

**Czech University of Life Sciences Prague**  
**Faculty of Economics and Management**  
**Department of Management**



**Diploma Thesis**

**Use of agile marketing and social media to enhance website  
traffic volume and social networks account frequency exposure  
for SME's**

**Ravoeva Maria**

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# CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Economics and Management

## DIPLOMA THESIS ASSIGNMENT

Maria Ravoeva

Economics Policy and Administration  
Business Administration

Thesis title

**Use of agile marketing and social media to enhance website traffic volume and social networks account frequency exposure for SME's**

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### **Objectives of thesis**

The objective of the thesis is to suggest agile marketing and social media activation in order to enhance website traffic volume and Social Networks account frequency exposure for SME's.

### **Methodology**

"Literature Review" part will be elaborated based on relevant secondary data analysis and synthesis.

"Analysis" part will result from relevant secondary data and original primary reconnaissance combination.

Recommended structure:

1. Introduction
2. Goals and Methodology
3. Literature Review
4. Analysis
5. Results and Discussion
6. Conclusions
7. References
8. Appendices.

**The proposed extent of the thesis**

60 – 80 pages

**Keywords**

Social media marketing, agile marketing, strategy, brand awareness, SMEs, audience, advertising, trend, business, promotion, Google analytic

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**Recommended information sources**

BRADLEY, N. *Marketing research : tools and techniques*. Oxford: Oxford University Press, 2007. ISBN 978-0-19-928196-1.

HAWKINS, D I. – CONNEY, K A. – BEST, R J. *Consumer behavior : implication for marketing strategy*. Homewood: Irwin, 1989.

KELLER, K L. – KOTLER, P. *Marketing management*. Harlow: Pearson, 2015. ISBN 9781292092621.

MCCARTHY, J. – PERREAUULT, W. *Basic marketing*. Boston: Irwin, 1990.

POPOVIĆ, K. *Satelite marketing : using social media to create engagement*. Boca Raton: CRC Press, 2016. ISBN 978-1-4822-5614-7.

QUAN-HAASE, A. – SLOAN, L. *The SAGE handbook of social media research methods*. Los Angeles: SAGE Reference, 2017. ISBN 978-1-4739-1632-6.

SCOTT, D M. *The new rules of marketing & PR : how to use social media, online video, mobile applications, blogs, news releases, & viral marketing to reach buyers directly*. Hoboken: John Wiley & Sons, 2011. ISBN 978-1-118-02698-4.

SCHIFFMAN, L G. – WISENBLIT, J. – KANUK, L L. *Consumer behavior*. Boston: Pearson Prentice Hall, 2010. ISBN 978-0-13-700670-0.

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## **Declaration**

I declare that I have worked on my diploma thesis titled "**Use of agile marketing and social media to enhance website traffic volume and social networks account frequency exposure for SME's**" by myself and I have used only the sources mentioned at the end of the thesis. As the author of the diploma thesis, I declare that the thesis does not break copyrights of any person.

In Prague on 04.04.2020

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**Ravoeva Maria**

## **Acknowledgement**

I would like to express my sincere gratitude to my thesis advisor **Ing. Michal Chocholoušek** whose support, mentoring, useful comments and engagement through the process were a crucial element of my diploma work. I would like to thank all the lectures I attended during the period of study.

# **Využití agilního marketingu a sociálních médií pro zvýšení objemu provozu na webu a na sociálních sítích vystavují frekvenci vystavení malým a středním podnikům**

## **Abstrakt**

Tato práce je aktuální díky faktu, že marketing sociálních médií se stal jedním z hlavních marketingových trendů. Tato práce si klade za cíl analyzovat pojem marketingu sociálních médií, jeho využití v marketingu obecně a nasazení agilního marketingu v praxi. Strategický rámec agility umožňuje malým a středním podnikům přizpůsobit svou agilitu na základě současných schopností a zdrojů. Přístup Agilního marketingu podporuje malé a střední podniky, v tom aby se staly aktivnějšími a efektivněji využívaly potenciál marketingu. Je důležité, aby podnikatelé / majitelé malých a středních podniků měli jasnou představu o tom, co agilní marketing představuje a aby věděli, jak agilní metody uplatnit ve svých marketingových činnostech.

Na základě aktuálních výzkumných prací se tato práce zaměřuje na analýzu korelace mezi „oblíbenými“ sociálními médii, celkovým provozem webových stránek a nákupními záměry návštěvníků webových stránek a sociálních médií. Dále se tato práce zabývá dostupnými studiemi o agilním marketingu a strategiích sociálních médií, shromažďuje data z kampaní v sociálních médiích a akcentuje povahu agilní metodiky pro uspokojení potřeb malých a středních podniků. Výsledkem této práce jsou doporučení pro malé a střední podniky, jak efektivně aplikovat metody Agilního marketingu ve svých marketingových strategiích v oblasti sociálních médií.

**Klíčová slova:** Marketing sociálních médií, agilní marketing, strategie, malé a střední podniky, reklama, podnikání, propagace, Google Analytics

# **Use of agile marketing and social media to enhance website traffic volume and social networks account frequency exposure for SME's**

## **Abstract**

The relevance of the topic of this thesis lies in the fact that social media marketing has become one of the main marketing trends. This thesis sets out to analyse the concept of social media marketing, its usage, and the deployment of agile in marketing practice. The agility strategic framework enables SMEs to customise their agility based on current capabilities and resources. The Agile Marketing approach stimulates SMEs to become more proactive and use marketing capabilities more efficiently. It is important for the entrepreneurs/SMEs owners to have a clear picture of what Agile in the marketing context implies and to know how to apply the agile methods in their marketing activities.

Based on the research papers, this thesis undertakes an analysis of the correlation between social media “likes”, the overall website traffic and the purchasing intentions of the website and social media visitors. Regarding the methodology, this thesis reviews the available studies of agile marketing and social media strategies, collects the data from social media campaigns and adopts the nature of Agile Methodology to meet the needs of SMEs. Finally, this thesis provides the recommendation for SMEs how to apply the Agile methods in their social media marketing strategies effectively.

**Keywords:** Social media marketing, agile marketing, strategy, SMEs, advertising, business, promotion, Google Analytics

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## List of abbreviations

GA: Google Analytics.....	2,17
KPI : Key Performance Indicator.....	38,57,58
PBIs : Product Backlog items.....	22,26,29
PO : Product Owner.....	23
SME : Small and Medium Enterprise.....	2,69
SMM : Social Media Marketing.....	7,8,65,70
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SNS : Social Networking Sites .....	2
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WWW : World Wide Web .....	1,10,18,56
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# 1 Introduction

In twenty-first-century marketing have faced revolutionary changes in the process of communication with client, as well as organizational transformation. Technology adoption processes have forced companies to reshape their entire working process to keep up in a highly competitive environment. While new technologies are becoming available marketing will be poised significant changes in its content. Digital technologies have been integrated with marketing activities continuously and disruptively to reach Marketing 4.0, aggressive global competition, highly demanding customers, the rapid development of new technologies were the factors, which stimulated this transformation. Nowadays, customers are not only looking to satisfy their basic needs to buy a product, but they also want to satisfy their values, being a part of the production process. The growing popularity of the internet and the proliferation of social media networking (SMN) provide opportunities to online advertisers and marketers to directly interact with customers. Important to notice that the media space has now changes its focused from product-centric to consumer-centric media exposure (Moriuchi, 2019). The current generation of the world wide web (WWW) WEB 2.0 allows collaborating with customers better by using blogs, forums, or social networking sites (SNS). It also allows increasing brand recognition or product awareness or to drive sales with marketing campaigns.

With Agile becoming more popular, many companies have adopted it, because it allows to response rapidly to changes which business needs. Agile is an iterative and collaborative process of managing team and projects in order to achieve objectives. (Yadav, 2015). Agile methodology has a lot of advantages over traditional methods to run projects and the most valuable being reduced product time delivery and faster customer feedback which leads to customer satisfaction.

The rapid development in information technology and customer experience has changed and become more engaging and interactive. With the improved technologies and growth of digital marketing and social media, agile became one of the most adopted methodologies. Applying Agile approach businesses can quickly adapt to constantly market changes in a productive manner, balances the need for speed, hit the targets and at the same time pursue quality.

## **2 Objectives and Methodology**

### **2.1 Objectives**

The general objective of this thesis is to evaluate the use of agile marketing and social media activation to enhance website traffic volume as well as to increase the frequency exposure of social media accounts of SMEs (Small and Medium Enterprises).

As specific objectives, this thesis aims to:

- demonstrate how an agile methodology in conjunction with social media strategies can improve the design and execution of social media marketing campaigns.
- gather and analyse quantitative data by using social media statistical tools and Google Analytics.
- formulate recommendations on the use of agile marketing and social media for SMEs.

### **2.2 Methodology**

The methodological approach of this study is based on a combination of three phases. The first research method is literature research focused on relevant literature, including theoretical background related to social media channels, Marketing 4.0 and Agile Methodologies. The second one is quantitative data analysis provided by a questionnaire survey, which is going to be divided into two parts: personal information and social media usage; and statistical analysis from Google Analytics (GA) and social media statistical tools of data generated by the campaigns. The third part will be dedicated to the implementation of Agile Methodology to fine-tune social media campaigns and to identify opportunities or issues during campaigns.

## **3 Literature review/ Theory Part**

A literature review was done by examining books, articles and research papers that the author of this thesis considered as relevant. All sources mentioned below were published

by accredited scholars. Literature which was chosen by the author supports the research topic with the context of previous researches and academic findings.

## **3.1 Evolution of Marketing**

### **3.1.1 Marketing 1.0**

The first stage of the marketing is dated during the industrial age. In this era, the marketing was basically focused on selling products, companies believed that if they developed a quality product, it would sell itself. Businesses focused primarily on manufacturing, without considering the needs and wants from the target market. Companies were not focused on the real needs of the market. During that period marketing did not play a large role and play a role in a form of billboards and print advertising. (Weber, 2019). This can be defined as the Marketing 1.0, which was a product-centric approach, one-way, push format that was used for decades.

### **3.1.2 Marketing 2.0**

After the industrial revolution, technological progress speeded up product production. The competition was more intense, since people bought only the essential products and supply often exceeded demand. This situation drove companies to use advertising heavily to push their products into the market. Since products production were not based on customers' needs, companies have to persuade to buy their products. It was based on manipulation and interruption, interrupting what people were doing and to manipulating them to buy something. This is Marketing 2.0 or also called the company-centric era. The customer was one-size-fits-all, having no power or voice. This established the one-way relationship between customers and companies.

### **3.1.3 Marketing 3.0**

Beginning approximately in the mid-20th century, this period was a fundamental shift from the needs of the seller to those of the buyer. Companies started developing products which satisfy customer's needs. Market research began to play an important role, helping companies to identify products which actually wanted by customers. New tactics, such as broadcast advertising, were used to capture consumers' attention. The strategy was

designed to attract as much mass's attention as possible, attempting to convince people to buy products.

Attract new customers was more expensive than keeping current ones, companies began understanding the value of relationship and brand loyalty. (Weber, 2019). Companies focused on building the relationship with customers, and big data emerged to help to understand better audience-specific segments. In Marketing 3.0 customers were transforming into human beings with hearts, spirits, and minds (Kotler, 2017). It took the form of direct marketing, such as physical mail, telemarketing, and emails. This marketing era is featured by the research about the needs and wants from the customers, to discover new target markets, which convert into beneficial opportunities.

### **3.1.4 Marketing 4.0**

According to (Kotler, 2017) Marketing 4.0 is a marketing approach that combines online and offline interaction between companies and customers. In the digital economy, digital interaction alone is not sufficient. In fact, in an increasingly online world, offline touch represents a strong differentiation. Marketing 4.0 also blends style with substance. While it is imperative for brands to be more flexible and adaptive due to rapid technological trends, their authentic characters are more important than ever.

The fourth industrialization is today a disputed topic for discussion of the entire progressive world. This is a new industrial revolution that will lead to automation and robotization of production: machines will no longer need human control in order to “communicate” with each other. Data collection and analysis technologies will reach a new level: it will be possible to process a significantly larger amount of information, which will bring to the business new opportunities to understand the target audience. These and other factors of Industry 4.0, already have an impact on many areas of human activity, including the field of marketing.

As moved into the 2000s massive power shift directly in the hands of consumers, who now have most important voice in the conversation. New channels with which communicate were brought into marketing. Engagement with customers become in essential aim. The path to engagement involves listening to customers, interact by having a dialogue with them and customize content to fit individual needs. (Weber, 2019).

Progressive technologies allow collect and analyse customers action and customize information. Amazon was the first using Artificial Intelligent/Machine learning to offer



suggestions of books and other products, on the other hand Google was the first to serve up customized advertise, Netflix use similar technologies to suggest movies or shows based on programs which customers watched.

This allow to move from using demographic to behavioural data. Behavioural data provides a clear understanding of who customers are. By using this data property will help to better understand and, therefore, better serve customers. The digital version of marketing involves interaction with potential customers through smartphones, phones, video games and various mobile applications. Digital marketing works by creating specific points of interactivity or interaction across different digital channels in order to build productive relationships with potential customers.

### **3.1.5 From Four A's to Five A's**

Nowadays in order to understand how people buy, advertisers adapted frameworks, which called AIDA: *aware, attitude, act and act again*. (Kotler, 2017). The simple process that customers go through when considering brands called the four A's framework. Customers learn about a brand (aware), evaluate the brand (attitude), make a decision whenever to purchase or not (act), and decided whether to repeat a purchase (act again). Nowadays, in the era of connectivity, A's were updated in order to accommodate changes.

- In pre-connectivity era, customers determined their own attitude toward the brand. In the connectivity era, the decisions and initial appeal of the brand influenced by social community. Personal decisions influenced by social decisions (Figure 1).
- In the connectivity era, loyalty plays an essential part and defined as the willingness of the customers to defend a brand. Customers might not only continuously purchase a brand but being willing to recommend a brand.
- Customers who need more information about a brand will search for it by connecting with one another, building ask-and-advocate relationships. Depending on the attitude shown during the conversation, the connection either weakens or strengthens the brand's initial appeal.

Based on new requirements four A's should be rewritten as five A's: aware, appeal, ask, act and advocate. (Kotler, 2017). In the new appeal phase, customers being aware of several brands starting processes all the messages they are exposed to. Memorable the brands

are more likely to be recall first, in the highly competitive industries, brand appeal must be stronger.

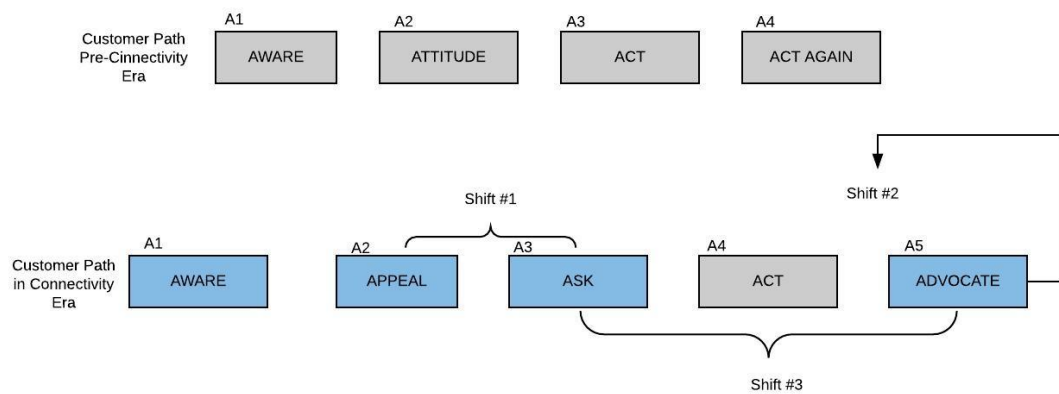


Figure 1: The Shifting Customer Path in a Connected World (Kotler, 2017)

On the other hand, at the asking stage, customers' decisions will be made based on conversations with others. It changes from individual to social. In order to make a decision customer can either call friends, make the research online on products' reviews or contact the sales center. Since customers have the option to go to multiple channels for more information, companies need to be present in the most popular channels (Figure 1). One of the biggest aspiration companies strive for is to have high level of customers' loyalty. Making their customers so happy that they not only purchase (and re-purchase) from them but also refer them to the friends and family and become an advocate for their product; this is the one of the biggest indicators of success. Companies must pay attention to marketing at the top level to ensure customers' satisfaction and retention. For some, companies it involves innovating new and exciting products, for others, excellent customer service, etc. The companies who take their most loyal customers for granted often lose them, and thus all the effort they invested in converting them through the marketing has gone to waste. The concept of Marketing 4.0 is to drive customers from awareness to advocacy. (Kotler, 2017).

