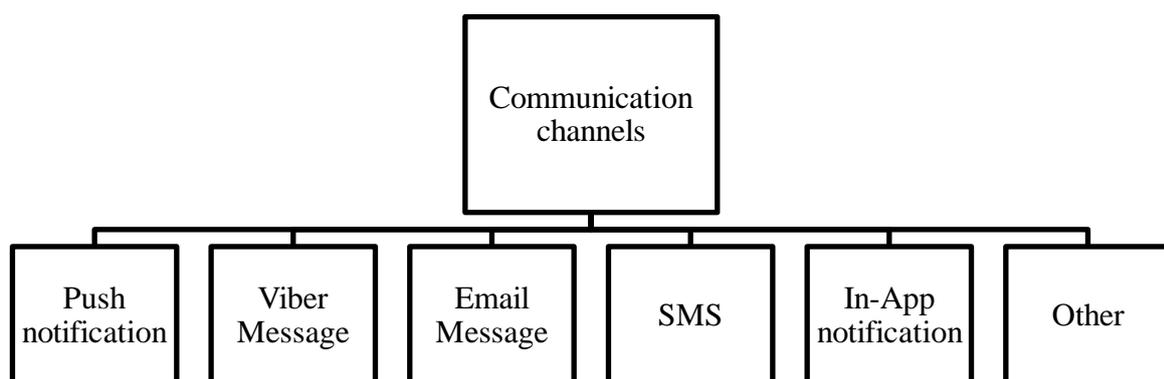


Figure 2. Communication channels

Source: Compiled by the author based on Ekhlassi, Maghsoodi , & Mehrmanesh, 2012;

Mailchimp, n.d.; Infobip, n.d.; eSputnik, n.d.

Throughout the customer journey, acquired customers can be reached by using different communication channels and they are almost the same as potential customers with some additional methods. Depending on the nature of the company and the environment where it operates communication channels differ. The focus of this thesis is mobile messages, they can be the following (Weber et al., 2015; Gao et al., 2022) :

1. Push notification – defined as a pop-up text message that can contain an image to communicate with a customer in different ads. This message can be seen on the locked screen, appears at the top of the screen, and has a sound in case the system supports it. In most cases when the user clicks on the push notification he is being redirected to the application.
2. Viber message – the promotional message that is being sent using Viber messenger. This message allows to add an image and more text compared to the push notification, as well as it can contain a link that leads to other web pages, stores, etc.
3. Email message – the message that is sent using email services, can be seen on any device, can contain a lot of text, any link, and images.
4. SMS – message that customer receives on his phone. This message has a limit for text amount, any link can be used, and no images can be added.
5. In-App notification – the message that the customer receives when using the application. This message can contain more text than push notification, has a link that leads to some internal page in the application, and an image can be added.
6. Other – there are other channels that are being used by different companies, for example, WhatsApp, but they are not as popular as previous methods.

Using these channels, the company can reach the customers whom they consider as potential buyers. Depending on the way the company collects the database and what the companies already have, marketers are choosing the communication channel (Murphy, 2018). For example, if the customer downloaded an application but didn't register for it, because he was comparing 10 more similar applications, according to GDPR (General Data Protection Regulation) the company has a right to send one push notification to him otherwise it is considered as spam because the customer did not consent to the promotional campaigns (Wolford, n.d.). In this step, the company doesn't have a phone number or email, but it has collected a "token" – the condition of the user, when there is no data collected but company knows that they user downloaded the application, on the customer, which means that they can send a push notification for him. This push notification will be a "push" to register in the

application and make the first purchase, so the company can receive a new buyer and his contact data to create more diverse communication in the future.

Successfully pushed customer is making a purchase. The first milestone is reached and now this customer is no longer potential, now this is the single purchase customer (Reichheld & Sasser, 1990). But since just a single purchase is not the final goal of the customer journey, there is still space for marketers to undertake additional action to push the customer to make a second purchase or retention stage. At this moment the marketers are trying to convert their single purchase customers into loyal customers. A recent study by Zephaniah, Ogba, and Izogo (2020) shows that advertising, personal selling, public relations, and sales promotion have the strongest effect on customer loyalty, hence marketers should pay extra attention to the messages they send to the customers. To promote sales further marketers can use 2 types of messages: direct and triggered.

The previous study (Reichheld & Sasser, 1990) shows the importance of turning acquired customers into loyal ones, underlining it with increasing profit over time. For most companies and industries, it's more profitable to keep a long-term relationship with the customer, rather than to spend money on acquiring the new ones every time. Companies should focus not only on the costs and value of acquired customers but also on the value that loyal customers generate (Lina & Bowman, 2022). By reducing the customer churn, companies can increase their profits from 25 to 85%. Businesses must define their weaknesses and turn them into stresses by asking customers, who stopped using their products or services, what they do not like, and what can be improved in order to keep the customer satisfied, although sometimes it can be really difficult to define such.

To create a long-term relationship with the customer, a company needs to build trust and satisfaction for the customer after interacting with it. Using different loyalty programs and excellent support work while providing the best product or service on the market is one of the key elements to building a long-term relationship with the customer (Lina & Bowman, 2022). Previous research by Leninkumar (2017) proves that there is a relationship between consumer trust and loyalty. As the conclusion from the previous studies - satisfied customers tend to be converted into loyal customers. The more companies dedicate time and money to these customers the better loyalty programs they have.

The link between profitability and long-term relationship was noticed a while ago. Customers who are loyal on average tend to be more profitable than new ones and this was proved by several studies conducted before, including Ranaweera (2007). Companies who are suffering from losses or low profits should pay more attention to the satisfaction of their

customer as well as increasing loyalty among them. Research made on this topic by Ranaweera (2007) showed that companies should invest wisely into loyalty problems, and in case they are suffering from low profit or losses they can focus on the loyalty of their customers. Indeed, nowadays customers have lots of different propositions for the same product and they are free to choose any company that they like. If the company leaves the customer unsatisfied it can be turned into big losses within time. Customers not only stop buying the products but also tend to leave bad reviews on the internet and spread the word of mouth about their poor experience with the company.

Customers have more touchpoints with businesses than ever before, they communicate via hundreds of different channels with businesses which leads to more complex customer journeys (Lemon & Verhoef, 2016). Marketing departments use difficult combinations of different communication channels: online and offline, to acquire customers and maintain a long-term relationship with them. To organize the information flow of the audience, customer relationship management (CRM) is used. It allows companies to build effective communication with the customers using different communication channels and data to analyze the suitability of the message (Ghavami & Olyaei, 2006). CRM software revenue worldwide increased from 13,93 to 69 billion dollars (Statista, 2021). The significant increase in revenue around the world underlines the value and importance of CRM software in the company as well as in the CRM department.

At the same time, with the emergence of an enormous amount of different marketing tools, techniques and methods, marketers can interact with the customer easier and more efficiently (Jayaram, Manrai & Manrai, 2015). To build effective communication with the customer, companies use a combination of messages, in case if one channel is not able to deliver the message, the other channel will immediately start delivering the message (Weinberg, Parise & Guinan, 2007). Common examples of such combinations are: push notification and Viber, push notification and email, push notification and SMS (Esputnik, n.d.). If the company uses a combination of different communication channels there is less probability that the message will not be delivered to the customer (Esputnik, n.d.). Channel priority is defined by several parameters and the user's engagement history:

1. Orders – how many orders did the customer do previously.
2. Sessions – how many times the customer opened the application.
3. Activity – what the customer had done in the application, what pages did he visit, what product did he scroll and check in the application, etc.

4. Deliverability – the deliverability of the channel, how many percent of the selected users will receive the message.

Every communication channel has its own features. Table 2 shows channels' features for the 4 most used channels. The riskiest is the push notification because it causes deliverability 40-60%, in contrast, SMS has a deliverability of 99%. Mobile applications prefer to send push notifications because the cost per message is 2 times lower compared to the SMS, however, it's available for 30-90 days, that's why these messages mostly have short-term information such as discounts, offers, system notification, etc.

Viber messages have deliverability of 60-70% and cost more compared to email which has 98%. Companies usually prefer to send Viber messages instead of email messages because emails require additional information about the user – their email address.

Depending on the company's nature the company can prefer to use email instead of Viber.

Table 2.

*Channels' features*

Channel name	Cost	Deliverability	Availability
Push notification	\$\$	40-60%	30-90 days
Viber message	\$\$\$	60-70%	Depends on the business type
SMS	\$\$\$\$	99%	Long term
Email	\$	98%	360+ days

Source: Compiled by author based on Mailchimp, n.d.; Infobip, n.d.; eSputnik, n.d.

In this thesis, the author will focus on push-notification messages due to the nature of the messages. This notification can be sent through the whole customer journey after the customer is acquired, and depending on the stage of the customer journey, there is different information available. For example, for customers who have only downloaded the application, there is no information available but acquired token. In countries where GDPR is strictly followed by the law, companies have an opportunity to send one message only, because in order to send promotional campaigns a customer should give an agreement to receive these messages, which means that the message has to be as efficient as possible in order to engage the customer in the application (GDPR, n.d.).