## **3.2 Definition and characteristics of social media**

### **3.2.1 Web 2.0 and Social Networking**

To be able to understand social media it is important to understand what is WEB 2.0. The term Web 2.0 became better known in 2004 after O'Reilly Media Web 2.0 conference (Bernal, 2010). Generally, Web 2.0 refers to a set of social, architectural and design patterns, resulting from migration of business to the internet as a platform. One of the central drivers of Web 2.0 is two-way communication, Web 2.0 technologies allow and encourage participations of users (O'Reilly, 2005). Interaction between communities, people, software, and computers are important aspects of the set of websites and web-based applications (Kaushik, 2010). The new technology significantly increases the ability of people to interact with businesses and with each other. Web 2.0 created new challenges for businesses itself, but also it provides new opportunities to getting to know their markets needs and opinions, as well as staying in touch with and interact with customers in a direct and personalized way.

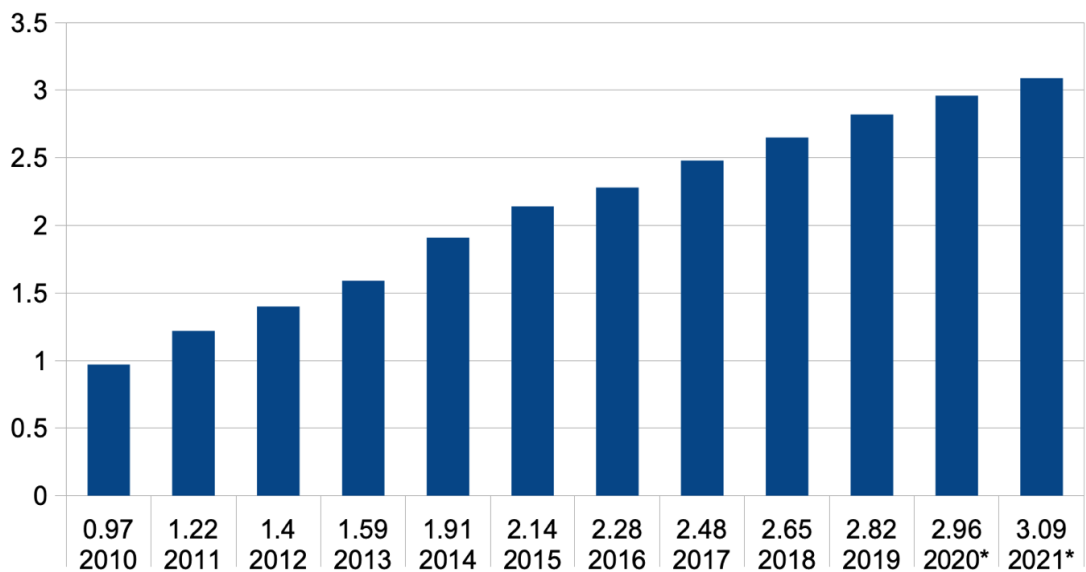
### **3.2.2 Social Media and Social media marketing (SMM)**

The Internet has changed peoples' lifestyle as well as peoples' habits. Social media is online tools and platforms that allow users to collaborate with online content, share insights and experiences, and connect to business or pleasure. Primarily every human has a need and wish to communicate with others and exchange information, ideas, news, etc. Internet has enabled people to connect and communicate with not only their families, but with people across the world. Although social media is relatively new, the concept of it is not. For many years, computers have been used by people to connect with others, share data and information, play games, socially interact (Cross, 2014). SMM is a form of internet marketing that utilizes social networking websites as marketing tool. The main goal of SMM is to create content that will be interesting for users and they will share it with their social network; which in return will help companies to increase brand exposure and broaden customer reach. SMM helps a company to interact with customers and get direct feedback from them. In addition, SMM is related to relationship marketing where the firms instead of "trying to sell" shift to "making a connection" with consumers (Iblasi, et al., 2016).

Social media is used by billions of people around the world. According to data compilation on (Statista, 2019), there are more than 2.82 billion social network users worldwide (Table 1). Social media can be considered as apps and websites that provide users’ opportunity to send and receive digital content or information over some type of social media network. Unlike the traditional media where the readers or viewers are passive participants, SMNs are one of the places where the customers as well as ‘would be’ customers are actively participating and exchanging information; as well as sharing experience, giving their opinion and reviews based on their understanding and their experience. The organization actually gets to ‘listen’ to the customer and understand more about the customer’s perception about the brand as well as the product etc. The social media channels help build collective opinion and precipitate healthy discussions about the relevant topics. It is important to notice that SMN (Social Media Networks) operates with several tools including audio, video, text, audio pods, and private forums, public discussion boards, SMS, chatting, emails as well as blogging, etc.

Social media has a huge impact on today’s consumers’ life. Therefore, the adoption of social media by consumers has put pressure on business, forcing them to adapt to the new environment.

*Table 1: Number of social network users worldwide from 2010 to 2021 (billions).*



Social media are breaking down boundaries, the readers can create their own blogs and write about any topic they want or share ideas; the reader can become the writer any time he or she wants.

Nowadays social media can be divided into 6 categories (Cross, 2014):

1. Collaborative sites
2. Blogs
3. Content communication
4. Social networking sites
5. Virtual game worlds
6. Virtual social worlds

### **3.2.2.1 Collaboration sites – consumer- generated websites (CGW)**

Collaborative sites allow multiple users to contribute to a final product. Wikipedia is an example of are CGW platform on which people can contribute to the content of the website. Wikipedia allows the contribution to create, revise, and edit articles (Moriuchi, 2019). People with different experiences and knowledge are reviewing and correcting content, eventually creating the final product (Cross, 2014).

The collaboration project classification also includes social bookmarking sites, where the bookmark is a shortcut to the location on the internet. Social bookmarking is a way for people to store, organize, search, and manage “bookmarks” of web pages. Users save links to web pages that they like or want to share, using a social bookmarking site to store these links. These bookmarks are usually public and can be viewed by other members of the site where they are stored. Most social bookmark services are organized by users applying “tags” or keywords to content on a website. This means that other users can view bookmarks that are associated with a chosen tag and see information about the number of users who have bookmarked them. In many cases, users can also comment or vote on bookmarked items.

### **3.2.2.2 Blogs**

Blogs are online initiative which allows different parson or group to post contend and exchange comments on a web page as a series of submission. A blog was written using software that puts the most recent update at the top of the site (Figure 2). Posts are tagged to appear in selected categories to make easy for people to find what they want on the blog or

via a search engine (Scott, 2013). Blogs range from the personal to the political and can focus on one narrow subject or a whole range of subjects.

Many blogs focus on a particular topic, such as web design, home staging, sports, or mobile technology. Some are more eclectic, presenting links to all types of other sites. And others are more like personal journals, presenting the author’s daily life and thoughts. After each article, people leave comments about the articles. Keywords called tags are used to categorize each link and make them easier to find. Until a few years ago, the blogs used to contain text messages or posts. In current times the professional blogs contain video, audio and image clippings, etc., making it an enriching experience for viewer. Marketing companies use such blogs for online brand building and advertising.

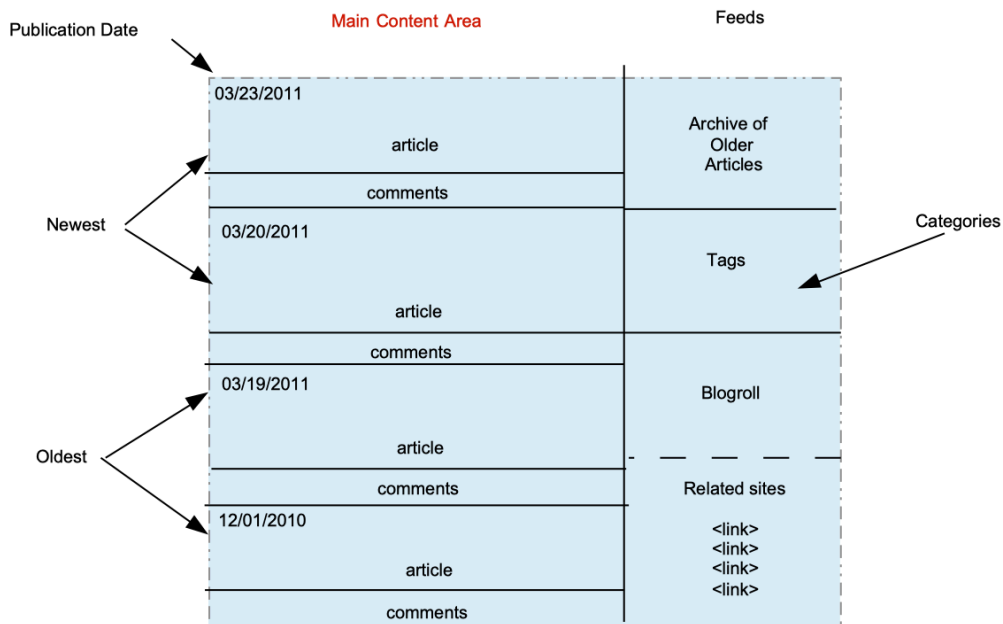


Figure 2 Content of blog (www.worldpress.org, 2019)

### 3.2.2.3 Social Networking Sites

It is a platform where people manage their social circles and interact with one another through the use of a profile page. There are many different social networking sites. Such as Facebook (www. Facebook.com), which boast 2.41 billion monthly active users as of the second quarter of 2019, Facebook is considered to be the biggest social network worldwide (Clement, 2019). There are other general social media networking sites like Instagram

([www.instagram.com](http://www.instagram.com)), which had reached one billion monthly active users in June 2018 (Statista, 2019), as well as, those which focusing on specific audiences like LinkedIn ([www.linkedin.com](http://www.linkedin.com)) for businesses and professionals. Social media has a huge impact on today's consumers' life. Therefore, the adoption of social media by consumers has put pressure on business, forcing them to adapt to the new environment.

#### **3.2.2.4 Virtual worlds and virtual social worlds**

A virtual world is a computer-simulated representation of a world with specific spatial and physical characteristics, and users of virtual worlds interact with each other via representations of themselves called “avatars.” Modern virtual worlds differ from traditional video games in their objective. In traditional video games generally, a person has an ultimate game objective, mission or task, but can also communicate with others to achieve a goal. The objective of virtual social worlds different from the games, the purpose is to continue participating in the world, interact and connect with other users through avatars as if it were the real world. Social worlds also allow people to play in a virtual environment but with social aspects as a general focus. Virtual worlds in general, are part of a larger group of Internet-based applications known as social media, but Virtual worlds allow users to interact with others in the real time. While the content on pages like YouTube, Facebook, or Wikipedia is usually posted and then consumed by others with a time delay (Andreas M. Kaplan, 2009).

### **3.3 Measurements of customer interaction in Social Media**

Social media is not the place where the action happens, it is a space where conversations begin. Certain elements of customers' interaction through social media can be measured (Holloman, 2014).

#### **3.3.1 Awareness**

It is important to notice that the consumer is not an expert on the market, and therefore consumer makes his choice in favour of a particular product based on indicators such as price and brand awareness. However, new products and services from a large manufacturer are not always able to attract a buyer even with an affordable price, because

the consumer does not have a sufficient level of confidence in the product. It is formed in the process of working on brand recognition. Confronted with the choice of buying an unknown product or an advertised brand, the consumer assesses his risks: a new product may turn out to be of poor quality and money will be wasted. Of course, there are innovative buyers who deliberately choose little-known brands. Product knowledge determines whether products are in the consumer basket. It is thanks to the emerged trust in the brand that the buyer is inclined to believe the manufacturer's advertising messages. Thus, even overpaying for the "name", the consumer is confident in his purchase.

As explained by (Keller, 2008) brand awareness (brand recognition) refers to whether consumers can recall or recognize a brand, or simply whether or not consumers know about a brand. Brand recognition is the ability of a brand to be identified by a consumer by certain attributes: appearance, logo, design, graphic images, etc. Brand recognition plays a special role when the target audience decides to buy on the spot, directly in the store, having before other alternatives. There are three levels of brand recognition that distinguish between the degree to which a product is remembered and the power of influence on consumer choice. It is the most desirable indicator of recognition. Recognition "without a hint", or spontaneous fame. The consumer names the desired brand among other brands of a product group or category. In this case, the consumer is not provided with any additional information. This level of recognition shows that the brand is firmly entrenched in the minds of the buyer. As a rule, he already bought goods of this brand and ranked him among the industry leaders. In the case of "unaided recall", a person knows about a brand name, but needs a while to think it through. This level of brand awareness is still useful for companies, but in situations where a purchasing decision has to be made quickly, this kind of brand awareness often won't apply. Last but not least, "aided recall" or "recognition", the consumer recognizes the brand only by direct contact with its products, that is, when there is at least one product element in the review: name, logo, packaging, a certain colour scheme or even an advertising slogan. This type of brand recognition is particularly useful when the customer has little product knowledge yet has time to make his purchase decision in peace.

### **3.3.2 Reach**

*Reach* can be considered as knowing how many people can hear what the brand is saying. It is the ability to influence others or an attempt to introduce some products to a bigger audience. The number of people who saw the advertisement at least once. The best



example of *Reach* is how tweets and posts are shared, liked and retweeted on Twitter, Instagram, Facebook, or other social platforms. Important to mention, that *Reach* looks at the number of individual people who see the piece of content. For instance, if one of the accounts views a page several times it will be still one in the total number of reaches.

### **3.3.3 Traffic**

Website traffic is the number of visitors who came to a web resource for a certain time. Its sources can be search engines, social networks, various Internet resources (blogs, forums, etc.) and direct visits (browser bookmarks, manual entry of the site address in the address bar). The aggregate traffic from all sources creates the total traffic to the site. Attracting visitors is the key task of a site of any subject. High-quality targeted traffic allows to expand the customer base for companies, increase sales to online stores, and increase advertising revenue for info portals. In addition, traffic growth is an effective way to find investors, advertisers and business partners (Holloman, 2014).

### **3.3.4 Engagement**

Another important measurable criteria in social media is engagement. Having an account in social networking sites allows to do two very important things: engage with existing customers and engage with potential customers (Shih, 2009). Engagement in social media is some form of interaction between the customer and the brand on prior knowledge of individual-level of information. This information includes past conversations, the customer's preferences, networks of relationships and influences. The value of customized engagement stems from the possibility to effectively personalize organizational communication and service, thus treating customers as individuals. Engagement is an indicator of how the audience responds to the content, interacts with it and correlates the content in the digital space and the brand in the offline world.

## **3.4 Tooling**

### **3.4.1. Instagram Analytics**

Instagram offers many metrics for measuring performance, exploring audience, and improving marketing results. Those metrics available in Instagram accounts for business.

Most of them are the most basic data of the first level (for example, the number of subscribers or comments). Instagram analytics will provide information on:

- Follower growth
- Audience demographics
- Website clicks
- Reach
- Engagement rate

Even though follower count on Instagram may be a simple metric, but it is also a very important one. The number of followers affects the overall performance of Instagram account in a variety of ways. The more followers Instagram account have, the more the Reach. The more people following companies' Instagram account, the more engagement and clicks this company will get. More specifically, the follower growth rate is a great way to measure the health of Instagram account. It is important to track not only how many followers Instagram account gained over the past weeks, months, and years, but also how fast follower base is growing. As well as all mentioned earlier features of Instagram analytics, audience insights are extremely important because it gives the opportunity to learn everything about the target audience (Hansen, 2010).

Another important metric that should not be forgotten is the Instagram website clicks. It is a metric for how many people clicked from Instagram profiles to the website or landing page (Chalkiopoulos, et al., 2018). This metric is crucial for some Instagram accounts and relatively unimportant for others. If the main priority on Instagram is to drive traffic, conversions, or sales, looking at analytics on website clicks might be beneficial. Analytics on Instagram allows to track the growth rate and understand the competitors' mistakes.

One more significant metric is *Reach*, which used for measuring how much brand awareness and buzz the company is generating with its content. *Reach* a metric that tells how many people have seen posts. Each account that views photo, video, or story counts as one account reached. Instagram insights shows how many accounts were reached in the last week in the activity tab, including how many people were reached each day. It is a useful metric because it tells which of the posts are showing more frequently in Instagram feeds. A lot of factors affect reach on Instagram, like how many people engaged with post after seeing it, how long they spent looking at it, or what time of day post was published. Because of that, Reach can tell in broad strokes how popular, well-timed, and engaging posts are. If it was

noticed that average post Reach is getting lower, the company should reconsider either time of posting content or the content itself.

### **3.4.2 Facebook Ads Manager**

One of the interactive capacities of Facebook is its ability to attract users by using text, images, videos as interactive content for marketing strategies. Creating social media profiles in Facebook and updating them frequently helps improve the general awareness and visibility of the business and the brand. Furthermore, Facebook has created a way for companies to market and sell their products by using Facebook Ads Manager, advertisements that appear on Facebook have enabled companies to reach potential consumers in a way that is less time consuming and cost effective. Facebook Ads Manager is an ad management tool to make, edit and analyse paid promotional Facebook campaigns.

### **3.4.3 Trello**

Where are several Agile methods, one of them is Kanban, which inspired by the just-in-time scheduling system for manufacturing that Taiichi Ohno pioneered at Toyota in the 1980s. The most popular concept from Kanban is a Kanban board, which visualizing the process and progress of work. Apart from using a physical board, many companies use electronic tools and services that are designed to help teams manage stories as they move from one state to the next. There are many software tools on the market for managing the Agile teams. Most of them are oriented to manage development teams, but few of them suitable for Agile marketing teams. The process of the project implementation in terms of *User Stories* was tracking by using the Kanban board and the Trello online application. It is important to understand that a Kanban board visualizes the underlying workflow and process in use, in other words the visual space in which the work is carried out. Kanban board is a list on which the cards are located. The board can be seen in a state of the first *Sprint* on a Figure 3. Sprint planning panel is used to plan which user stories will be implementing the next. Product backlog contains ordered and uncompleted user stories. There are no due dates attached to backlog items, there are only business priorities. The items in a *Backlog* represent tasks to be performed. Initially, all the work that needs to be done in the *Sprint* is placed in the *Sprint Backlog*, in priority order from top to bottom. As the *Sprint* progresses, items

move from *Sprint Backlog* to the *Sprint* column. *User stories* have different colours in order to make it visually easier to differentiate *User Stories*.

Next, we can see that six *User Stories* are currently part of a *Sprint I*. Those *User Stories* were completed and moved from *Sprint Backlog* into the *Sprint I* column.

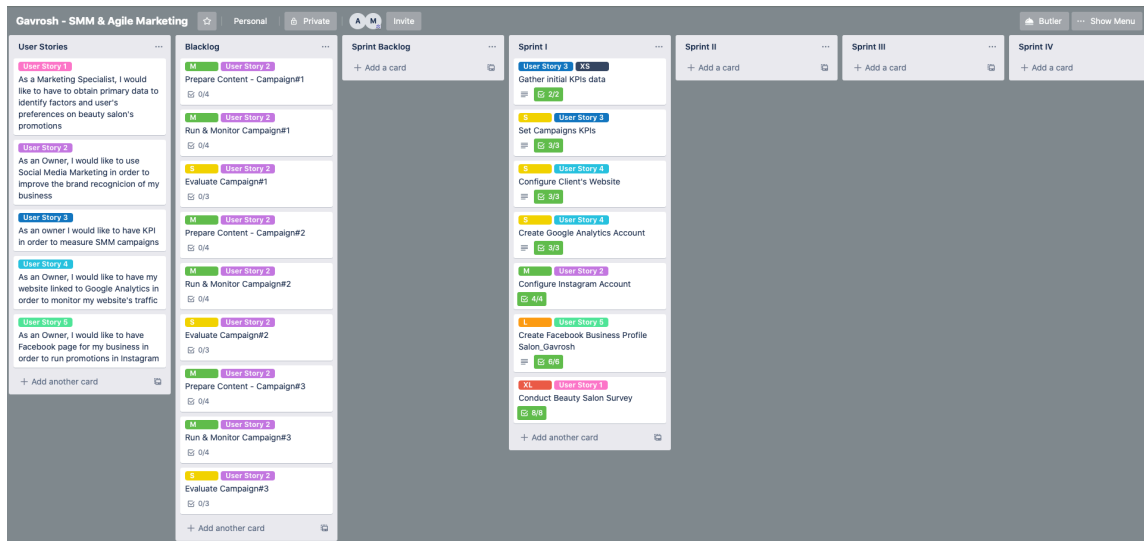


Figure 3 Trello Kanban board Sprint II

Most often the *User Story* must be supplemented by adding specific needs to it. The first thing which advised to do when taking on a big task is to split it into smaller tasks. This means defining the individual subtasks that can be worked on in parallel (Figure 4). On top of having a title and description; tasks have to satisfy a list of conditions with specific implementation details, called an Acceptance Criteria (Definition of Done).

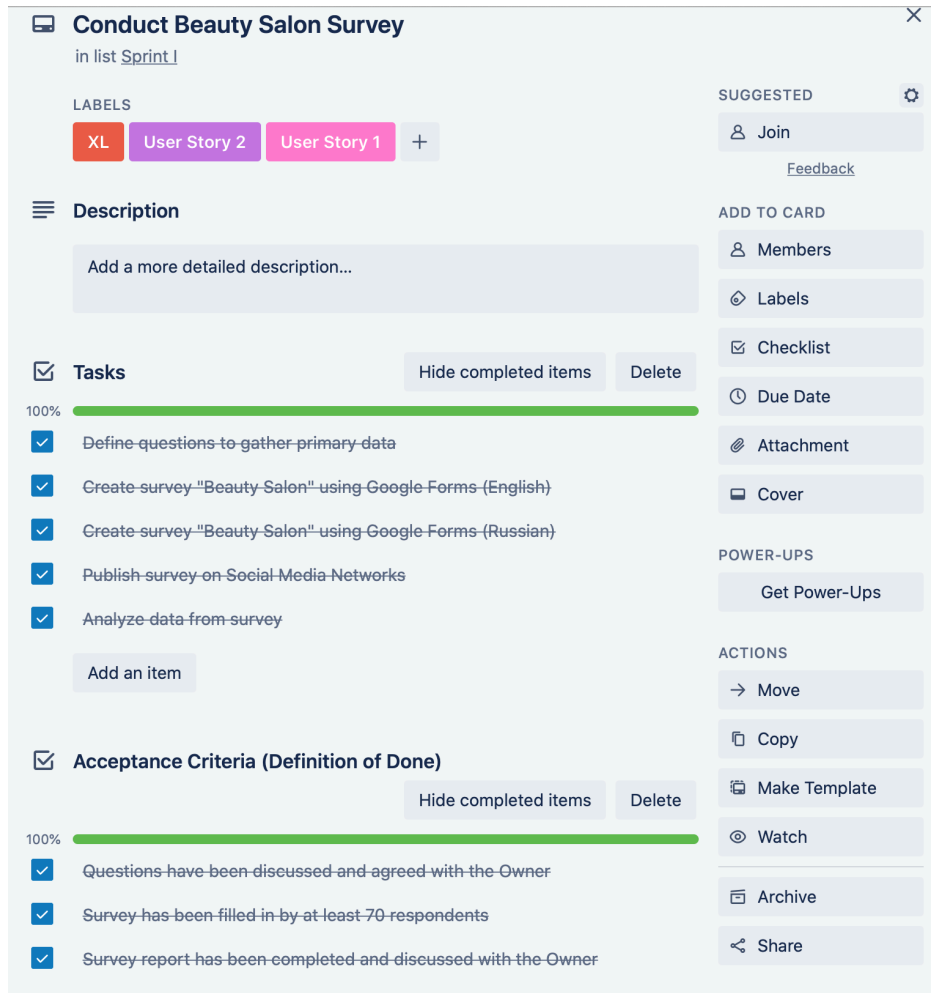


Figure 4 Trello Kanban board User story 2

After *Sprint* is completed, the product owner has to verify that all of the acceptance criteria have been met, only after that task can be considered as completed.

### 3.4.4 Google Analytics

GA is an analytical service from the Google search engine that collects statistics about website visitors after installing a special counter on it. The only requirement for creating a GA account is an email address that is associated with a Google account. GA processes the information received from the site, providing the data reports about visits, conversions, geolocation, provider, traffic source, operating system and other parameters (Eric Fettman, 2016).

Data collection will begin only after installing JavaScript code on the site. The counter automatically records the visit as soon as the user navigated to the resource page from the search engine, using links from another site, social networks, advertisements, and

other sources. Data is processed and displayed on the service panel in a form convenient for analysis. The service offers two types of data - parameters and metrics. Analytics tools measure various parameters of visits. These include user geolocation, traffic source, etc. Metrics show the numerical values of the measured parameters. For example, bounce rate, session duration, number of users, etc. In GA, all reports are customized for the specific tasks of the project needs. For example, sources of traffic (acquisition), the tool captures the traffic coming to the site from various sources (source) and channels (medium).

(Waisberg, 2015) explains that GA automatically measures a whole range (traffic channels) of different ways people find the website.

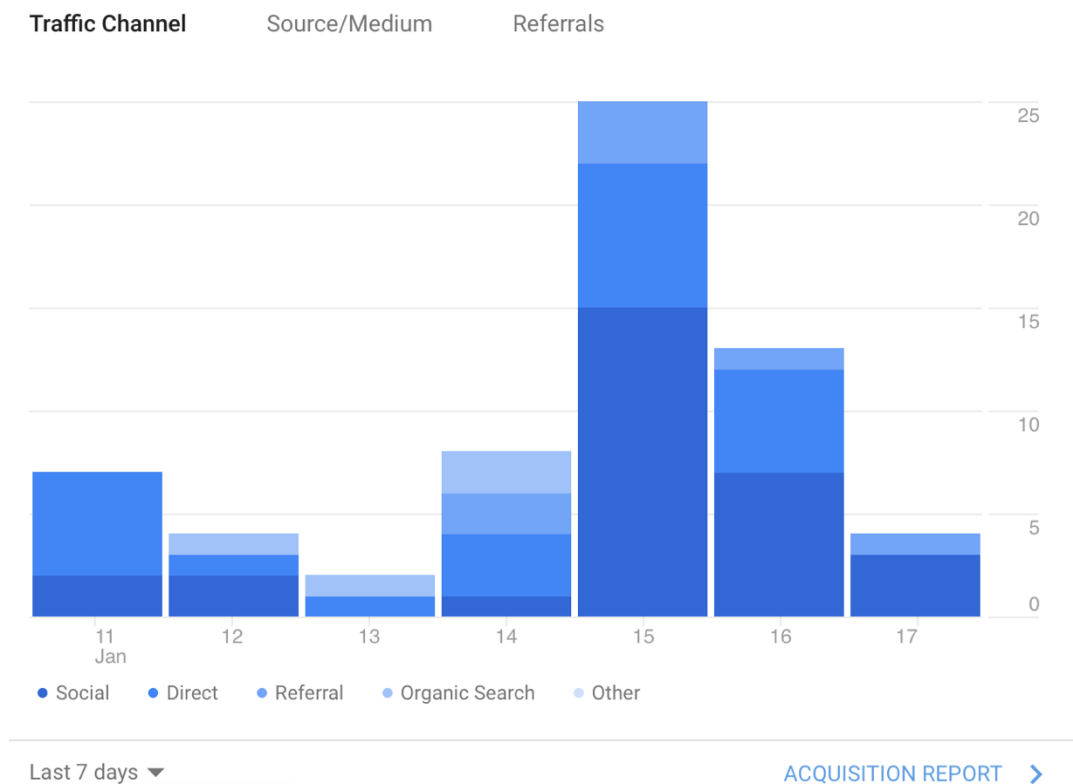


Figure 5 Google Analytics Acquisition reports overview [www.salongavrosh.com](http://www.salongavrosh.com)

In GA there are several default channel groupings, which include Direct, Social, Referral, Organic Search and Other. Direct most commonly includes people who know the URL of the website and they type URL of the website in a browser. On the other hand, the organic search shows people who have clicked through from an organic listing on a search

engine. Referral groups people who find the website by clicking on a link on another website. Social indicates people who navigate to the website using a link from a social network.

### **3.5 Agile Methodologies**

Agile Methodology is a popular lightweight software development method that provides opportunities to assess the direction of the project through the development lifecycle, where requirements and solutions develop through collaboration between cross-functional, self-organized teams and customer participation (Gupta, 2016).

The Agile concept was born in 2001 when the Agile Manifesto was formulated by group software practitioners. Agile Manifesto provides a single definition of Agile and underlies the development and delivery of Agile frameworks. The Manifesto describes four values:

- Individuals and interactions over processes and tools.
- Working software over comprehensive documentation.
- Customer collaboration over contract negotiation.
- Responding to change over following a plan.

In addition to the values of the Manifesto, there are twelve principles that support the values (Radtac, 2015). The principles are very general, and they are about giving ability to make good decisions in a particular situation.

The twelve principles of agile development include:

1. Customer satisfaction through early and continuous software delivery – Customers are happier when they receive working software at regular intervals, rather than waiting extended periods of time between releases.
2. Accommodate changing requirements throughout the development process – The ability to avoid delays when a requirement or feature request changes.
3. Frequent delivery of working software – Scrum accommodates this principle since the team operates in software sprints or iterations that ensure regular delivery of working software.

4. Collaboration between the business stakeholders and developers throughout the project – Better decisions are made when the business and technical team are aligned.
5. Support, trust, and motivate the people involved – Motivated teams are more likely to deliver their best work than unhappy teams.
6. Enable face-to-face interactions – Communication is more successful when development teams are co-located.
7. Working software is the primary measure of progress – Delivering functional software to the customer is the ultimate factor that measures progress.
8. Agile processes to support a consistent development pace – Teams establish a repeatable and maintainable speed at which they can deliver working software, and they repeat it with each release.
9. Attention to technical detail and design enhances agility – The right skills and good design ensures the team can maintain the pace, constantly improve the product, and sustain change.
10. Simplicity – Develop just enough to get the job done for right now.
11. Self-organizing teams encourage great architectures, requirements, and designs – Skilled and motivated team members who have decision-making power, take ownership, communicate regularly with other team members, and share ideas that deliver quality products.
12. Regular reflections on how to become more effective – Self-improvement, process improvement, advancing skills, and techniques help team members work more efficiently.

At that time, software projects were managed using management practice, so-called waterfall. Which methodology based on three principles such us: low customer involvement, strong documentation, and sequential structure of projects (Schneider, 2017). Activities on waterfall projects have to happen in the exact order and one set of activities can't start before the previous one ends. The problem with using the waterfall method on a software project is that planning is very tricky in software development, as a result, the waterfall is risky. The Agile Methodology is more responsive to the needs of the customers than the traditional waterfall model. It became an alternative approach that breaks down large projects into smaller releases and welcomes changes, improvements and additional features incorporated with the project life cycle. Another factor, to take into account is that the clients are



constantly engaged into the process, on the opposed to waterfall where the client is heavily engaged at the beginning of the project and then their engagement significantly declines.

In addition, it is important to point out that Agile is also a mindset. As explained by (Greene, 2015) that the right mindset can make a significant difference in team performance in practices. Instead of making important project decisions only by a manager, right mindset helps people on a team to share ideas and information with one another, so they can make those decisions together. An Agile minder is about opening up processes, planning and improvement to the entire team, where everyone shares information and each member of the team has the right to say how practices are applied.

*Table 2: Fixed and Agile mindsets*

	<b>Fixed mindset</b>	<b>Agile mindset</b>
Ability	Static, like height	Can grow, like muscle
Goal	To look good	To learn
Challenge	Avoid	Embrace
Failure	Defines identity	Provides information
Effort	For those with no talent	Path to mastery
Reaction to challenge	Helplessness	Resilience

Table 2 demonstrates the contrast between characteristics of an Agile mindset and non-Agile ‘fixed mindset ‘ (Radtac, 2015).

One of the most common Agile practice is a meeting, so-called the daily stand-up, where each member talks about what he is working on and what are the challenges. It helps to the manager to clearly understand and also be aware of the status of the tasks, and on the other hand, the employee who is working on a project, not to be interrupted several times per day for meetings, as a result, it can help to get work done faster.

### **3.5.1 Scrum**

Multiple Agile software development methodologies contributed to the values behind the Agile Manifesto, one of the most influential and popular is Scrum. The original concept for Scrum was introduced in Japan in 1986 as a part of The New Product Development Game by Hirotaka Tekeuchi and Ikujiro Nonaka (Green, 2016). The concept of a *Scrum* was taken from the team game rugby, where a cross-functional team with self-

managed roles work together. Scrum introduces roles, artefacts and meetings to support a structure of the principle to do product development feature in small, equal-sized iterations, called sprints (Nicolaas, 2018).

The methodology allows the most efficient use of the available labour and material resources of the team, all its technical potential. When the staff is divided into groups, where each member is responsible for its specific direction. The project manager controls and coordinates the work of all teams; manages the processes of development, discussion of ideas and controls their completion. Scrum helps the team to develop the ability to estimate how much effort it will take to produce a new feature. In other words, Scrum promoted ideas of the transparent backlog of prioritized work; cross-functional teams that control planning and execution for each sprint. Scrum creates the opportunity for a team to reflect on the process and improve it regularly. Implementation of Scrum helps the companies to maximize speed, user acceptance, and, most importantly, the odds of successful outcomes.