As the conclusion of this subchapter one can say that based on the customer location in the sales funnel, marketers have different information that can be used to segment customers better and make more personalized offers. The communication channel is chosen

for every situation differently, marketers are considering such things as costs, deliverability, and suitability of the message. The biggest question is what message is suitable for the exact situation and what it should contain. This personalization can be done automatically and manually using instruments of direct marketing such as direct and triggered messages, which are described in the next part.

### **1.2 Triggered mobile messages vs. Direct mobile messages.**

Direct marketing message – is direct communication with the user, without any intermediaries for marketing purposes (Mullin, 2002). This message allows marketers to communicate with the customers instantly and directly. “Direct marketing is one of the most effective and measurable methods of marketing available” (Wang, Zhou & Yeung, 2005) and direct messaging is a part of it. The messages which are called direct imply that they are created for a specific campaign to increase customer engagement. Most of these messages (Roland & Peter, 2005) are call-to-action messages, which “push” the user to execute some actions. For example, in the food delivery market, such call-to-action messages can be the following (Labanauskaitė, Fiore, & Stašys, 2020):

1. Promotion of single restaurant or chain of restaurants.
2. Sale or discount offers in a single restaurant or in the restaurant chain.
3. Promo code giveaway.
4. Notification about weather conditions.

These messages are being created specifically for a chosen segment of users. To make these messages more efficient (Vafainia, Breugelmans & Bijmolt, 2019) suggested collecting information about purchases made, the timing of direct messages sent, and socio-demographic data. With the direct message, marketers can control the time and frequency of the messages, in contrast with the triggered messages which follow the pre-sets.

Triggered messages - are automatic messages that are being sent when a customer does a specific action (Goic, Rojas & Saavedra, 2021). Marketers create special scenarios and come up with the potential actions that the customers can do in the application. To create such scenarios they analyze and collect the user data and past activity in the application. Some of the events are only unique to the company and the field where the company operates. For example, using specific actions of the user from food delivery will not be suitable for e-commerce, in e-commerce the customer doesn't use the services of the company as often as in the food delivery. This complexity and uniqueness of the CRM software and CRM strategy for the marketing departments, make companies invest more in this kind of system.

To be sent a triggered message requires input from a user or a triggered moment to be created. Meanwhile, direct messages require a user segment and user data. A triggered message is being sent automatically and can be not suitable for the exact moment in contrast with the direct message. Since these messages follow presets of scenarios, they can be sent too often to the exact user. Some companies ask their users how often they would like to be communicated, so the user will not receive too many irrelevant messages per day/week/month. If the user has not consented to the messages or has notifications turned off on the device, it's impossible to send both direct and triggered messages. Table 3 provides common examples of triggered messages.

Table 3.

*Common types of triggered messages*

Trigger type	Explanation
Cart was abandoned	User chose the items to buy but didn't check out.
Abandoned view	User was scrolling the list but left the application.
Personal recommendation	Product / Service is recommended based on the past activity of a user.
Birthday	Promotional message for a specific date
Order status	The status of a user order
Referral	User shares an application with friends and receives a bonus
Confirmation	User has triggered a message response for some action: welcome message, registration is done, etc.

Source: Compiled by the author based on sources Rossi, McCulloch, & Allenby, 1996; Arora, Dreze, Ghose, Hess, Iyengar, & Jing, et al 2008

To create any type of message there are 3 pillars for it. The first one is the text that the message contains, and the second one is the deep link. Deep-link is a special link that will bring the user after the click to some of the web pages or in the case of the application to some of the pages in the application (Technopedia, n.d.). Deep-link allows marketers to communicate with the customers more efficiently and help them to navigate the application or the webpage. Without a deep link, the user will be navigated on the main screen of the webpage or application. The last pillar is the service where the message will be created. It can be both internally developed software in the company, or the other company that provides services for performing and preparing messages.

Based on the provided information from Table 4 there is the following conclusion. Direct and triggered messages have both pros and cons. Each message suits better for different situations. In order to create a scenario of triggered messages, there should be done A/B testing using direct messages. Depending on the purpose of the promotion these messages provide different results.

Table 4.

*The difference between direct and triggered messages*

What input is needed?	Direct message	Triggered message
Copywriting	Each message requires unique copywriting	Copywriting is the same for all message flow, some of the data can be automatically inserted, for example, user name.
Deeplink	Each message requires a unique deeplink	Deeplink is the same for every message
User segment	Segment of users are being picked for every message	Message is being sent to a user who triggered it
User data	Following data can be used for both messages: token, phone number, email, action done in the past, etc.	

Source: Compiled by the author based on the guides from Esputnik.

### **1.3 Measurements of the efficiency of the mobile messages in previous studies**

A study conducted by Bidargaddi, Pituch, Maaieh, Short and Stretcher (2018) reveals a link between content and application functions usability however despite content and suitability of the message importance both direct and triggered messages can have the same content which does not provide information regarding the efficiency of the direct or triggered messages. Study shows that content on the push-notification doesn't have an impact on the use of the key app features. The efficiency of the messages was measured by the Linear mixed effect model and the main KPI of the measurement of the efficiency was customer engagement in the application. This approach has limitations in terms of achieving the required actions from the customers. When users are clicking very actively on the notifications from the application, it doesn't mean that they will fulfil the action that the company is trying to achieve. The study concluded that more tailored messages have better efficiency for encouraging users into the application.

In contrast, Andrews, Luo, Fang and Ghose (2015) was focused on the obstacles and surroundings of the users at the moment when the message was delivered to the customer, where after adjusting the peaks purchase rates increased from 2,1% to 4,3%, but this research does not provide information whether it's more efficient to use direct or triggered messages for this increase. Research proposes to rely on crowdedness as a boost for mobile message advertisements. This approach can be applicable in the case of large-scale companies, that can operate with a big number of users. For those companies which don't have significant databases, this approach might be difficult to implement. The main KPI was the consumer response to the mobile ads, but the paper doesn't specify whether this was direct or triggered messages communication with the users.

Previous studies are focused on the content of push notification (Bidargaddi, Pituch, Maaieh, Short & Strecher, 2018), the impacts of push notifications on consumer spending (Suzanne, Bronnenberg & Gijsbrechts, 2021), purchase dynamics (Park, Park & Schweidel, 2018), crowdedness response on the mobile messages (Andrews, Luo, Fang & Ghose, 2015) these studies partially touching the topic communication with the customer using mobile messages, but they lack comparison between direct and triggered messages efficiency. There is a representation on Table 5 of different studies done on the topic of the efficiency of mobile messages.

Table 5.

*Comparison of previous studies*

Author	KPI's	Message types (direct or triggered, not specified)
Bidargaddi, Pituch, Maaieh, Short & Strecher, 2018	Engagement with the app in the next 24 hours	Not Specified
Suzanne, Bronnenberg, Gijsbrechts, 2021	Spending and redemption	Not Specified
Park, Park, Schweidel, 2018	Short-term and longer-term effects of mobile promotions	Not Specified
Andrews, Luo, Fang, Ghose, 2015	Consumer responses to mobile ads	Not Specified

Source: Compiled by author based on the mentioned studies

These studies use different approaches to the measurement of efficiency. Bidargaddi, Pituch, Maaieh, Short and Strecher (2018) are focused on the engagement of the users with the app in the next 24 hours. The study doesn't specify which messages were used in the communication with users. A study done by Suzanne, Bronnenberg and Gijsbrechts (2021) is using spending and redemption as the main KPI for the efficiency of the mobile message but

this study, as well as the previous, doesn't specify what type of the messages did they use. A study done by Park, Park and Schweidel (2018) is focused on the short-term and long-term effects of mobile promotions but there is no specification on which type of messages was used in the research. The last study from the table done by Andrews, Luo, Fang and Ghose (2015), where the main KPI is consumer responses to the mobile ads also doesn't specify what type of the messages was used in the study.

Researchers Park, Park and Schweidel (2018) proposed to examine the effects of mobile messages and how they can vary across the differences and the author of this paper decided to go further and to compare direct and triggered messages efficiency in the food delivery market. The value proposition in both cases is described in the empirical part of the thesis. The recency and novelty of this research are highlighted with the lack of comparison between triggered and direct messages efficiency. This experiment will give an overview and deeper understanding of the suitability of direct marketing instruments for different situations.

The lack of studies done on the topic of mobile message efficiency is shown in previous chapters. Authors mostly are focusing on the measurement of the efficiency without separation between direct and triggered mobile messages. In the empirical part, the author is focused on the measurement of the direct and triggered mobile message efficiency in two different customer segments in the food delivery market. The KPI that will be introduced in the empirical part is focused on the profitability of the messages. Studying efficiency in two different segments will introduce the difference between triggered and direct mobile messages in different scenarios.

## **2. Direct and triggered messages efficiency on the example of Rocket**

### **2.1 Overview of the Rocket company**

Rocket - is a Ukrainian food delivery company that delivers meals from restaurants and groceries from shops. In 2018, the company began testing its service in Ukraine, but within a few years expanded to 30+ cities around the country and to seven Netherlands, France, Portugal, Greece, Cyprus, Spain, and Hungary. At the moment of writing the thesis, the company has more than 500 employees in the office and thousands of couriers around the world. The company's primary customers are people who order food for the office, home, and parties in order to save time and do not spend it on cooking. The company is planning to expand its services even further by providing delivery from pharmacies.