### **3.5.2 Effort Estimation**

Generally speaking, waterfall projects are based on strict planning and performing the plan step by step. While Agile methods such as Scrum in the contrary avoid this scenario by breaking work into more manageable parts. Scrum teams tend to be far more successful than their waterfall counterparts (Simon, 2017). One component of the *User Story* is to estimate of effort to carry out the tasks. Story points are a unit of measure for expressing the overall size of a *User Story*. When a story is estimated with story points, it assigned a point value to each item. There are a variety of methods for teams to estimate work:

- Planning Poker is a consensus-based technique to estimate effort, which is based on agreement from the team on the points being assigned to the Product backlog item (PBI). The full Scrum team participates when performing the Planning Poker session. Each team member is given a set of cards with numbers on them, the numbers usually in the Fibonacci sequence. After the product owner presents the story, every member of the team is asked to hold the card which in their opinion represents the level of effort for this story. After the team has heard the explanation, they have the chance to choose an estimate card again. After collection all the members' votes, team members with highest and lowest estimates explain why they choose their number.

The goal of the session is to reach a consensus about the estimate among the team. Once the agreement has been reached that score is reordered to the story to which it relates.

- T-Shirt Sizes technique where items are categorized into t-shirt sizes: XS, S, M, L, XL, where XS is a very simple user story/task, no complex work involved and XL complex work, requires more time compared with other stories. The T-shirt sizes need to be converted to numerical values for the sake of tracking effort over time. It is important to point out that the Developing team is in charge of effort estimation. Additionally, is important to mention that one of the advantages of the T-shirt sizes technique is that it is relatively easy of getting started with.
- The Bucket System is a system which helps with estimating a large number of items with a large group of participants quickly. For the Bucket System estimate different baskets are created with values: 0,1,2,3,4,5,8,13,20,30,50,100,200. The stories need to be placed within these where a team member finds them suitable.

Using numbers is the most common approach for estimating points, but sometimes teams find themselves over analysing when trying to arrive at a number of points, it may be more effective to switch to a non-numerical system like T-shirt sizing.

### **3.5.3 Roles in Scrum**

A Scrum team has three roles with specific properties and responsibilities:

- Product Owner
- Scrum Master
- Development Team

The product owner defines what will be delivered and in what order, while the Scrum master facilitates the adoption of Scrum through guidance, coaching and inspect the team, as a result leading the team to high-performance. The development team is a cross-functional, self-organizing and collaborative entity which defines how to deliver what has been asked for and how long it will take.

#### **3.5.3.1 Product owner**

The first role in personas' definition to consider is the Product Owner (PO). The Scrum Framework's PO role involves guiding the team, so the value of the product delivered

is the highest possible for the team to produce. In the words, the PO's role is to maximize the business value of the product delivered by the team (Fowler, 2018). The PO keeps an eye on the big picture from the customers' perspective, looking at the overall state of the product and the timeline for release cycles. The PO is the single person that is responsible and accountable for the success of the product. The focus of the PO is therefore not on 'doing projects', but on delivering, maintaining and marketing the product.

The PO is responsible for defining Stories and prioritizing the Team Backlog by deciding what features are the highest priority for the team to work on in the next sprint. The PO has a vitally important decision-making role to play since they are the main link between the Scrum team and the customer. The PO needs to be in regular communication with the customer, to make sure the stories they are writing and the backlog they are grooming meet current expectations of the client. In addition, the PO has to be able to help the team to resolve any conflicts or clarify any details about the stories the team is working on. As the internal voice of the customer, the PO needs to ensure the expectations for the product and be able to make decisions quickly so the team can continue working.

Important to mention, that PO is either an official representative or an authorized representative of the customer. Based on the available information from a client, the PO develops a list of requirements, which is also sorted by importance. In fact, the Owner of the product can be called the center of final decisions for the project team, for this reason it is always only one person (Radtac, 2015). The PO is responsible for maximizing return on investment.

List of activities of the PO:

- Product vision formation.
- Defining available budget.
- Settings goals for the sprints and releases.
- Participating in the sprints and releases.
- Managing customer expectations (and other stakeholders).
- Coordination and prioritization of the product backlog (log) (see below).
- Providing the team with understandable and testable requirements.
- Interaction with the project team and the customer.
- Reception and evaluation of the result of work at the end of each iteration.

### **3.5.3.2 Scrum master**

Scrum master is another important person in the whole process. The Scrum master must be one of the team members; it is necessary that he is involved in the development process. This person is also important because timely decision-making depends on him, regardless of their scale (from fixing the table leg to informing the team about new requirements), maintaining the necessary technical Scrum practices that will be used in the development of the project. Among other things, the Scrum master is obliged to ensure maximum working capacity and productivity of the team, clear interaction of all project participants; eliminate problems that inhibit or stop work, protect the team from any external or internal influences during each iteration, ensure that the workflow is followed.

In summary, the Scrum master is responsible for the following:

- The success of the Scrum process.
- Establishing Scrum practices and rules.
- Ensure that the Scrum team is fully functional and productive.
- Creating a Confidential Atmosphere.
- Participation in general meetings and ensuring successful communication of participants.
- Eliminating work obstacles.
- Identification of problems.
- Enforcing process practices.
- Leading and coaching the organization in adopting Scrum.

### **3.5.3.3 Team member**

The nature of the development team in Scrum is completely different from traditional teams in waterfall and command-and-control settings. The development team is a group of 5-9 initiative and independent members of the team. Team members operate with high degrees of authority. They solely determine estimates (i.e., how much time and effort each task takes) and they collaborate freely. Its primary task is to set a really achievable, predictable, interesting and significant goal for each iteration. The task is to achieve the goal on time and in high quality. The goal of the iteration can be considered achieved only when all the tasks are implemented, a working version of the product is tested, all defects are installed and fixed. Members of the development team should be able to plan and evaluate

their work, be able to work in a team, systematically analyse the quality of their interaction and work to improve it.

The responsibilities of the development team are summarized below:

- Working with the product owner, ensure that requirements are understood.
- Lots of face-to-face communications.
- Maintain quality of work at the agreed level.
- Responsible for organizing tasks and committing to work.
- Demonstrates work results to the product owner and stakeholders.
- Has the right to do whatever is needed to meet the commitment.

### **3.5.4 Scrum activities**

#### **3.5.4.1 Product Backlog Refinement (Grooming) meeting**

As suggested by (McGreal & Jocham, 2018) Product Backlog Refinement is the act of adding estimates and order the items in the Product Backlog. It's a summary of all activities that relate to PBIs. This process is a collaboration on the details of the Product Backlog between the Product Owner and the Development team.

Product grooming is critical in product management because it means to keep the backlog up to date and getting backlog items ready for the upcoming *Sprint*. During the Grooming (refinement) meeting the Scrum team discusses the product backlog and the next sprint planning is prepared. The refinement involves splitting big items into smaller ones, deleting or rewriting absolute items. In addition, the Scrum team decides how and when refinement is done.

#### **3.5.4.2 Sprint and sprint planning**

*Sprint* in a Scrum project is called one iteration (phase) of the project. In Scrum, a *Sprint* represents the period in which a team completes a predetermined number of user stories. In most cases, a *Sprint* lasts one month with a preference for a shorter timescale. As a result of each *Sprint*, the team should receive a working version of the product, which can already be demonstrated to the customer. Preparation for the very first *Sprint* begins after the owner of the product prepares the project plan, identifies the requirements and sorts them in a volume suitable for one iteration. This list is called the backlog of the product. In the sprint planning process, planning sessions are developed in details. Each *Sprint* has its goal,

in other words, a set of objectives mutually agreed between the product owner and the development team.

The *Sprint* planning meeting happens before each *Sprint*. The team are already familiar with items from attending Backlog refinement meeting and can focus on feature detailed clarification, discussion, estimation, creating of sprint goal. *Sprint* planning usually takes about two hours. At its core, the meeting seeks to achieve two things: a sprint goal and a sprint backlog. Within *Sprint* planning, the product owner defines the set of achievements, in other words ‘sprint goals’, which have to be accomplished during the *Sprint* and initial assignments of responsibilities. The product owner and team members should develop and agree on goals, which ideally short, one- or two-sentence descriptions of what the team plans to achieve during the *Sprint*. Team members should begin thinking about the specific tasks they need to complete to deliver the agreed-on User Stories. The scope of the *Sprint* should be fixed. Important to point out is that the product owner does not assign a task to team members, like in traditional project management.

#### **3.5.4.3 Daily Scrum**

Daily stand-up, as the name suggests, is a daily status meeting that takes place in the morning. It is a strictly time-fixed session, up to 15 minutes, the meeting should be brief and focused. It allows each member of the team to understand who exactly is doing what in the current project and current progress. In other words, participants simply share information. If there are issues requiring resolution, they are taken out of the meeting. Daily scrum improves communication and provides an opportunity to adapt daily planning and self-organization. Based on the idea from (Green, 2016) the Daily Scrum meeting optimizes the probability that the Development Team will meet the Sprint Goal. Daily Scrum improves communication, eliminate other meetings, promote quick decisions and improves the level of knowledge.

#### **3.5.4.4 Sprint Review Meeting and Sprint Retrospective**

To optimize performance, the team holds a Sprint Review meeting after each *Sprint*. During this meeting, the team evaluates the past sprint. Its main focus is on the process, not on the things produced: what went well during the sprint, what problems did they face, and how can they improve the process for the next *Sprint* (Nicolaas, 2018). During this meeting,

the Scrum master should ensure that all members express issues that they face during the *Sprint*. After all, sprints are completed and the last sprint is closed, the team sits down with the Scrum master to go through the sprint retrospective. The main point of this meeting is to get people talking about what they think went well during the last *Sprint*, what they could have done better, and what changes they think they should make to the process going forward (Green, 2016).

The Sprint retrospective meeting occurs after the Sprint Review meeting; retrospective session is basically meeting focused on improvements, in order to find possible past mistakes, and seek a new way to avoid them in the future. In other words, a Sprint Retrospective meeting is to find what activities the team is doing well and what activities should be improved.

### **3.5.5 Scrum Artefacts**

#### **3.5.5.1 Product Backlog**

The Product Backlog is a dynamic ordered list of all features, functions, and requirements; each item of the Product Backlog has its order, description, and the estimate. The User story is an integral part of Agile development techniques. Identifying the User Story is important because, without a solid understanding of client and customer requirements, create content or campaigns can be not efficient. By using User Stories, work have to be broken down into a series of tasks, the implementation of each brings tangible value to the project implementation process. All these tasks can be discussed and sorted by importance independently of each other. Most often the User Story must be supplemented by adding specifics needs to it. The first thing which advised to consider when taking on a big task is to split it into tasks. This means defining the individual subtasks that can be worked on in parallel (Figure 6). These needs take the form of tasks with satisfying an acceptance criterion (definition of done). Acceptance criteria help, in particular, to understand whether the wishes of the user are fulfilled. After those criteria are completed, the task can be considered as being finished.



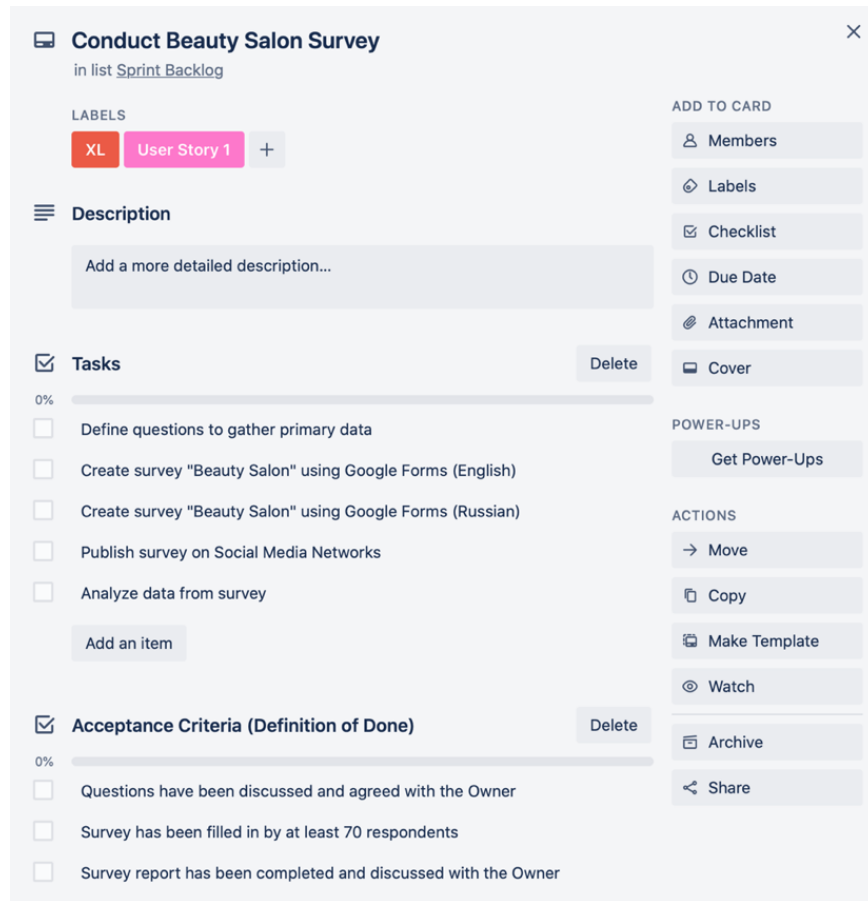


Figure 6 Kanban Board - User Story 1

### 3.5.5.1 Sprint Backlog

As explained by (McGreal & Jocham, 2018) the Sprint Backlog is the set of PBIs selected for the *Sprint* and plan for delivering Sprint goal. The Sprint Backlog consist of PBIs that the team agreed with their product owner to include during the sprint meeting. Sprint backlog makes visible all the work which has to be done in order to meet *Sprint* goals. It is a real-time picture of the work of team plans to accomplish during the *Sprint*. The Sprint backlog only lasts for the duration of a sprint. Each new *Sprint* starts with a new Sprint Backlog. It was explained by (Green, 2016) that the size of the Sprint Backlog for the current *Sprint* is based on the negotiations that happening at the beginning of the *Sprint* during the Sprint planning meeting. Important to point out, that picking stories (tasks) that aren't from the top of the backlog will result in work being done out of priority order.

### **3.5.5.2 Increments**

The final artefact of Scrum is the product increment. The increment is the sum of all the PBIs which met the definition of done during a *Sprint* and the value of the increments of all previous *Sprints*. The increment is the collection of the PBIs that meet the team's Definition of Done by the end of the *Sprint*. The Product Owner may decide to release the increment or build upon it in future *Sprints*.

### **3.5.5.4 Acceptance Criteria- Definition of done**

As explained by (Larman & Vodde, 2016) the definition of done provide a detailed scope of the requirements that a User Story must adhere to for the team to call it complete, it applies to each story in a Sprint Backlog. The definition of done includes predefined requirements a team has to meet in order to consider the User Story finished.

Effective acceptance criteria should be:

- Acceptance criteria should be testable, and the results of these tests must leave no room for interpretation. Tests should reveal straightforward yes/no or pass/fail results.
- Criteria should be clear and concise.
- Everyone must understand the acceptance criteria.
- Acceptance criteria should provide a user perspective.
- Acceptance criteria is looking at the problem from a customer's standpoint.

Usually, the responsible for acceptance criteria is the PO or manager. It may be created during the first sprint meeting and adjusted on during sprint retrospective. The idea behind this is to ensure that requirements are written with customer needs in mind. At the very latest, acceptance criteria should be defined before the project begins. Acceptance criteria (definition of done) is an important component of User Story that an Agile team works on.

## **3.6 Burn-down/Burn-up Charts**

Two popular tools in the Scrum are burn-down, burn-up charts. They can bring visibility to the project progress for better understanding of how much work is remained to be done and how much work has been completed, as well as the total amount of work.

### **3.6.1 Sprint Burn-down Chart**

A Burn-down chart is a good way to visualize work remained (McGreal & Jocham, 2018). Lines or columns on the burn-down chart may be used to represent the number of story points, starting with the number a team has committed to at the sprint planning. The chart slopes downward over *Sprint* duration and across story points completed. What makes the chart an effective reporting tool, since it shows the team progress towards the *Sprint* Goal, in terms of how much work remains. During the project implementation, a Scrum team might discover that more work needs to be added or team burns more story points than they expected, and work can be finished earlier. The Burn-down chart is an excellent tool to track the progress. The Burn-down chart is usually maintained on a daily basis by the Scrum master. A pattern of rising columns on a Burn-down chart indicates that the scope of the work is exceeding the originally agreed sprint backlog. In addition, (Green, 2016) points out that for a Burn-down chart the primary audience is the team itself, although it can be relevant to people outside the Scrum team.

### **3.6.2 Sprint Burn-up Chart**

A Burn-Up Chart is a tool used to track how much work has been completed and represents the total amount of work for a project. The completed work and total work are shown on a vertical axis, for example: working-hours, story points, working-days, or any other work units. On the other hand, the horizontal axis displays time, usually in *Sprints*.