Rocket has also separated the division of restaurants into what they call "Dark kitchen". A dark kitchen is a closed type of restaurant which means that the customer cannot walk into it, they can only order using the application. At this moment dark kitchen restaurants are located in different districts in Kyiv and propose different types of cuisine such as fast food, Italian food, salads, sushi, and Ukrainian traditional cuisine. For this division Rocket plan to expand into "Dark stores". Dark stores are closed types of shops from where the customer can only order, they create a competitive advantage based on the speed of order preparation and delivery. Dark store's goal is to prepare an order within 10 minutes and deliver it to the customer within 15 minutes.

The food delivery market is not new, it existed before, but the convenience of the applications made a new niche and allowed companies to create a new convenient service for food delivery. Competition in this field is high because before the food delivery applications appeared restaurants already had their own delivery and client base but since they are not as convenient as mobile food delivery applications in most cases companies like Rocket agree to use already existing couriers in restaurants to deliver food. Primarily competitors for Rocket in Ukraine are companies who have more resources and capital and are presented around the world. These companies already have well-working applications and tailored organized working processes when they come to the Ukrainian market. In order to maintain the competitive advantage in this market, top management has to constantly seek improvements and new perspectives to expand their business as well as raise additional capital in order to implement the new gathered ideas. For example, earlier presented dark kitchens and dark stores are the future of food delivery because they allow to size waiting time for the customer significantly compared to classical restaurants. There are a lot of competitors for Rocket in this market, but the author was focused primarily on the Ukrainian market, and hence here

are some of the examples of competitors in Ukraine. Table 6 represents a comparison of the main competitors on the Ukrainian market for Rocket.

Table 6.

*Comparison of the Rocket competitors*

Company	Delivery price	Delivery radius	Delivery time
Rocket	40-60 UAH	2,5 – 3 km	30 mins
Glovo	30 – 40 UAH	2,5 km	30 mins
Bolt Food	40 UAH	2,5 km	20 – 40 mins
Mister.am	45 UAH	Around city	Up to 1-hour
Noww	45 UAH	Around city	30 mins

Source: compiled by the author based on the sources 7, 17, 29, 32.

Mostly competitors have around the same delivery price but it can vary depending on the weather conditions, amount of couriers available, and traffic conditions. Companies like Mister.am and Noww have a constant delivery price because they operate in small cities and previously listed factors are not crucial for them when it comes to defining the final price of the delivery. Delivery radius depends also on the same factors, but sometimes companies may lower it if they see they the demand is more than they can supply. Delivery time is average for every company and can vary based on the previously listed factors as well. With the high competition in the market, every company is trying to outperform each other in different ways by providing more variability of the restaurants, lower delivery prices, more suitable delivery radius, and quicker delivery time.

The CRM department in Rocket plays a crucial role in the creation of the competitive advantage. This department has around 35% of all orders created focusing on increasing users' loyalty and engaging customers in the application. Department wants to take around 50% of all orders created by introducing new automatic triggers for the customers and decreasing the manual work of the employees. Currently, in the department, 70% of the orders come from triggered messages and 30% from direct messages.

Using different communication channels, helps Rocket create a competitive advantage in the market. When users are being onboarded into the application, Rocket collects the necessary data to use different communication channels. Along the way of the onboarding, Rocket explains to the users why and what they collect users' data. According to Rocket, 95% of the users are leaving their contact data, this allows the company to send them four

types of messages: push notification, email, SMS, and Viber message. Sending messages to every communication channel CRM department analyses and compare the efficiency of the campaigns. Rocket Welcome flow lasts for the first month after a user registered into the application. For the first 30 days, they send around 3-4 messages per week which helps the company to bring back into the application up to 85% of the new registered users. If customers didn't make orders for the whole year, they will be included into the reactivation work flow, and receive messages every month.

When users made their first order it comes to the time when they are being “convinced” to make the second order. In order to do this Rocket proposes different discounts in the area where user is located. The data about the area is being collected based on the last activity of the user – last address where user made an order. Sometimes Rocket sends promocodes with the discount to the users. To involve the user more into the application Rocket uses triggers like cart was abandoned, abandoned view, personal recommendation.

When users do the second order it's a very crucial and important moment for Rocket, because at this point of time, users understand whether they like the service or not. At this moment a lot of the users are leaving service but Rocket came up with the strategy how to deal with this issue. They asking more about the users favourites by using different triggered messages in 4 different channels: push notification, email, SMS and Viber. They are collecting additional information to come up with more tailored messages. After the information is collected CRM department analyses and testing the data using direct messages and triggers to compare and come up with more suitable workflows.

In order to minimize the customer churn Rocket uses different triggered messages. If the customer didn't open the application for 7 days, he will be included in the triggered workflow. If the customer stopped taking orders, he will be proposed to rate the service in order to understand what happened and why he stopped using the service. If the user stops opening messages, triggered messages will use different communication channels. Rocket mostly relies on the triggered messages, which are around 70% of the workflows, but they also use direct messages to communicate with customers, which are around 30%.

In order to understand which workflow has to be or not to be automatized (create a trigger) A/B testing is used where the team compares the results of the efficiency of the triggered and direct messages. The theoretical part explained both pros and cons of these messages. Many CRM managers send campaigns for the users, but after they do not measure the efficiency of it or rely on the wrong metrics which leads to wrong conclusions, and they continue to use not efficient promotional campaigns.

### 2.2 Methodology and data

Rocket uses a pirate funnel because it allows being focused not only on acquisition but also on customer retention. This funnel helps the company to delegate tasks between different marketing teams and set KPIs for all of them. The CRM department in Rocket is focused on the last 3 stages of the funnel, in precise: retention, revenue, and referral. They modified the Retention stage accordingly to their needs by using RFM segmentation. This segmentation was done based on the users’ past activity in the application. Using instruments of direct marketing CRM team increases user lifetime value and user loyalty. Depending on the user’s behavior and past activity they are being moved between different cohorts of the RFM segmentation. Figure 3 represents the cohorts of users based on RFM segmentation for the last step of the sales funnel to create a convenient and efficient way of working with acquired customers.

<b>F</b>	<b>20+</b>	Lost	Risk zone		Loyal		
	<b>10-19</b>						
	<b>5-9</b>				Pending	Potential	
	<b>2-4</b>					New	
	<b>1</b>	One-time buyer			New members		
	<b>0</b>	Members churn					
		<b>361+</b>	<b>181-360</b>	<b>90-180</b>	<b>30-89</b>	<b>0-29</b>	
		<b>R</b>					

Figure 3. RFM Segmentation in Rocket

Source: internal Rocket sources.

On the table F – stands for frequency, R – for recency. The time period from day 0 to 361+ days, the number of orders from 0 to 20+. The user journey begins in the “New members” cohort, these are users who just downloaded the app and made 0 orders. CRM department converts these users into “New”, and made 1 order within 30 days. After this step, the user can go into “Pending” or “Potential”. The goal of the department is to convert users

into “Loyal”. Sections “Members churn”, “One-time buyer”, “Risk zone” and “Lost” represent the users churn from the application.

In order to measure the efficiency of direct and triggered mobile messages, the author decided to be focused on two segments of users: “New members” and “Members churn”. These segments were chosen based on several factors: the difficulty of converting an acquired customer into a buyer and the importance of working with churn, in order to engage users in the application again.

To measure the efficiency accurately and exclude the possibility of unequal distribution of messages New members and members churn segments were divided each by 50/50 so that half of the users will receive triggered messages, and the other half of each segment will receive direct messages. Table 8 represents 6 direct messages that were sent to the New member’s segment, images are provided in the Appendix A.

Table 8.

*Direct messages for the New members’ segment*

Message	Offer	Time	Promo code	Day
1	General	12:00	No	1
2	General	19:00	No	4
3	General	12:30	100 UAH	7
4	General	19:30	No	10
5	General	12:00	No	13
6	General	18:00	70 UAH	16

Source: internal Rocket sources.

These messages propose food in different situations for different events in people’s life. They aim to close a person’s necessity in an exact period of time. The exact time when messages were sent was chosen based on the people’s habits to eat. For example, some of the messages contained promo codes for discounts of 70 and 100 UAH. The time period for these messages is 16 days. Copywriting for all messages was general, which means that there were no promotions for local restaurants or offers. Despite the general copywriting in the messages their main focus was to be useful in different lifetime moments e.g. no time to cook, snacks for a movie, need to go shopping but there is rain outside. Messages were sent each 3 days to users, this was done in order not to spam users and try to push them to make their first order as fast as possible, while they are still in the “New buyers” cohort. Table 9 represents two

different triggered messages that were sent to users one by one and then they repeat themselves until the user makes an order, images are provided in the Appendix B.