## **3.7 Agile Marketing**

The Agile practices, traditionally related to the field of software development and inspired by Agile Development Manifesto, have been increasingly influencing marketing. Agile marketing is a new trend in marketing, particularly for a smaller firm which needs to develop and adapt Agile Marketing capabilities to design and implement strategic responses and be more competitive. As stated by (Mills, et al., 2006) that Agile concepts can be practiced across various disciplines such as Agile Development, Agile Enterprise, Agile Manufacturing, and the list goes on. Agile Marketing becomes another project management tool which benefits project with speed, alignment, and engagement (Ewel, 2011). At the same time enables to overcome traditional practical problems, such as waste of time and resources,

long product development cycle. Firms' agility aims to reconfigure marketing activities at short notice to be able to respond better to the market feedbacks.

Certain areas of Marketing land themselves to be Agile more than easily than others. Areas such as digital marketing, email campaigns, social media campaigns, lead generation, channel training, and even support can be easily integrated into the Agile model (Ewel, 2011).

As suggested by (Brinker, 2016) Agile Marketing values include:

- Numerous small experiments over a few large bets.
- Testing and data over opinions and conventions.
- Intimate customer tribes over impersonal mass markets.
- Engagement and transparency over official posturing.

“Agile Marketing Manifesto” officially was introduced in San Francisco in 2012. Since then, the ideas of Agile marketing have continued to spread. Marketers around the World improvising by mixing techniques from various Agile and Lean methods. This flexible definition of Agile marketing is agile itself.

### **3.7.1 Roles in Agile Marketing**

Structurally, Agile teams are generally flat (Figure 7). Some team members will be more senior than others as authorities in their particular areas of expertise. Team decisions are made collectively and there's little emphasis on rank in how the group functions. In Agile Marketing a product owner and a Scrum master role are less distinct. Often the role of marketing owner -instead of a product owner, served by a marketing manager or marketing executive. Important to point out that it is not unusual for the same person to be the process owner for the team and moderator of the process (Brinker, 2016).



Figure 7 The Flat Structure of an Agile Team (Brinker, 2016)

### 3.8 Data Collection technics

Data collection is defined as the process of gathering and measuring information on variables of interest; as a result, queries, research questions, tests for hypotheses can be answered. There are the two main types of data - quantitative and qualitative and both are equally important. The data obtained via quantitative data collection methods can be used to test existing predictions or ideas, learn about company customers or measure general trends. The data obtained from quantitative data collection is more objective and reliable than qualitative. Two of the most common data collection techniques are questionnaires and surveys.

Unlike quantitative, qualitative data collection methods consist of open-ended questions with a possibility for descriptive answers. Data obtained using qualitative data collection methods can be used to find new opportunities, ideas, problems. Some of the most common qualitative data collection techniques open-ended interviews, questionnaires, surveys, observation, focus groups, case studies.

## **4 Practical Part - Marketing Campaign Implementation**

### **4.1 Introduction**

Agile marketing is used as a methodology to execute the project. The implementation of the marketing campaign was done using the concept of Agile Marketing as defined in Section 3.7 of this document.

At the beginning of the project the author of this work and the owner of the beauty salon had a Skype meeting in order to discuss initial plan of marketing campaigns and its requirements. The requirements were gathered as User Stories. Furthermore, actors and priorities for the project were defined.

It was decided to run three different campaigns in social media in order to analyse which one is more suitable for this particular beauty salon. Using the definition of section 3.5.4.2 within sprint planning five User Stories were written and inserted to the Trello Kanban board application. An initial backlog grooming meeting was carried out with the Owner of the beauty salon where requirements were gathered using user stories. Also, actors and priorities of the project were defined.

As explained in Section 3.4.3 a Kanban board for the project was created in Trello (<https://trello.com/b/u5bs36yH/gavrosh-smm-agile-marketing>).

Finally, Agile Marketing's roles and Personas Definitions for the campaign were established. As mentioned in Section 3.7.1, Agile Marketing has three roles, Marketing Owner, Process Owner and Marketing Team. For this project, all three roles are performed by the same person (the author of this work). From the Agile Marketing standpoint, the Owner of the beauty salon is the "Client". It is important to point out that for the marketing campaign implementation, the definition of "Client" differs. The next section describes in detail the definition of the personas for the marketing campaign.

### **4.2 Personas Definition**

#### **4.2.1 Owner**

The general manager and the founder of Beauty Salon "Gavrosh" Ivanova Geta defined as an Owner for the following project. Beauty salon "Gavrosh" is located in Russia, in Moscow city and can be classified as a small-sized company since it employs currently

only six people and it started to scale up its business since 2007. Even though the number of employees is low, each member of the team is well-experienced in his field of expertise and having gained numerous achievements. All employees of the beauty salon are highly qualified and experienced. Stylists of the beauty salon is in undergoing annual professional development. The Salon Gavrosh follows fashion trends, new tendencies and use high-quality cosmetics in their work. The workers in this beauty salon are all fully employed by the Salon Gavrosh. When it comes to decision making or strategic planning of the salon in general, decisions are made by Geta Ivanova.

The services of the salon are divided into several categories – hair styling, cosmetics, pedicure, and manicure. Hair dressing services include hair colouring, hair cutting, hair treatment, hair style for special occasions. In cosmetics services there are eyebrows treatment and colouring, and cosmetics procedures such as skin cleansing, skin massage, face peeling. In pedicure and manicure services here are classic and French, paraffin bath, foot peeling, nails lacquering, nails decorating, and gel nails. In addition of all the services, customers can buy products from the brands Wella, Goldwell, Olaplex, L'Oréal in the salon.

#### **4.2.2 Client**

The salon is visited by many customers who are among the regular and loyal clients. It was pointed out by general manager of the salon, that there are not many new clients. As a client for this particular project was decided define customers from the neighbourhood, who have no awareness about the salon, but those who use Social Media, in particular Instagram and Facebook. From the data collection research, which is mentioned in Section 5.2, it was assumed that main target group of the Beauty Salon is a working or studying woman age 18 to 50.

#### **4.2.3 Marketing Team**

Marketing team in Scrum implementation for this project will consist of one member, author of this work. Author completed online course of Social Media Marketing which consists of 93 lectures. Marketing team uses Agile development processes to apply them to internet marketing strategies to create an interactive approach to marketing and achieving set by Owner goals.

### 4.3 User Stories

As pointed out in Section 3.5.5.1 initial User Stories were gathered during the first meeting with Owner. In total seven User Stories were defined; these User Stories serve as based to define tasks for each *Sprint*. User stories were defined as follow:

- User Story one. -

For the marketing specialist, it was important to have primary data which will help to identify factors and preferences for beauty salon promotions. It was decided and agreed with Owner to conduct marketing survey for at least seventieth responders, both in Russian and English language and it was defined as User Story 1.

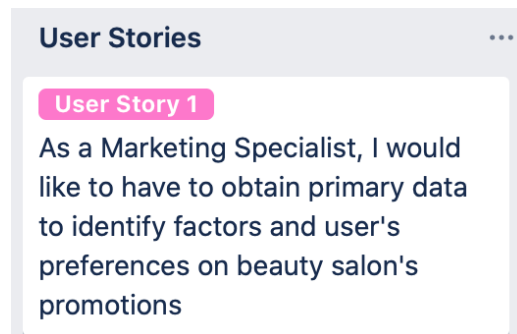


Figure 8 User Story 1

The requirements for the task on Figure 8 were given from Marketing Specialist: “*As a Marketing Specialist, I would like to have to obtain primary data to identify factors to identify user's preferences on beauty salon's promotions*”, and the aim was is to complete five subtasks assigned to this task:



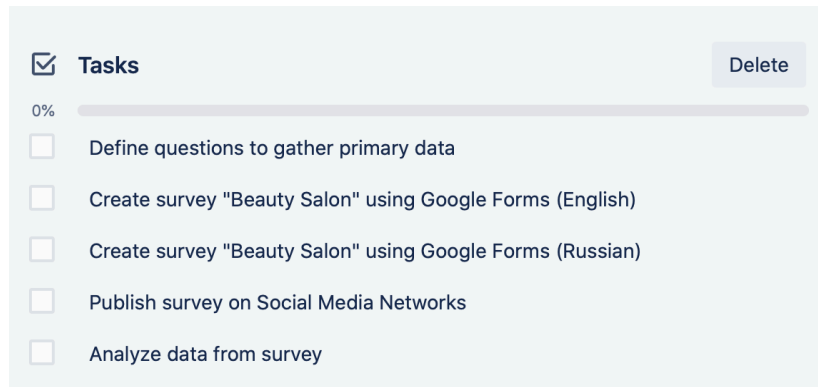


Figure 9 Task assigned to user

Based on the User Story 1 task requirements (Figure 9), acceptance criteria conduct tree points (Figure 10): questions for survey have to be discussed and agreed with the Owner, survey has to be filled in at least by seventy responders and survey report has to be completed and discussed with the Owner.

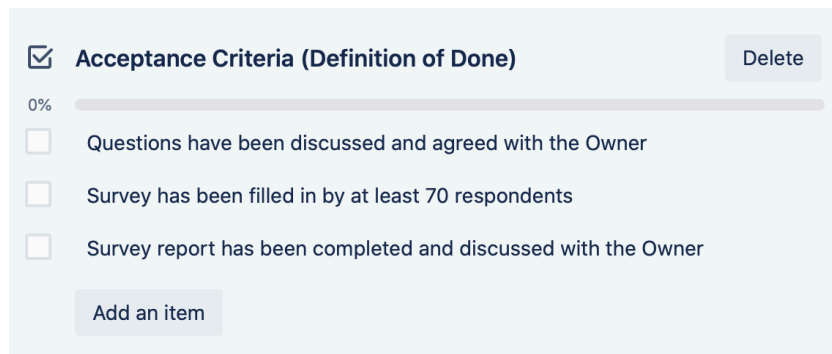


Figure 10 Acceptance criteria for the tasks in User story 1

- User Story two -

In the context of research, (Green, et al., 2018) points out that organizations are able to reach the global market through social media due to millions of users worldwide. Taking into account that fact, for a second task it was decided to use social media for the marketing campaigns.

**User Story 2**  
As an Owner, I would like to use Social Media Marketing in order to improve the brand recognition of my business

*Figure 11 User Story 2*

- User Story tree -

Both the Owner and the Marketing specials agreed to set KPI's (Key Performance Indicators), simply to have measurable components that can be used to demonstrate the efficiency with which a company achieves marketing objectives.

**User Story 3**  
As an owner I would like to have KPI in order to measure SMM campaigns

*Figure 12 User Story 3*

- User Story four –

Following the idea of have measurable indicators it was decided to create and link the beauty salon website with google Analytics, which collects statistics about website visitors (Figure 13).

**User Story 4**  
As an Owner, I would like to have my website linked to Google Analytics in order to monitor my website's traffic

*Figure 13 User Story 4*

- User Story five –

Next task which was created during the planning meeting with the Owner was to create Facebook page for the Beauty Salon which allows to monitor and run paid promotions for Instagram.

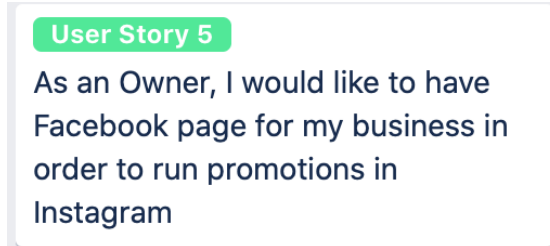


Figure 14 User Story 5

- User Story six -

After *Sprint II* another task was created and inserted to the Kanban Board application. For this task the Marketing Team has to run promotion in Instagram Stories in order to get more Followers and increase website traffic volume.

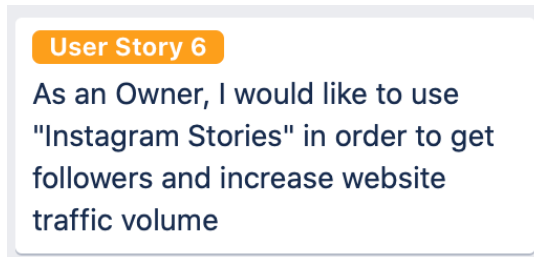


Figure 15 User Story 6

- User Story seven -

Finally, the last User Story which were added during *Sprint Planning* meeting. It was decided to test "Facebook Boost Post" advertisement tool in Facebook. User Story was added to the Kanban Board application.

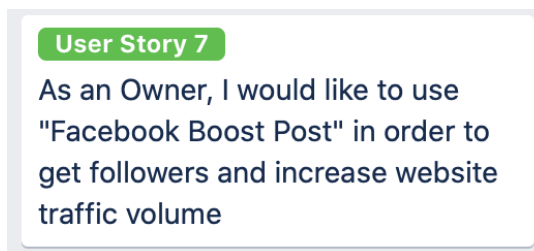


Figure 16 User Story 7

#### 4.4 Effort Estimation & Prioritization

As stated in Section 3.5.2 T-shirt sizing categorized tasks into different sizes. Taking into account that the Marketing Team is composed of just one member; task sizes were defined as function of the number of subtasks of a given task. Due to the fact that this is the first project of the Marketing Team, no reference data regarding the value of each T-shirt size exist. Thus, numerical values were assigned following a Fibonacci sequence (1,2,3,5,8,13,21) with the condition that each size is at least the double of its predecessor. It needs to be pointed out that these values are just mere reference of how the Marketing Team perceives the complexity of a given task. Groups, conditions, numerical values and their colour label are defined in Table 3:

Table 3 Effort estimation

Group	Condition	Value	Colour
XS	1-2 subtasks	1	Blue
S	2-3 subtasks	2	Yellow
M	3-4 subtasks	5	Green
L	5-6 subtasks	13	Orange
XL	6-7 subtasks	20	Red

#### 4.5 Sprints

During the Backlog Refinement meeting it was decided to divide project in four *Sprints*, each *Sprint* one week-long. Each *Sprint* consists of a prioritised backlog of tasks (parts of User Stories) that need to be completed by the end of each week. The total amount of story points of each *Sprint* represents the effort needed to implement all its tasks; it can also serve as reference to plan the next *Sprint* as well as to show the speed of the project implementation. The Marketing team write down all items and requirements and insert them into Sprint Product backlog in Trello. Next the marketing team estimate effort.

It was also agreed that to keep track of the project, the Trello Kanban board would be daily updated. Burn-Down and Burn-Up charts would be produced at the end of each Sprint; they would be used as reference when planning new Sprints.

Finally, it was decided to have five-minutes Skype daily stand-up meeting each morning (Section 3.5.4.3) with two participants the Owner and the Marketing team. During this meeting the Marketing Team gives a short report on what was achieved the previous working day, what tasks will be implemented during the day, status of the current marketing campaign (including if content modification is needed) and any issues or blockers for the project.

As a result of this session all the items in the Sprint Product Backlog have an initial rough estimation and prioritization.

It was also agreed with the Owner to have meeting after each sprint is completed, in order to analyse the performance of the Marketing Team and reveal the data collected during the sprint.

#### **4.5.1 Sprint I – Tooling Configuration & Primary Data**

##### **4.5.1.1 Sprint Planning**

The *Sprint* planning meeting took place between the Marketing Owner and the Client. The timebox for the meeting was agreed to be one hour and a half. The purpose of the meeting was to define sprint goals, prioritize user stories and define sprint backlog.

- Sprint goals. – The *Sprint* has three main objectives: (1) To gather primary data related to marketing target groups and their preferences. (2) To prepare the tooling necessary to run the social media campaign i.e., create Facebook Business Profile, etc. (3) To define KPIs to measure the campaigns.
- Prioritize User Stories: *Sprint I* tasks are part of user stories 1, 2, 3, 4 and 5. The Marketing Owner prioritized the story's tasks in the following order: 1,5,2,4,4,3,3. As seen in Figure 17, the most important task of the *Sprint* is “Conduct Beauty Salon Survey” which belongs to User Story 1. While, the second most important task is “Create Facebook Business Profile” which belongs to User Story 5.
- Sprint Backlog. – The backlog for this *Sprint* contains 7 tasks and it was prioritized as shown in Figure 17. The tasks account for 45 story points: 1 **XL** task (20 story points), 1 **L** task (13 story points), 1 **M** task (5 story points), 3 **S** task (9 story points) and 1 **XS** task (1 story point).

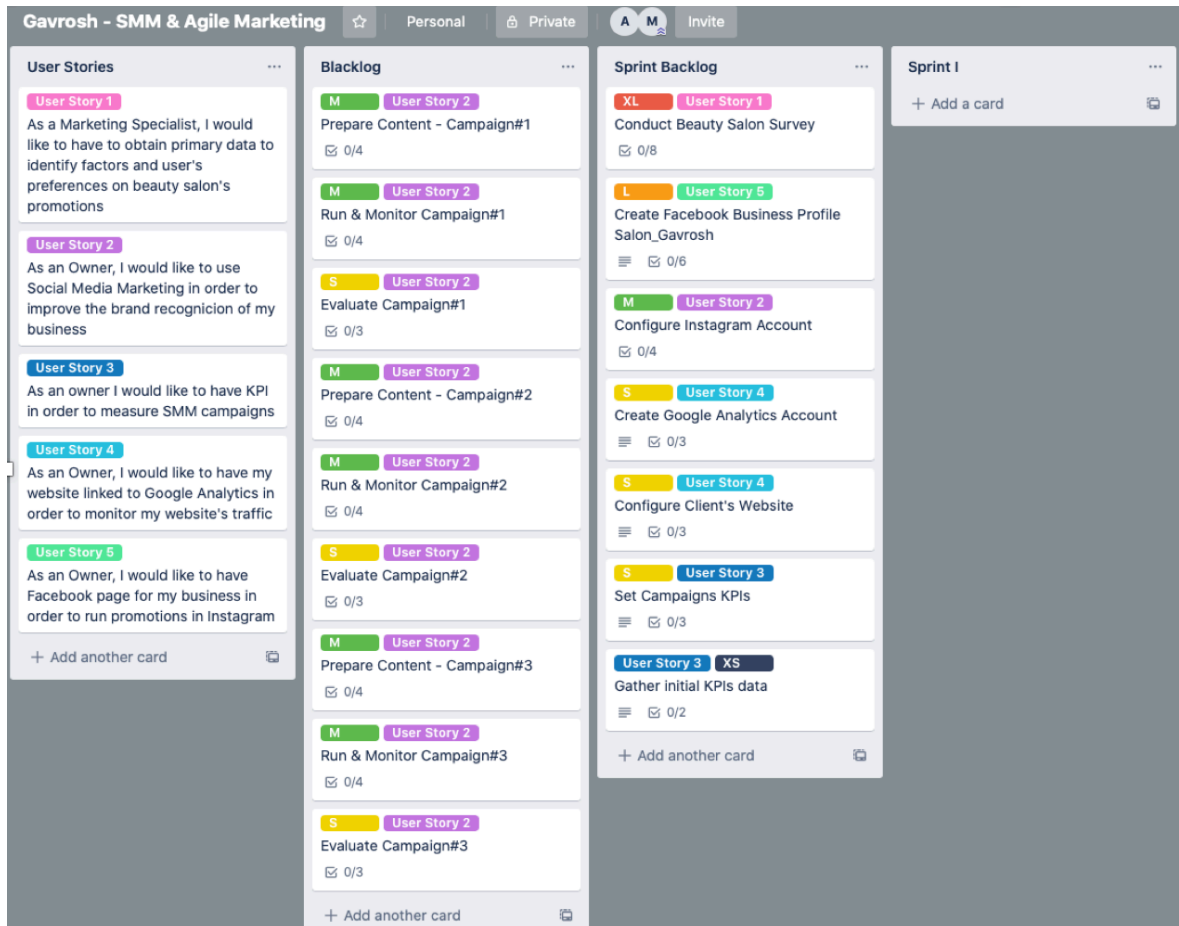


Figure 17 Sprint I Backlog

Figure 17 depicts the state of *Sprint I* before its implementation. There are four columns on the left “User Stories” followed by “Backlog”, and “Sprint Backlog”. Items from the first three columns have been prioritized by the Marketing Owner. The Marketing Team is obliged to implement the tasks in column “Sprint Backlog” from top to bottom. As tasks are being initiated, the Marketing Team should move them from “Sprint Backlog” to “*Sprint I*” column. It is worth pointing out that just the Marketing Owner has the right to change the order of the items in the “Sprint Backlog” column.

#### 4.5.1.2 Tasks

The most challenging task of the *Sprint* was “Conduct Beauty Salon Survey” which contains eight subtasks as follows:

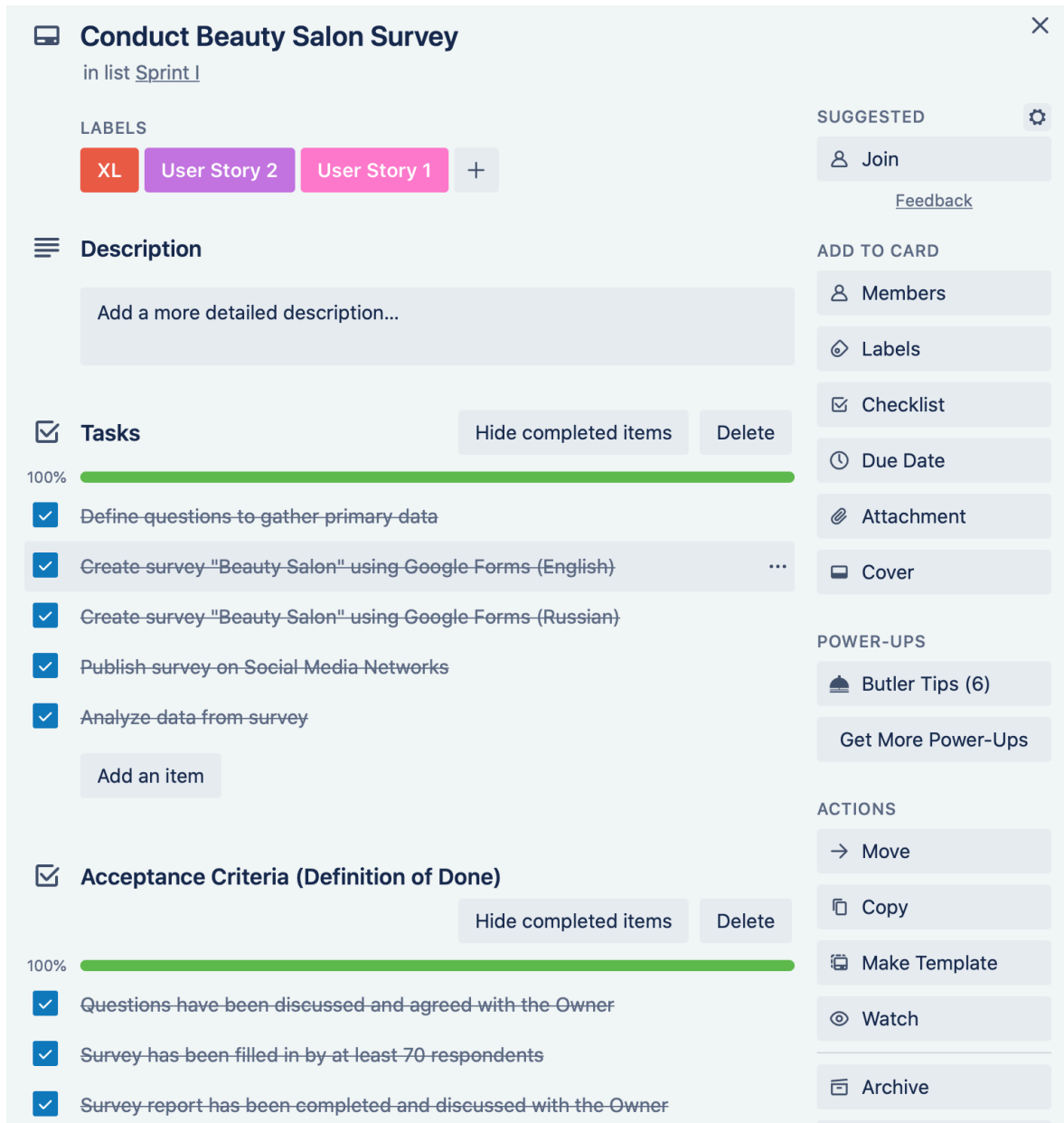


Figure 18 Task of Sprint I “Conduct Beauty Salon Survey”

As it can be seen on Figure 18 where are five subtasks and four acceptance criteria assigned to the task. The key to develop a survey questionnaire was to keep it short while ensuring to capture all information which is needed. After questions were defined and agreed between Marketing Owner and the Client, survey was released on the Google Forms application. Furthermore, online questionnaires are mainly distributed on Facebook, Instagram, V Kontakte groups and other social media. A total number of collected questionnaire were 77 samples and collected primary data was analysed by Marketing Team and presented to the Client.

### 4.5.1.3 Sprint Review

Sprint review was timeboxed to one hour and took place via Skype call between the Client and the Marketing Owner. The objective of the meeting was to discuss the tasks implemented during the *Sprint* including their results.

All forty-five Sprint Backlog story points were completed and the acceptance criteria of all seven tasks were met one hundred percent. In order to discuss the velocity of the project and to forecast the time and effort needed for its successful termination, the Marketing Owner produced Release Burn-down & Burn-up charts to present to the Client.

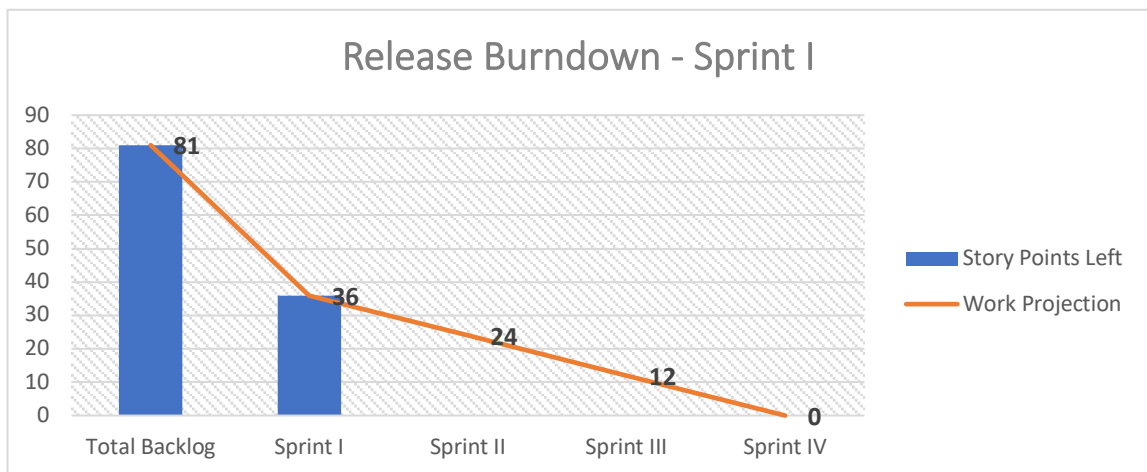


Figure 19 Sprint I Burn-down Chart evolution of project development

Figure 19 shows the Release Burn-down chart for *Sprint I*. The chart compares the total amount of story points in the project against the story points left after each *Sprint*. It also forecasts how many story points would need to be completed so the project can be finished in 4 *Sprints* (4 weeks). It can be seen that after *Sprint I*, 36 story points are left. Therefore, it is estimated that 12 story points should be implemented during each following *Sprint* so the project can end by week 4<sup>th</sup>. The project is completed when the trend line (work projection) intersects with horizontal axis at *Sprint IV*.



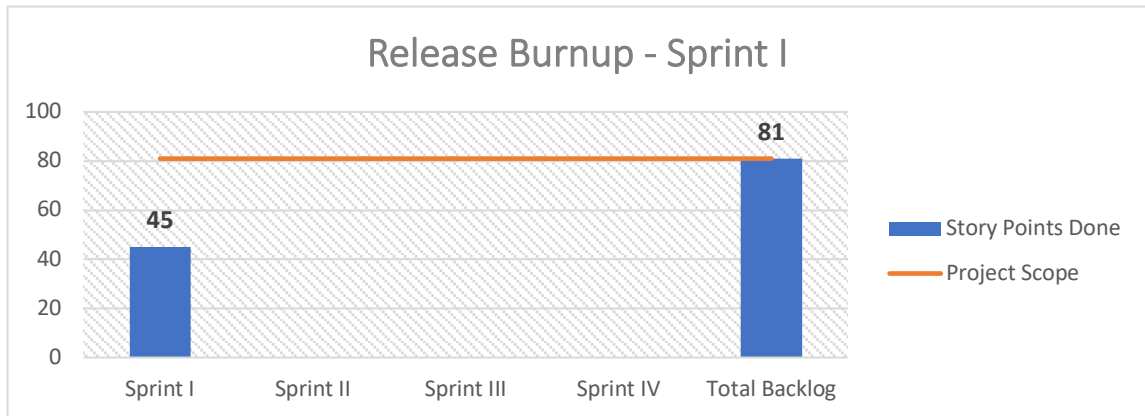


Figure 20 Sprint I Burn-Up Chart evolution of project of development

Figure 20 shows the Release Burn-up chart for *Sprint I*. This chart analyses the effort needed to complete the tasks assigned in each Sprint. It can be seen *Sprint I* accounts for more than 55% of all the effort needed to implement the project. Given that the scope of the project would not change, it can be argued that *Sprint I* was the most intense among all Sprints. The Marketing Owner as well as the Client concluded that the Sprint was successfully completed and there were not blockers neither concerns for the next Sprint

## 4.5.2 Sprint II

### 4.5.2.1 Sprint planning

The timebox of the *Sprint II* planning meeting was scheduled to be one hour. Taking into account that during the first *Sprint* all tasks were completed, meaning that all necessary preparation for the marketing campaign implementation was done, for the *Sprint II* three new tasks were assigned with twelve story points in total.

- Sprint goals. – *The Sprint* has three main primary objectives: (1) To prepare content for *Campaign 1* i.e., prepare a special offer, text for promotion, etc. (2) To run and monitor *Campaign 1* i.e. activate Instagram’s paid promotions, evaluate Instagram hashtags (daily), etc. (3) To evaluate *Campaign 1* i.e. evaluate website’s traffic statistics by GA, etc.
- Prioritize User Stories: *Sprint II* tasks are part of User Story 2. As seen in Figure 21 the Marketing Owner prioritized the story tasks in the following order: Prepare Content for *Campaign 1*, run & monitor *Campaign 1* and evaluate *Campaign 1*.

- Sprint Backlog. - The backlog for the *Sprint II* contains 3 tasks and they account for 12 story points: 2 **M** tasks (10 story points), 1 **S** task (2 story points). The backlog was prioritized as follow:

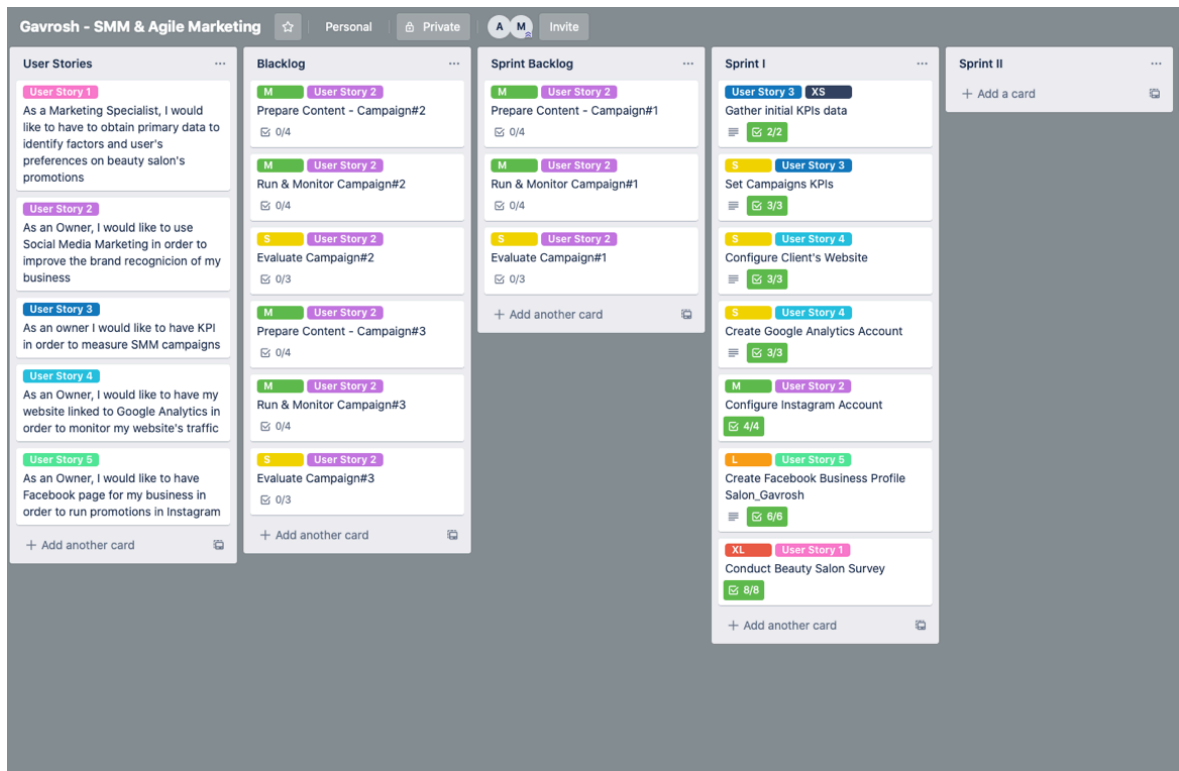


Figure 21 Sprint II Backlog

#### 4.5.2.2 Tasks

For the first marketing campaign implementation, the Marketing team prepared a contend i.e. special offer, text for promotion, etc., for Instagram feed which was discussed and approved by the Owner (Figure 22).