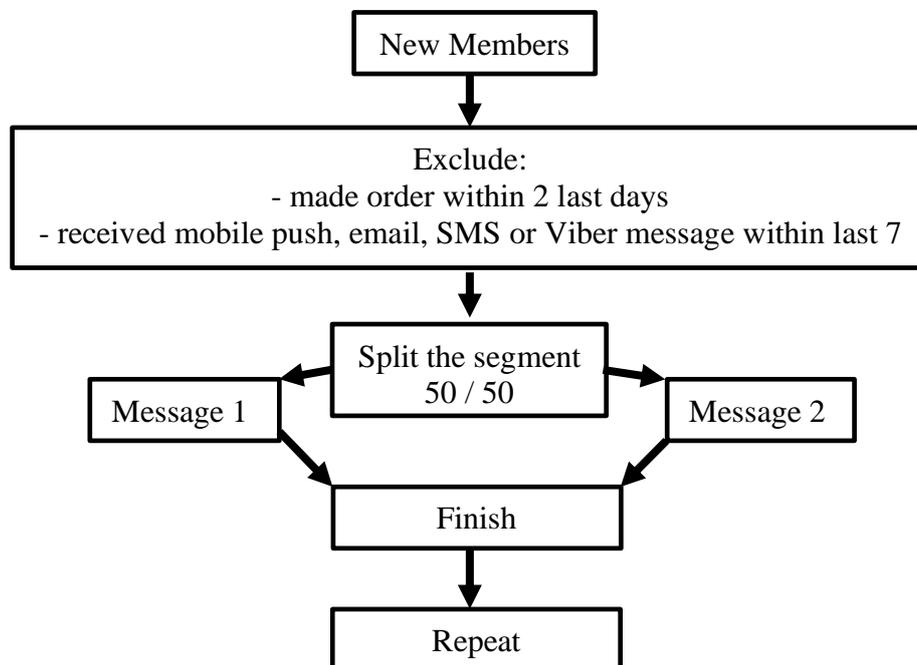
Table 9.

*Triggered messages for the New members' segment*

Message	Offer	Time	Promo code	Day
1	General	10:00-21:00	40 UAH	1-16
2	General	10:00-21:00	No	1-16

Source: internal Rocket sources.

Copywriting for these messages was general, meaning that there was no specific offer for users but they were pushing users to make their first order. The time period for these messages is allocated between 10:00 and 21:00, this time period was chosen in order not to send messages to users at not suitable time but at the same time to include a timeframe when users can possibly order delivery. One of the messages had a promo code for 40 UAH and they were sent to users starting from day 1 till 16. Figure 4 represents the scenario of triggered messages that were sent to the customers.



*Figure 4. Scenario for "New members"*

Source: internal Rocket sources.

The scenario works in the following way: New members segment is being divided into 2 segments equally, 50% of the users receive Message 1 and 50% of the users receive

message 2, then the triggered chain stops. In this case, if the user didn't order he will be still treated as a new member and will be included in this trigger again. If a user clicks on the message and makes an order he is being moved from a cohort of "New members" into a "New" cohort and a user will be excluded from this trigger chain, meaning that he will not receive these messages again. In the end, a user who didn't make any orders received 6 triggered messages within 16 days period. There were 9 general messages for "Members churn", without a specific offer in them, images are provided in the Appendix C.

Table 10.

*Direct messages for Members churn segment*

Message	Offer	Time	Promo code	Day
1	General	18:00	40 UAH	1
2	General	12:30	No	8
3	General	18:30	No	15
4	General	18:00	No	22
5	General	10:00	40 UAH	29
6	General	12:30	No	36
7	General	12:45	No	43
8	General	18:30	40 UAH	50
9	General	18:45	No	57

Source: internal Rocket sources.

Timing for them was chosen based on the user's habits to eat. Some of the messages had 40 UAH promo codes. Messages were sent with a pause of 7 days, in order not to spam a user, and since they didn't react to messages while they were in the "New members" messages were sent with a bigger pause. Starting from day 1 and following by day 8, one week was chosen as a pause for these messages.

Despite the general copywriting in the messages their main focus was to be useful in different lifetime moments e.g. no time to cook, snacks for a movie, need to go shopping but there is rain outside. Trying to engage the user who already downloaded the application but was not convinced enough with the benefits of its services. Table 11 represents the difference in the approach for the triggered messages for "Members churn", images are provided in the Appendix D.

Table 11.

*Triggered messages for Members churn segment*

Message	Offer	Time	Promo code	Day
1	General	10:00-21:00	40 UAH	1-57
2	General	10:00-21:00	No	1-57

Source: internal Rocket sources.

These messages contained the information for customers who used the service but didn't buy anything for 90 days. The time, when messages were sent, was from 10:00 to 21:00, this time frame was picked in order not to spam users and to reach him while he needs food delivery. One of the messages had a promo code for 40 UAH. Messages were sent from day 1 to day 57 in order to keep the same amount of messages that were sent as direct campaigns and compare them after. Copywriting for these messages was general, meaning that there was no specific offer for users but they were pushing users to come back to the application and make an order. Figure 5 represents the scenario for "Members churn".

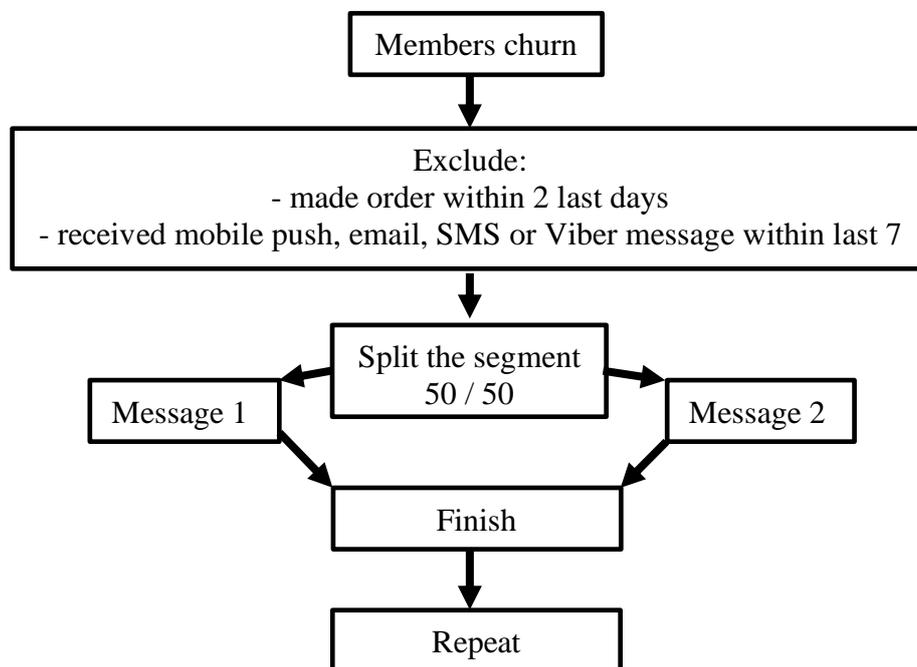


Figure 5. Scenario for "Members churn"

Source: internal Rocket sources.

Users who are in this segment are being divided into two categories in order not to repeat the same message for the same user two times. In this case, if the user didn't order he

will be still treated as a new member and will be included in this trigger again. If a user clicks on the message and makes an order he is being moved from a cohort of “Members churn” into a “New” cohort and a user will be excluded from this trigger chain, meaning that he will not receive these messages again. In the end, a user who didn’t make any orders received 9 triggered messages within 57 days period.

Data for this experiment was collected using Rocket’s internal database. After every message sent the information such as time, message, deep-link data, segment, country, phone number, order value, number of orders, and revenue goes to the Google Bigquery. After the experiment finished and 60 days period was passed (Rocket counts order successful if the user does the required action with the communication message within 60 days period) the information required for the comparison of the results was taken from Google Bi query using SQL and with the help of the analytical department of the company. Rocket uses eSputnik, this service allows the company to send messages using different communication channels within one tool. eSputnik is Omnichannel CDP platform (eSputnik, n.d.).

The quantitative method was used for this experiment because the data has to be compared and relationships between different variables need to be found. The sample sizes for both segments were 27280 for the “New members” segment and 154500 for the “Members churn” segment.

### 2.3 Results of measuring the efficiency of direct and triggered messages

Performing the experiment started on day 1 and finished on day 57. Followed by a pause after 60 days to measure and compare the results. The reason why 60 days pause was chosen is introduced in the following paragraphs. For the New Members cohort after the split of the segment there are the following results represented on the Table 12.

Table 12.

*Messages’ efficiency for New Members cohort*

New Members	Users	Orders	Revenue UAH	Orders conversion
Direct messages	13 640	20 097	5 024 250	47,3%
Triggered messages	13 640	23 140	5 785 000	69,6%

Source: Compiled by the author.

Triggered messages compared to the direct messages gave 15% based on the calculations  $20\ 097 / 23\ 140 = 15\%$ . More orders and gave 22,3% more in the orders conversion. Orders count as fulfilled if the user does the targeted action within 60 days after

receiving the message. Because the availability of the push notification lies within 30 to 90 days, as was mentioned in the theoretical part. Triggered messages gave 760 750 UAH more than the direct messages as revenue.

These results are controversial, and from the first glance, it can be concluded that the triggered messages showed better efficiency compared to the direct messages. In total for the “New members” segment, there were 6 different direct messages sent. Some of these messages were not delivered because of the deliverability problems. As it was mentioned in the theoretical part, push notifications have a deliverability of 50-60% and there are different factors that can possibly influence the deliverability. In the case of the “New members” segment, users had the following issues with the deliverability: the account was deleted, and notifications were turned off. Triggered messages from this segment had the same deliverability problems, but despite that, they gave 15% more orders than the direct messages. For the New Members Churn cohort after the split of the segment into 2 equal parts the results are represented on the Table 13.

Table 13.

*Messages' efficiency for Members Churns cohort*

Members Churn	Users	Orders	Revenue UAH	Orders conversion
Direct messages	77 250	700 546	175 136 500	806%
Triggered messages	77 250	850 601	212 650 250	1001%

Source: Compiled by the author.

The results of the performance of the direct and triggered messages for “Members Churn”. The sample size differs from the “New members” segment because of the nature of the food delivery business. The size of the sample is 150 055 combined, and since it was divided accordingly before the test 77 250 users received direct messages and 77 250 users received triggered messages.

The total number of orders from direct messages is 700 546, which is less than from the triggered messages where 850 601 orders were created. This difference in the segment size and number of orders is because some of the users might order 2 and more times. Revenue from direct messages is 175 136 500 UAH and it's lower compared to the triggered messages where revenue is 212 650 250. Orders conversion for direct messages is 806% and compared to triggered messages is lower, where the conversion rate is 1001%. Order count as fulfilled if the user does targeted action within 60 days after receiving the message. This

exact number of days was chosen based on the lifetime of the push notifications and RFM segmentation.

The results of both experiments are surprising and controversial, and they require further investigation. A possible explanation can be that in both cases triggered messages showed better results compared to direct messages due to several factors: triggered messages appeared to be more suitable because they were more tailored for the users. Since all triggered messages were aiming to “push” the user to do the targeted activities such as first order, and order to be brought back into the application. Triggered messages also are being sent at different times from 10:00 to 21:00 and compared to the direct messages in the case of Rocket they don't have a set time. Some companies use the set time for the messages, but in the case of the food delivery industry, the team decided to move on without a fixed time for the messages.

In theory, direct messages are supposed to be more suitable and tailored but the practice has shown that since the application doesn't track the users all the time it's very difficult to catch the right moment for the direct messages. And in the case of direct messages for this exact case, setting the time for the campaign means more guessing the right time, rather than proposing a value proposition at the right moment.

Human mistake is one of the factors that could influence the results of the experiment. Since the direct messages are being prepared as unique campaigns every time there is a possibility to have additional mistakes. Such mistakes can be the wrong time, mistakes in the copywriting, mistakes with the deep link generation, segmentation mistakes. Compared to the triggered messages, such campaigns require more time to prepare because they must be double-checked every time before the actual sending.

Previous studies were focused on the engagement with the app in the next 24 hours (Bidargaddi, Pituch, Maaieh, Short & Strecher, 2018), Spending and redemption (Suzanne, Bronnenberg & Gijsbrechts, 2021), Short-term and longer-term effects of mobile promotions (Park, Park & Schweidel, 2018) Consumer responses to mobile ads (Andrews, Luo, Fang & Ghose, 2015) but in these studies, the message type was not specified so there is no possibility to compare the results on this experiment to previous studies because they all lack of this data.

After comparison of the efficiency of direct and triggered messages, it can be concluded that triggered messages showed better efficiency of two cohorts of the users compared to the direct messages. Although, triggered messages outperformed direct messages on these two cohorts, investigation of the efficiency on different cohorts is needed.

This experiment allowed to analyze the data and compare two methods of the communication with the customers. The results were controversial, but nevertheless it can be seen that triggered messages showed more orders and gave more revenue compared to direct ones.

As a suggestion for the Rocket company, CRM department can conduct more experiments and analyze how different customer segments behave when they receive different messages. Depending on the strategy and goals, CRM department can adjust their communication flows in order to reach the best performance for their customers. Adjusting the performance can rely on the similar experiments but for different customer segments.

### **Conclusion**

Communication with the customer is a complicated process involving many different approaches. Depending on the market where a company is operating, marketing departments apply and adjust different sales funnel theories, building unique and complicated customer journeys. Every sales funnel theory has both pros and cons and is applicable to its own sector or market. There is no single approach that all companies can use to reach the customers and built long-term relationships with them. Communication and customer engagement are difficult processes, which require time and resources to be investigated and tailored for every segment of the customers in the company. There is no one straight answer on what is efficient communication with the customer or what can be treated as an efficient message. Different studies measure efficiency from different angles.

Through the sales funnel or customer journey, the customer is being contacted by the company using different communication channels. Depending on the environment and market where the company operates marketers are choosing the best suitable communication channels. Companies are using mixed online and offline communication channels throughout the customer journey. This allows them to come up with suitable marketing strategies for the market. When the company acquires a customer they are trying to “push” the customer to make the first order or use their service for the first time. If the company operates in the field where they are aiming only for one-time purchases from the customer then they are using more simple sales funnels and customer journeys. Companies who are striving for long-term relationships with the customers are aiming to create complicated and efficient sales funnels that are aiming for customer retention and working with the customer churn as well as efficient acquisition stage.

Customer engagement and stimulation are done by using tools of direct marketing, in precise: direct and triggered messages. When the company is choosing direct communication with the customer by using direct messages, it involves research about the customer to make the message more tailored and suitable for the customer. Triggered messages are used to send a response to the customer’s actions on the webpage or in the application. Both messages have their pros and cons and which to use is completely up to the company and the field where the company is operating. There is no single approach in marketing strategies that the marketers should use only one kind of message. To build the most effective communication chain of messages, marketers use difficult combinations of multichannel messages to increase customer engagement. In the case of Rocket, the CRM department is using 4 main channels: mobile push, email, SMS, and Viber.

Previous studies have introduced KPIs for measurements of efficiency and were distributed along with different fields. The lack of studies on the efficiency of the different mobile messages can be seen from the gap in studies on this topic. Previous studies have one common lack – comparison of the efficiency of direct and triggered messages. Authors measure the efficiency of the messages but without a clear split between direct and triggered messages. This research closes the gap in studying the efficiency of the direct and triggered messages for the acquired customers in the two segments “New members” and “Members churn”.

The experiment was done successfully on two customer segments “New members” and “Members churn”. Even though the results of the experiment are controversial, they still show a significant difference in the efficiency of the direct and triggered messages. RFM segmentation used by the Rocket CRM department allows them to work more efficiently with the acquired customers by splitting them into different segments. Conducting the test on two different segments showed different results and underlines the importance of testing and stimulating users in different ways to come up with a more tailored customer engagement process.

This study brings valuable contribution for Rocket company and for the academic research field. Since previously studies were not focused separately on different customer segments and didn't divide the messages on direct and triggered. Rocket company by its nature is more focused on the triggered messages and this experiment allowed to see the clear difference on the profitability of direct and triggered messages for segments “New members” and “Members churn” in the food delivery market. Operating in the food delivery market allowed to conduct experiment on the big segment size and with frequent communication to the users.

As suggestions for future studies, different customer segments can be investigated and compared. This study covers two segments of the customers, but there are others that require detailed attention. In the food delivery industry based on the two segments experiment there is space for the automatization of the workflows, but in the cases when the companies have different business models, and sales funnels their results might be different from this study. Further studies can be focused on the AI and ML-based triggered messages and compare them to the direct communications with the users.

### References

1. Aktas M. (2021). AAARRR: Everything You Need to Know about Pirate Metrics & Funnel. Retrieved from <https://userguiding.com/blog/pirate-metrics-aaarr/>
2. Andrews M., Luo X., Fang Z., Ghose A., (2015). Mobile Ad Effectiveness: Hyper Contextual Targeting with Crowdedness. *Marketing Science*, Vol.35, 2.
3. Arora, N., Dreze, X., Ghose, A., Hess, J. D., Iyengar, R., & Jing, B., et al (2008). Putting one-to-one marketing to work: Personalization, customization, and choice, *Marketing Letters*, 19(3-4), 305-321.
4. Bayunitri B., Putri S. (2016). The Effectiveness of Visualization the Logo towards Brand Awareness. *Procedia - Social and Behavioral Sciences*, 219, 134-139.
5. Bernstein, M.S., Bakshy, E., Burke, M., & Karrer, B. (2013). Quantifying the invisible audience in social networks. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*.
6. Bidargaddi N., Pituch T., Maaieh H., Short C. & Strecher V. (2018). Predicting which type of push notification content motivates users to engage in a self-monitoring app. *Preventive Medicine Reports*, 11, 267 - 273.
7. Bolt food. (2022). Bolt food. Retrieved from <https://food.bolt.eu/ru-RU>
8. Brooke K. (2021). What Is a Sales Funnel? (And How Is It Changing?). Retrieved from <https://www.salesforce.com/blog/what-is-a-sales-funnel/>
9. Corfman K. (1987). Comparability and Competition Among Consumer Products: a Typology For Specifying Hierarchical Comparison Structures, in NA, *Advances in Consumer Research* (14), 29-31.
10. eSputnik. (n.d.). All CDP Features Pricing Plans. Retrieved from <https://esputnik.com/en/segmentation-price>
11. Esputnik. (n.d.). How to Create a Web Push Notification. Retrieved from <https://esputnik.com/en/support/how-create-and-manage-web-push-notifications>
12. Ekhlassi A., Maghsoodi V., Mehrmanesh S. (2012). Determining the Integrated Marketing Communication Tools for Different Stages of Customer Relationship in Digital Era. *International Journal of Information and Electronics Engineering*, 2(5).
13. Gao C., Zeng J., Lo D., Xia X., King I., & Lyu M. (2022). Understanding in-app advertising issues based on large scale app review analysis. *Information and Software Technology*, 142, pp. 1-13.
14. GDPR. (n.d.). GDPR. Retrieved from <https://gdpr.eu>