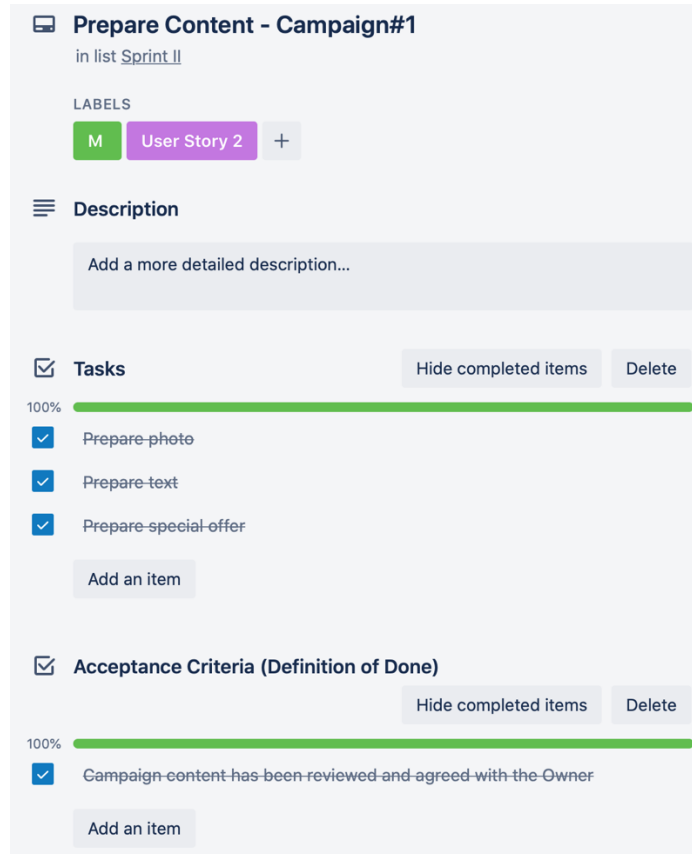


Figure 22 Task of Sprint II

As previously mentioned in Section 4.5 campaign duration was one-week long. During this period the campaign was running in Instagram feed in paid promotions with a selected target group (women from 18-50 years old) and location (Moscow city, Leninskiy prospect district). Statistics from the campaign from each day were recorded and evaluated at the end of the *Campaign 1*.

#### 4.5.2.3 Sprint Review

The Sprint review meeting was timeboxed to one hour and took place via Skype call between the Client and the Marketing Owner. The objective of the meeting was alike the first sprint review meeting.

Every day the remain effort needed to be recorded and summed up; Burn-down and Burn-up charts were created and updated accordingly.

Figure 23 depicts a Burn-down chart after the second *Sprint*. It can be seen that the projection got closer to the goal and the estimated achievement of a goal to submit the project

in *Sprint IV* didn't change. After completion of *Sprint II* twenty-four story points remain left for the next *Sprints*.

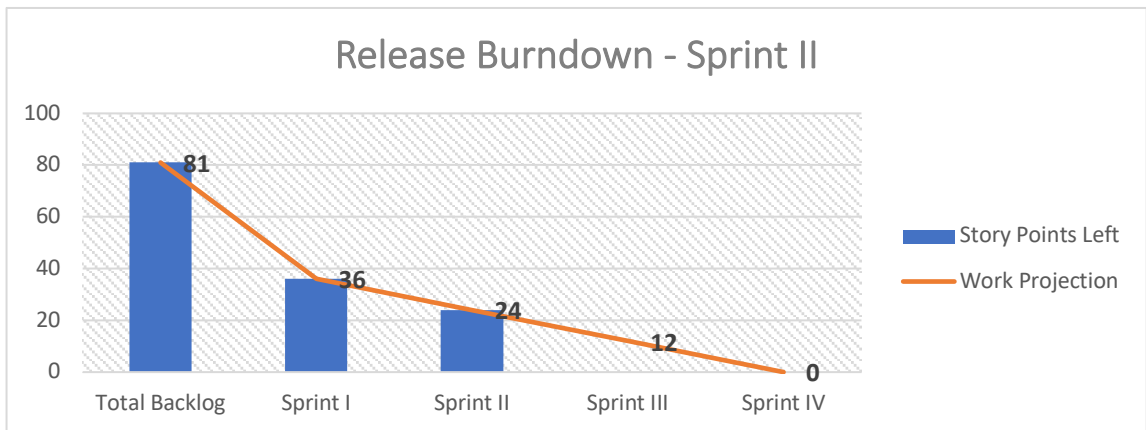


Figure 23 Sprint II Burn-down Chart evolution of project development

Release Burn-up chart for *Sprint II* (Figure 24) shows analyse of the estimated effort for next *Sprints*. It can be seen that after *Sprint II* fifty-seven story points in total were completed and it accounts for 70 % of all the effort needed to implement the project.

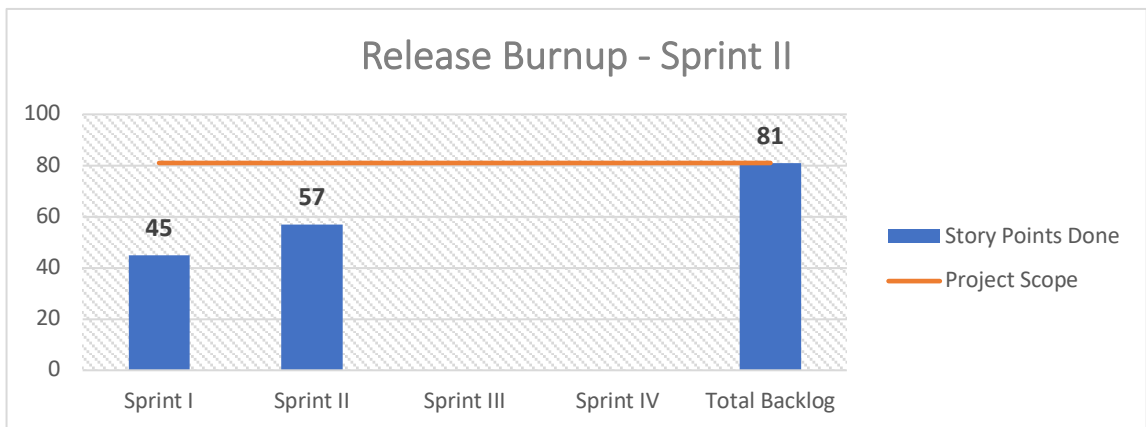


Figure 24 Sprint II Burn-Up Chart evolution of project of development

The overall goal for the *Sprint II* was achieved and there were not blockers nor concerns for the next *Sprint*.

### 4.5.3 Sprint III

#### 4.5.3.1 Sprint planning

For the following Sprint planning meeting with the Marketing Owner and the Client, the timebox was agreed to be 45 minutes, taking into account that the Scrum team became

better familiar with the work format. During the planning meeting was decided for *Sprint III* to test promotions in Instagram Stories. As it was stated in Section 3.5 Agile Methodology very flexible and responding to changes over the following plan. It was agreed to add another User Story for the *Sprint III*. A new User Story was created and inserted into the Trello Kanban board application (Figure 25).

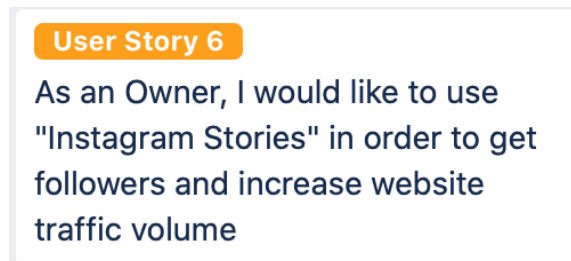


Figure 25 User Story 6 Sprint III

- Sprint goals. – The Sprint has three main primary objectives: (1) To prepare content for *Campaign 2* i.e., prepare a special offer, text for promotion, etc. (2) To run and monitor *Campaign 2* i.e. activate Instagram’s paid promotions, evaluate Instagram hashtags (daily), etc. (3) To evaluate *Campaign 2* i.e. evaluate website’s traffic statistics by Google Analytics, etc.
- Prioritize User Stories: *Sprint III* tasks are part of user stories 2 and 6. As it can be seen in Figure 26 the Marketing Owner prioritized the story tasks in the following order: Prepare Content for *Campaign 2*, run & monitor *Campaign 2* and evaluate *Campaign 2*.
- Sprint Backlog. - The backlog for the *Sprint III* contains 3 tasks and they account for 12 story points: 2 **M** tasks (10 story points), 1 **S** task (2 story points).

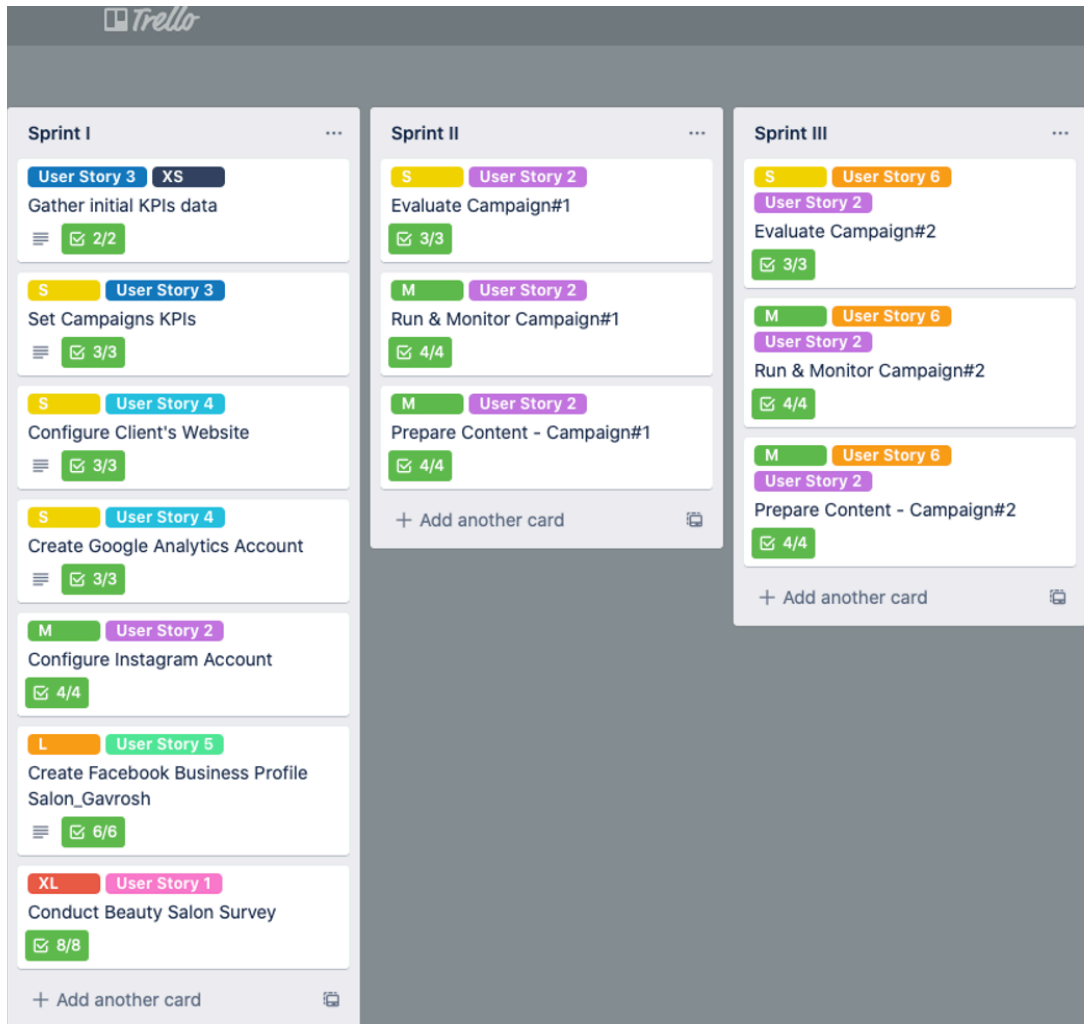


Figure 26 Sprint III Backlog

#### 4.5.3.2 Tasks

For the second marketing campaign the Marketing Team implemented tasks that were prepared for *Sprint III*. The Marketing team prepared a content for Instagram stories which matched the requirements of advertisement in Instagram stories i.e. format of the picture (full-screen vertical 1080x1920), minimum resolution (9:16), etc.; as well as promotional text and call to action button with the link to the website. During a one-week period campaign was running in Instagram stories in paid promotions with the selected target group (women 18-50) and location (Moscow city). Statistics from the campaign were recorded and evaluated at the end of the *Campaign 2 (Sprint III)*.

### 4.5.3.3 Sprint Review

Sprint review meeting was timeboxed for one hour and took place via Skype. The Marketing Owner demonstrated the work results to the Client; the Client inspected the statistical report, which was prepared by the Marketing team, and gave feedback for the current status of the marketing campaign implementations. Despite adding additional User Story, the project scope did not change because tasks had the same sizes (2 M and 1 S) as it was initially estimated. All twelve Sprint backlog story points were completed and for the *Sprint IV*, twelve-story points remain left as it can be seen in the Release Burn-down chart in Figure 27.

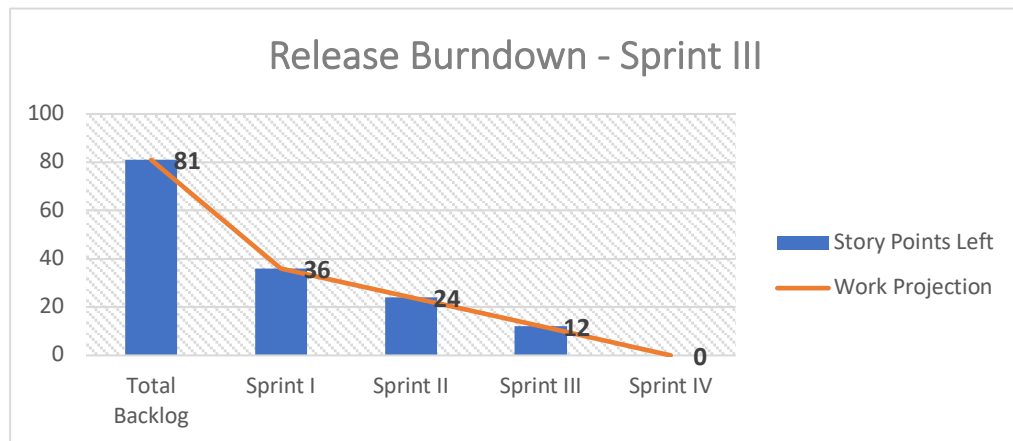


Figure 27 Sprint III Burn-down Chart evolution of project development

Figure 18 depicts the Release Burn-up chart for *Sprint III*. It can be seen that after the *Sprint III* sixty-nine story points were completed and it accounts for 85 % of all the effort needed for the project implementation.

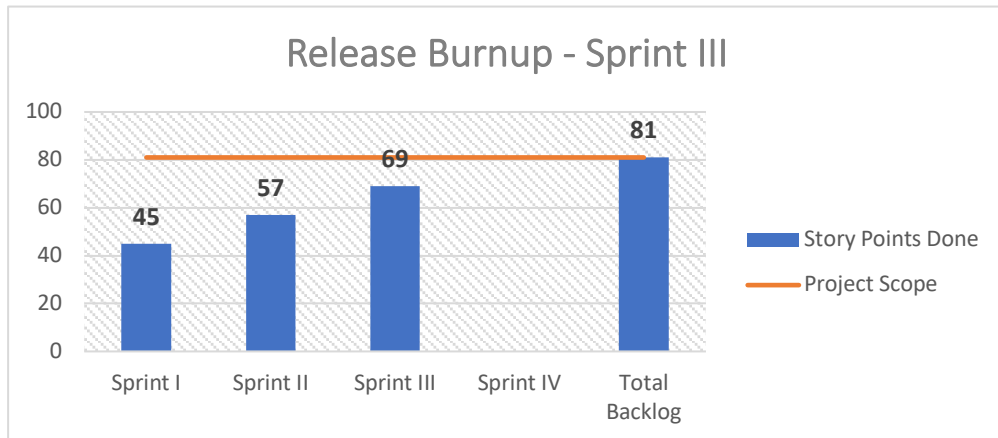


Figure 28 Sprint III Burn-Up Chart evolution of project of development

## 4.5.4 Sprint IV

### 4.5.4.1 Sprint planning

The last Sprint planning meeting between the Marketing Owner and the Client was timeboxed for one hour. For *Sprint IV* the main goal was to run a marketing campaign on Facebook. User story 7 was created and inserted in the Trello Kanban Board application.