15. Geysler W. (2021). How to Create a Powerful Marketing Funnel: A Step-by-Step Guide. Retrieved from <https://influencermarketinghub.com/how-to-build-a-marketing-funnel/>
16. Ghavami, A., & Olyaei, A.J. (2006). The impact of CRM on customer retention. Retrieved from <https://www.divaportal.org/smash/get/diva2:1023082/FULLTEXT01.pdf>
17. Glovo. (2022). Glovo. Retrieved from <https://glovoapp.com/ua/ru/>
18. Goic M., Rojas A., Saavedra I. (2021). The Effectiveness of Triggered Email Marketing in Addressing Browse Abandonments, *Journal of Interactive Marketing*, 55, 118–145.
19. Gustafson T., Chabot B. (2007). Brand Awareness. *Cornell Maple Bulletin*, 105, n.d.
20. Halvorsrud R., Kvale K., Følstad A. (2016). Improving service quality through customer journey analysis. *Journal of Service Theory and Practice*, Vol. 26, No. 6, pp. 840-867.
21. Infobip. (n.d.). Design and Deliver Emails Through API or Web Interface on a Single, Integrated platform. Retrieved from <https://www.infobip.com/email>
22. Jayaram D., Manrai A., Manrai L. (2015). Effective use of marketing technology in Eastern Europe: Web analytics, social media, customer analytics, digital campaigns, and mobile applications. *Journal of Economics, Finance and Administrative Science*, Vol.20, pp. 118-132.
23. Krishna A., Cian L., Sokolova T. (2016). The power of sensory marketing in advertising. *Current Opinion in Psychology*, 10, pp. 142-147.
24. Lemon, K. N., & Verhoef, P. C. (2016). Understanding Customer Experience Throughout the Customer Journey. *Journal of Marketing*, 80(6), pp. 69–96.
25. Leninkumar V. (2017). The Relationship between Customer Satisfaction and Customer Trust on Customer Loyalty. *International Journal of Academic Research in Business and Social Sciences*, Vol. 7, No. 4, pp. 450-465.
26. Lina C., Bowman D. (2022). The impact of introducing a customer loyalty program on category sales and profitability. *Journal of Retailing and Consumer Services*, 64.
27. Labanauskaitė, D., Fiore, M., & Stašys, R. (2020). Use of E-marketing tools as communication management in the tourism industry. *Tourism Management Perspectives*, 34, pp. 100-652.
28. Mailchimp. (n.d.). Marketing smarts for growing businesses. Retrieved from <https://mailchimp.com/pricing/marketing/>
29. Mister.am. (2022). Mister.am. Retrieved from <https://misteram.com.ua>

30. Mullin R. (2002). *Direct Marketing: A Step-by-step Guide to Effective Planning and Targeting*. London: Kogan Page Limited.
31. Murphy D. (2018). Marketing Communications Channel Strategy, retrieved from <https://masterful-marketing.com/marketing-communications-channel-strategy/>
32. Now app. (2022). Download the Now app. Retrieved from <http://noww-app.com/>
33. Park C., Park Y. & Schweidel D. (2018). The effects of mobile promotions on customer purchase dynamics. *International Journal of Research in Marketing*, 35, pp. 453-470.
34. Perez S. (2021). *App stores saw record 218 billion downloads in 2020, consumer spend of \$143 billion*. Retrieved from <https://techcrunch.com/2021/01/13/app-stores-saw-record-218-billion-downloads-in-2020-consumer-spend-of-143-billion/>
35. Ranaweera C. (2007). Measurement and Analysis for Marketing. *Journal of Targeting*, 15(2), pp. 113–120.
36. Reichheld, F. F. & Sasser, W. E. (1990). Zero defections: Quality comes to services. *Harvard Business Review*, 68, pp. 105–111.
37. Roland T. & Peter C. (2005). Optimizing the Marketing Interventions Mix in Intermediate-Term CRM, *Marketing Science*, 24(3), pp. 477–89.
38. Rosenbaum M., Otalora M. & Ramírez G. (2017). How to create a realistic customer journey map. *Business Horizons*, 60, pp. 143-150.
39. Rossi, P. E., McCulloch, R. E., & Allenby, G. M. (1996). The value of purchase history data in target marketing, *Marketing Science*, 15(4), pp. 321–340.
40. Statista. (2021). Customer relationship management (CRM) software revenue worldwide from 2010 to 2020. Retrieved from <https://www.statista.com/statistics/294537/customer-relationship-management-crm-software-revenue-worldwid/>
41. Statista. (2021). Online Food Delivery. Retrieved from <https://www.statista.com/outlook/dmo/eservices/online-food-delivery/worldwide>
42. Suzanne M., Bronnenberg B. & Gijbrecchts E. (2021). How push messaging impacts consumer spending and reward redemption in store-loyalty programs. *International Journal of Research in Marketing*
43. Teamleader. (2021). What is a sales funnel and how can you use one?. Retrieved from <https://www.teamleader.eu/blog/sales-funnel>
44. Technopedia. (n.d). Deep linking. Retrieved from <https://www.techopedia.com/definition/23356/deep-linking>
45. Vafainia S., Breugelmanns E. & Bijmolt T. (2019). Calling Customers to Take Action:

The Impact of Incentive and Customer Characteristics on Direct Mailing Effectiveness, *Journal of Interactive Marketing*, 45, pp. 62–80.

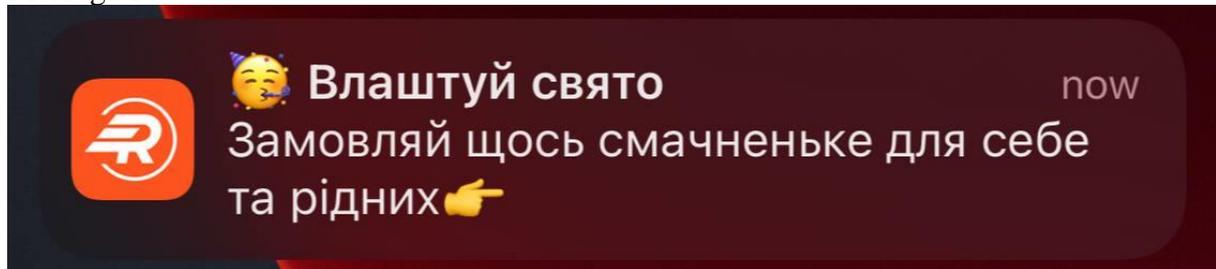
46. Wang K., Zhou S. & Yeung J. (2005). Mining customer value: From association rules to direct marketing, *Data Mining and Knowledge Discovery*, 11, pp. 57–79.
47. Weber, D., Shirazi, A.S. & Henze, N. (2015). Towards smart notifications using research in the large. In: Proceedings of the 17th International Conference on Human Computer Interaction with Mobile Devices and Services Adjunct (Mobile HCI), pp. 1117–1122.
48. Wolford B. (n.d.). How does the GDPR affect email?. Retrieved from <https://gdpr.eu/email-encryption/>
49. Weinberg B., Parise S. & Guinan P. (2007). Multichannel marketing: Mindset and program development. *Business Horizons*, 50(5), pp. 385 - 394.
50. Zephaniah C., Ogba I. & Izogo E. (2020). Examining the effect of customers perception of bank marketing communication on customer loyalty. *Scientific African*, 8

## Appendices

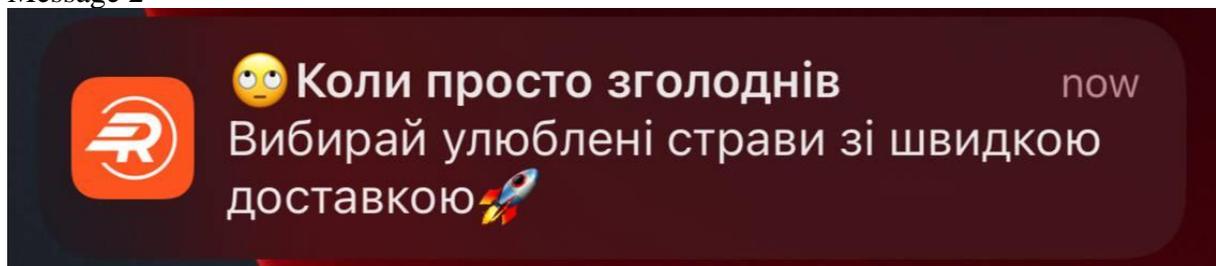
## Appendix A

## Direct messages for the New Members' segment

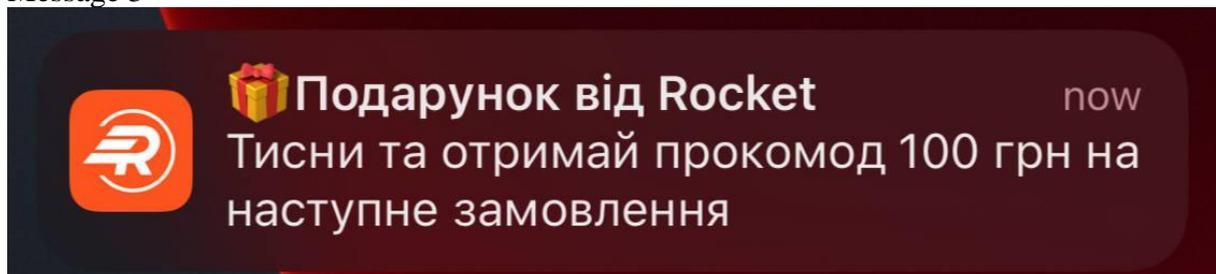
## 1. Message 1



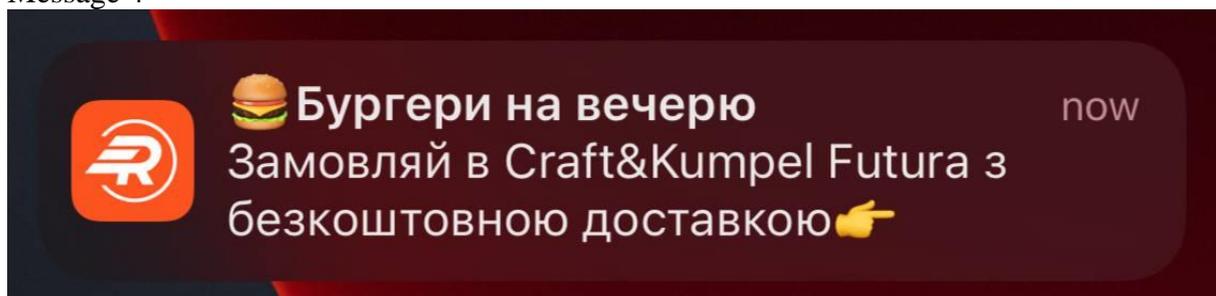
## 2. Message 2



## 3. Message 3



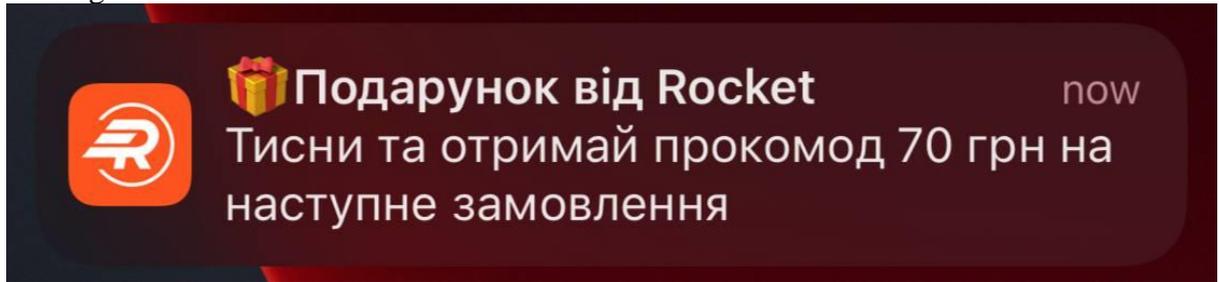
## 4. Message 4



## 5. Message 5



## 6. Message 6

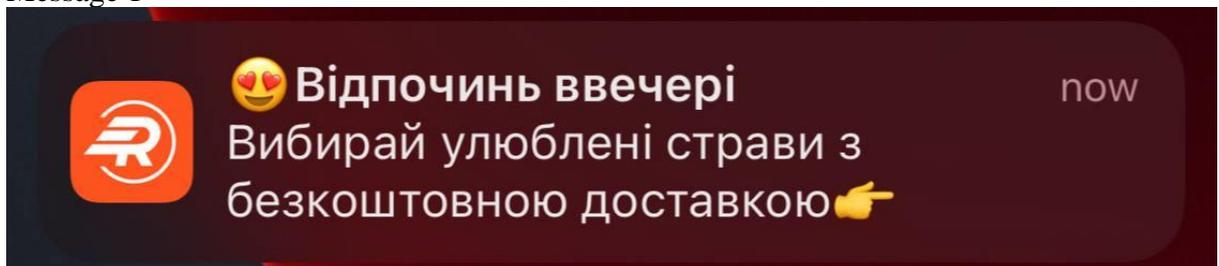


Source: Compiled by the author

**Appendix B**

Triggered messages for the New members' segment

## 1. Message 1



## 2. Message 2



Source: Compiled by the author

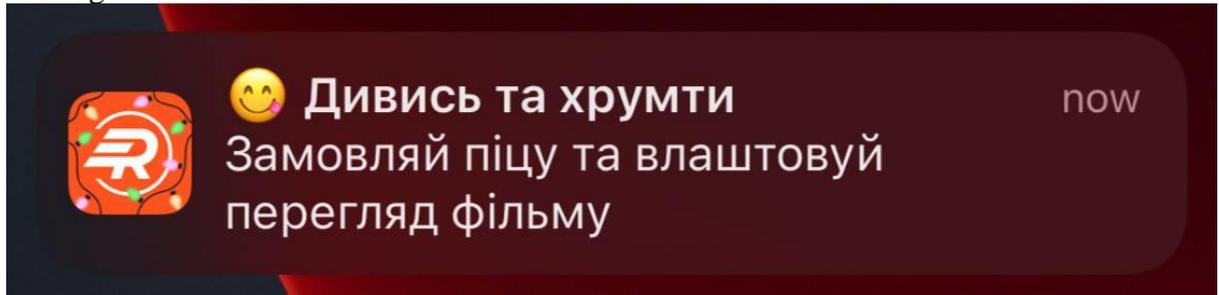
**Appendix C**

Direct messages for Members churn segment

## 1. Message 1



## 2. Message 2



## 3. Message 3



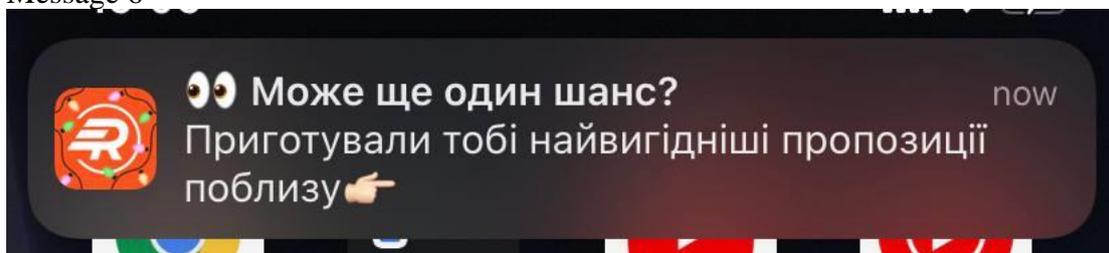
## 4. Message 4



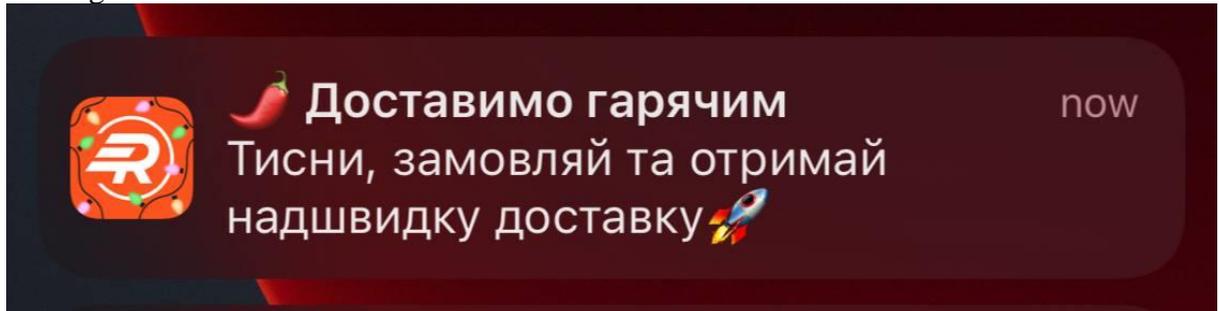
## 5. Message 5



## 6. Message 6



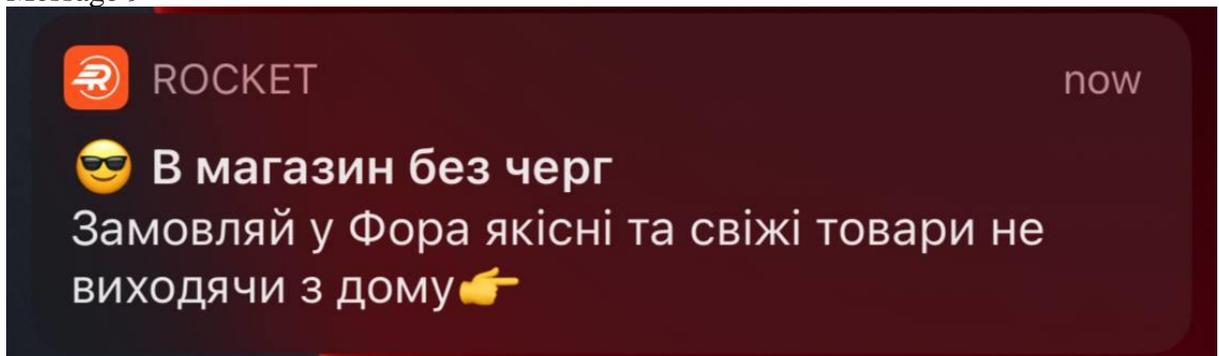
## 7. Message 7



## 8. Message 8



## 9. Message 9

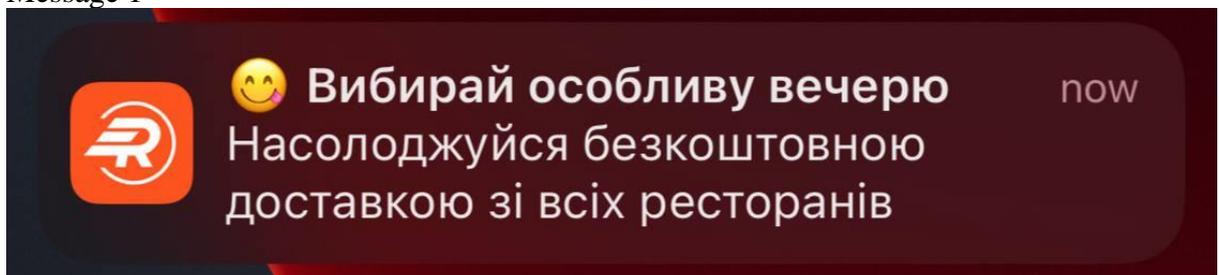


Source: Compiled by the author

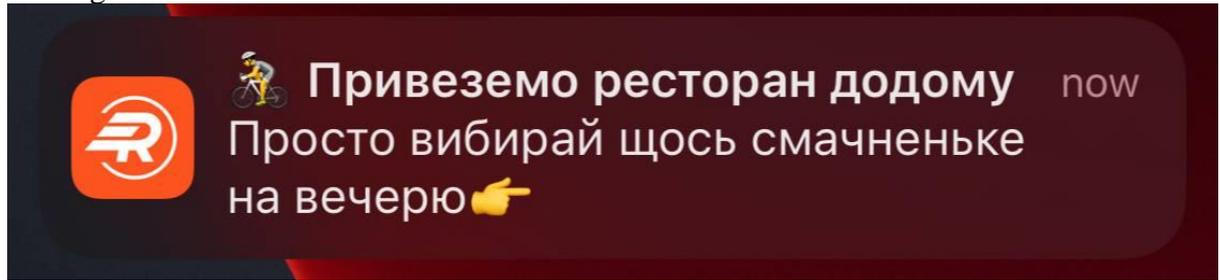
### Appendix D

Triggered messages for Members churn segment

## 1. Message 1



2. Message 2



Source: Compiled by the author

## Resümee

### **Otse ja käivitatud mobiilsõnumite efektiivsus müügilehtri erinevates etappides Rocketi eeskujul**

Pavlo Nedvyga

Seoses erinevate internetiteenuste kiire kasvuga laaditakse igal aastal alla üha rohkem mobiilirakendusi. Kuna rakendusi on palju ja kohati võivad osad jääda kahesilmavahele, siis siin tulevadki sisse turundajad. Turundajate ülesanne on kliendile meelde tuletada, et klient kasutaks mobiilirakendust, selleks kasutavad nad kahte moodi sõnumeid: otseseid ja käivitatavaid sõnumeid.

See uuringu eesmärk on võrrelda näitab omandatud klientide stimuleerimise tähtsust klienditeekonnal/müügilehtril. Autor otsustas sellele teemale keskenduda, kuna puudub teave otseste ja käivitatud sõnumite tõhususe ning kliendi kaasamise kohta klienditeekonna erinevatel etappidel. Sellest tulenevalt püstitas autor 6 uurimisküsimust.

Kliendi kaasamine on keeruline protsess, mis nõuab aega ja ressursse, et uurida ja kohandada iga kliendisegmenti ettevõttes. Ei ole ühest vastust, mis on tõhus suhtlemine kliendiga või mida saab käsitleda tõhusa sõnumina. Erinevad uuringud mõõdavad efektiivsust eri nurkade alt.

Müügilehtri ehk klienditeekonna erinevate suhtluskanalite kaudu võtab ettevõtte kliendiga ühendust. Sõltuvalt keskkonnast ja turust, kus ettevõtte tegutseb, valivad turundajad kõige sobivamad suhtluskanalid. Ettevõtted kasutavad kogu klienditeekonna jooksul segatud võrgu- ja võrguühenduseta suhtluskanaleid. See võimaldab neil turu jaoks sobivaid turundusstrateegiaid välja pakkuda. Kui ettevõtte omandab kliendi, üritab ta klienti "suruda" esimest tellimust tegema või nende teenust esimest korda kasutama. Kui ettevõtte tegutseb valdkonnas, kus sihiks on vaid ühekordsed ostud kliendilt, siis kasutatakse lihtsamaid müügilehtreid ja klienditeekondi. Klientidega pikaajaliste suhete poole püüdlevad ettevõtted püüavad luua keerulisi ja tõhusaid müügilehtreid, mille eesmärk on hoida kliente ja töötada nii klientide kaotuse kui ka tõhusa hankimise etapiga.

Kliendi kaasamine ja stimuleerimine toimub otseturunduse vahendite abil, täpsemalt: otse- ja käivitatud sõnumid abil. Kui ettevõtte valib otsesuhtluse kliendiga otsesõnumite abil, hõlmab see kliendi kohta uurimistööd, et muuta sõnum oleks paremini kohandatud vastavalt kliendile. Käivitatud sõnumeid kasutatakse vastuse saatmiseks kliendi tegevusele veebilehel või rakenduses. Mõlemal sõnumil on oma plussid ja miinused ning mida kasutada, on täielikult ettevõtte ja ettevõtte tegevusvaldkonna enda otsustada.

Turundusstrateegiates pole ühtset lähenemist, et turundajad peaksid kasutama ainult ühte

tüüpi sõnumit. Kõige tõhusama sõnumite kommunikatsiooniahela loomiseks kasutavad turundajad mitmekanaliliste sõnumite keerulisi kombinatsioone, et suurendada klientide kaasamist. Rocketi puhul kasutab CRM-i osakond 4 peamist kanalit: mobiilne lüke, e-post, SMS ja Viber.

Varasemad uuringud on tutvustanud tõhususe mõõtmiseks KPI-sid ja jaotati erinevate valdkondade vahel. Erinevate mobiilisõnumite tõhusust käsitlevate uuringute puudumine ilmneb selleteemaliste uuringute ajalisest lüngast. Varasematel uuringutel on üks ühine puudus – otseste ja käivitatud sõnumite efektiivsuse võrdlus. Autorid mõõdavad sõnumite tõhusust, kuid ilma selge jaotuseta otseste ja käivitatud sõnumite vahel. See uuring katab lünga omandatud klientide otseste ja käivitatud sõnumite tõhususe uurimisel kahes segmendis "Uued liikmed" ja "Liikmete lahkumine".

Katse viidi edukalt läbi kahes eelmainitud kliendisegmendis. Kuigi katse tulemused on vastuolulised, näitavad need siiski olulist erinevust otseste ja käivitatud sõnumite tõhususes. Rocket CRM-i osakonna kasutatav RFM-i segmenteerimine võimaldab neil omandatud klientidega tõhusamalt töötada, jagades need erinevatesse segmentidesse. Testi läbiviimine kahes erinevas segmendis näitas erinevaid tulemusi ja rõhutab, kui oluline on testida ja ergutada kasutajaid erinevatel viisidel, et jõuda paremini kohandatud klientide kaasamisprotsessini.

See uuring annab väärtusliku panuse Rocketi ettevõttele ja akadeemilisele uurimisvaldkonnale. Kuna varem ei keskendunud uuringud eraldi erinevatele kliendisegmentidele ning ei jaganud sõnumeid otsestele ja käivitavatele. Rocketi ettevõttele on oma olemuselt rohkem keskendunud käivitatud sõnumitele ja see eksperiment võimaldas näha selget vastuolu otseste ja käivitatud sõnumite kasumlikkuses toiduainete kohaletoomimise turul olevate elementide "Uued liikmed" ja "Liikmed lahkuvad" puhul. Toidu kohaletoomimise turul tegutsemise võimaldas läbi viia eksperimente suure segmendi suuruse ja kasutajatega tiheda suhtlemisega.

Soovitustena tulevaste uuringute jaoks saaks uurida ja võrrelda erinevaid kliendisegmente. See uuring hõlmas kahte klientide segmenti, kuid on ka teisi, mis nõuavad üksikasjalikku tähelepanu. Kahe segmendi eksperimentil põhinevas toidutarnetööstuses on ruumi töövoogude automatiseerimiseks, kuid juhtudel, kui ettevõtetel on erinevad ärimudelid ja müügilehtrid, võivad tulemused erineda käesolevast uuringust. Edasised uuringud võivad keskenduda AI- ja ML-põhiste käivitatud sõnumitele ja võrrelda neid otsesuhtlusega kasutajatega.

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*Pavlo Nedvyga*

*12/05/2022*