- Sprint goals. – The *Sprint* has three main primary objectives: (1) To prepare content for *Campaign 3* i.e., prepare a special offer, text for promotion, etc. (2) To run and monitor *Campaign 3* i.e. activate Facebook boost post promotion, etc. (3) To evaluate *Campaign 3* i.e. evaluate results from Facebook statistical tool, etc.
- Prioritize User Stories: *Sprint IV* tasks are part of user stories 2 and 7. As it can be seen in Figure 26 the Marketing Owner prioritized the story tasks in the following order: Prepare Content for *Campaign 3*, run & monitor *Campaign 3* and evaluate *Campaign 3*.
- Sprint Backlog. - The backlog for *Sprint IV* contains 3 tasks, but after user story 7 was added the task account for 20 story points: 1 L (13 story points), 1 M tasks (5 story points), 1 S task (2 story points). The backlog for this *Sprint* was prioritized as shown in Figure 29.



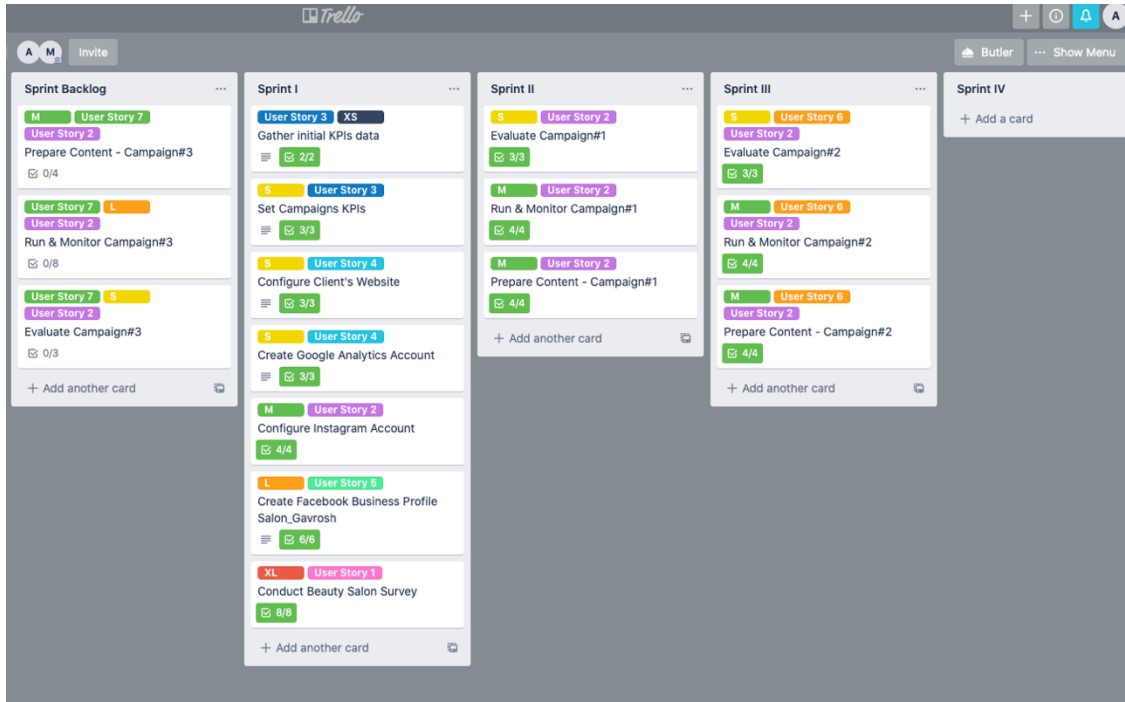


Figure 29 Sprint IV Backlog

#### 4.5.4.2 Tasks

The most time consuming and hence the biggest task was” Run & Monitor Campaign #3). This task consists of four subtasks as follow:

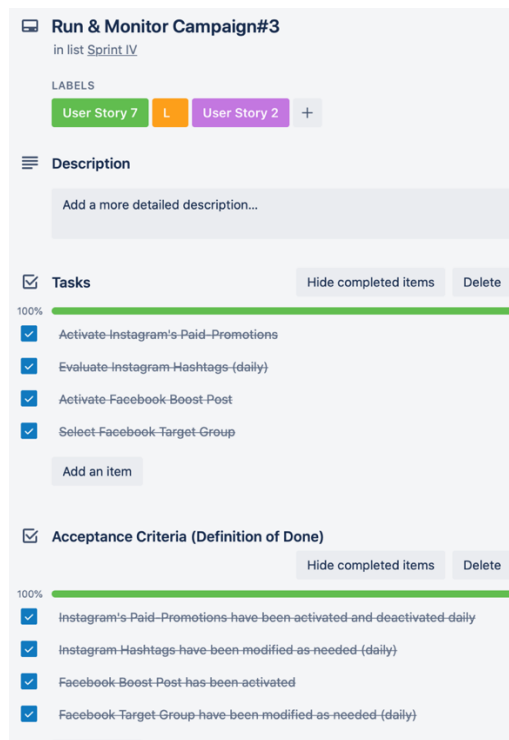


Figure 30 Sprint IV

### 4.5.3.3 Sprint Review

The last Sprint Reviewing meeting was timeboxed for 1,5 hours and took place via Skype. It was discussed that by adding additional User Story project scope changed and an additional eight-story points were added. Hence the total number of story points became eighty-nine. Nevertheless, the fact that new User Story was added it did not affect the deadline of the project and the project was completed at Sprint IV. Results from Figure 31 suggest that projection of project completion linear line (work projection) met the horizontal axis (story points left) at the point zero.

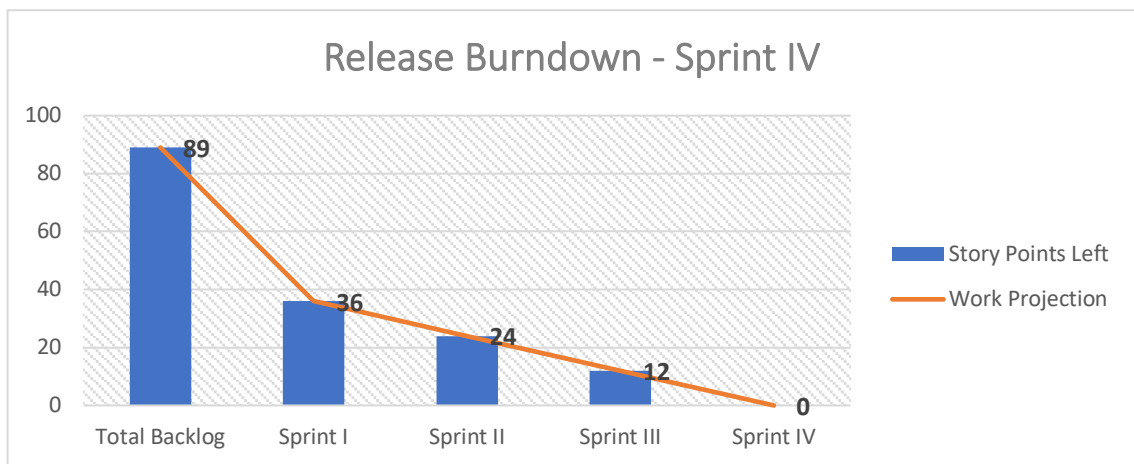


Figure 31 Sprint IV Burn-down Chart evolution of project development

Results from Figure 32 shows that 89 story points account for 100% of all the effort needed for project implementation. Even though project scope was changed, *Sprint I*, was the most challenging and time-consuming among all four *Sprints* as it consists of 45 story points. And it accounts for 50 % of all the effort needed to implement the project after project scope was changed at *Sprint IV*.

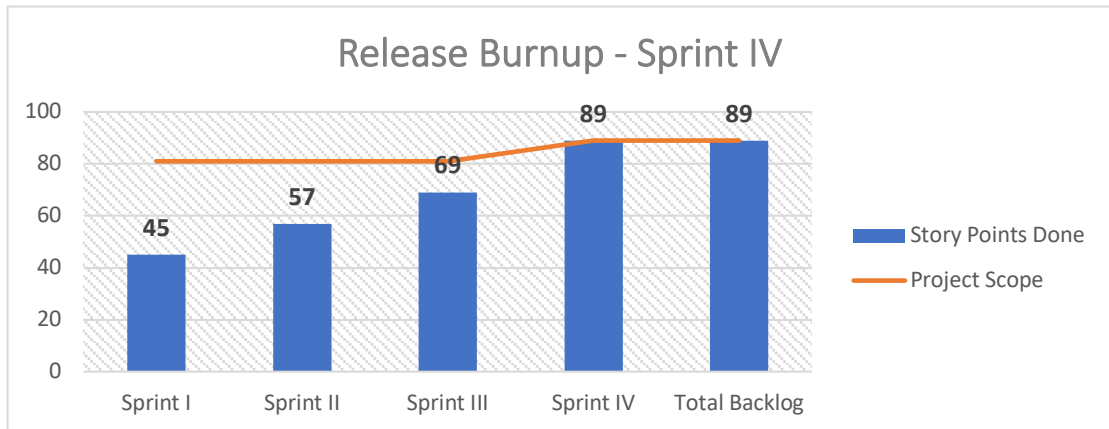


Figure 32 Sprint IV Burn-Up Chart evolution of project of development

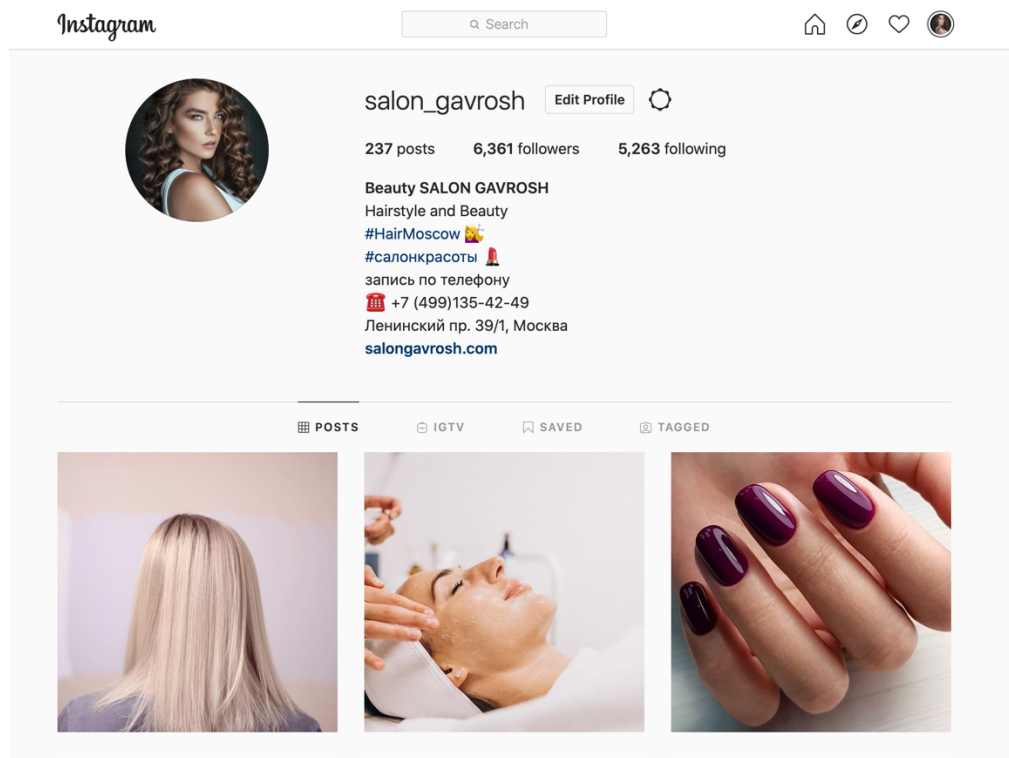
## 5 Analysis of data collection (Results)

In this section of the thesis, the evaluation of the effectiveness of the social media channels used for Beauty Salon Gavrosh will be discussed. The data to evaluate campaigns will be collected by the use of statistical tools provided by social networks Instagram and Facebook, as well as the Google Analytics tool. A quantitative analysis of three campaigns will be performed in order to demonstrate which campaign works the best for marketing communication in social media for the Beauty Salon. Additionally, primary data, which identifies target groups and preferences of the target groups for marketing campaign implementation, will be obtained from the questionnaire survey.

The Beauty salon Gavrosh' professional social profiles can be found by clicking the following links.

For Instagram please visit:

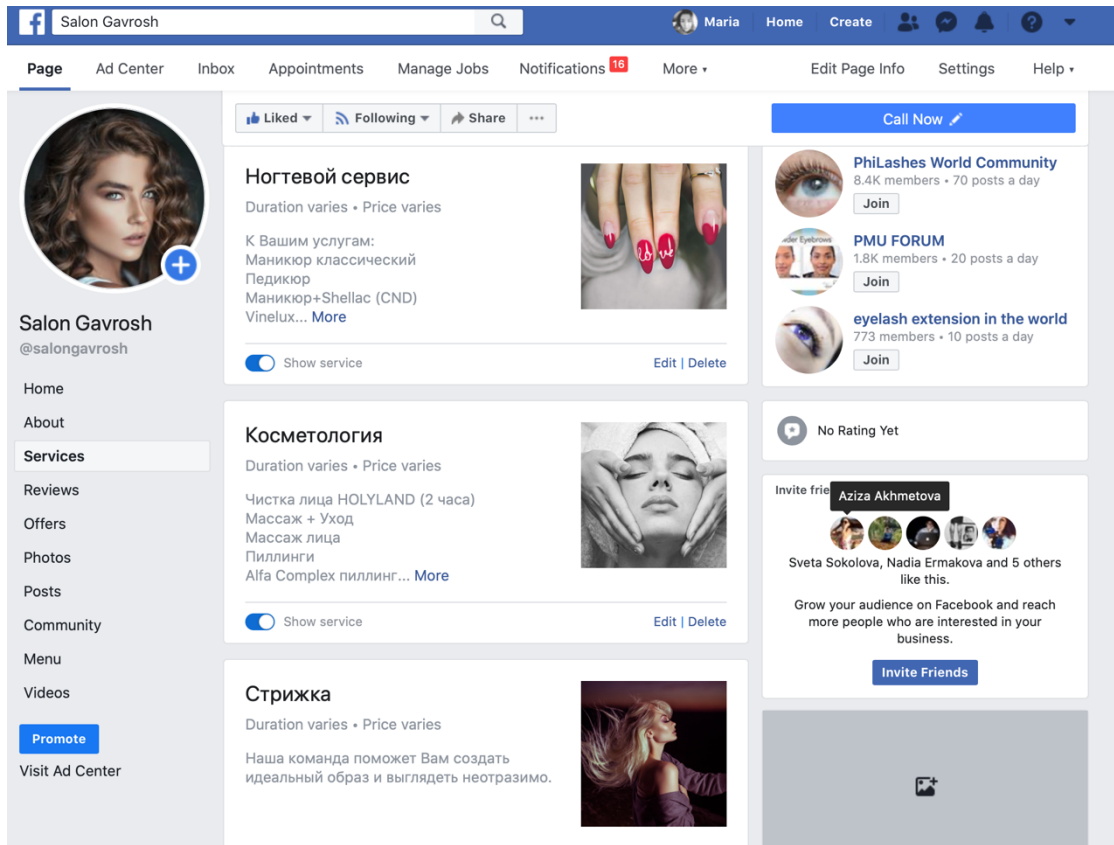
[https://www.instagram.com/salon\\_gavrosh/](https://www.instagram.com/salon_gavrosh/)



*Picture 1 Salon Gavrosh Instagram page*

For Facebook please visit:

[https://www.facebook.com/salongavrosh/?modal=composer&notif\\_id=1582397322672369  
&notif\\_t=aymt\\_upsell\\_tip](https://www.facebook.com/salongavrosh/?modal=composer&notif_id=1582397322672369&notif_t=aymt_upsell_tip)



Picture 2 Salon Gavrosh Facebook page

## 5.1 Key Performance Indicators (KPIs)

KPIs are the important navigation instrument used by managers in order to understand whatever business is on a successful path or whatever it is bearing off from the defined path. The right set of indicators will help to highlight areas that need attention and at the same time shine a light on performance itself. In order to evaluate campaigns of Beauty Salon Gavrosh, it was decided to define KPIs as follow.

As it was mentioned in Section 3.4.1 Follower count on Instagram an important metric which will be used as a first KPI to evaluate Beauty Salon Gavrosh campaigns. More specifically, the Follower growth rate is a great way to measure the health of SMN account. It is important to track not only how many followers account gained over the past weeks, months, and years, but also how fast follower base is growing.

For the second KPI, website clicks were chosen. It is a metric for how many people clicked the website or landing page (Chalkiopoulos, et al., 2018). To obtain statistical data from website clicks GA will be used.

The third KPI which will be used is Reach, which can be considered as knowing how many people can hear what brand is saying. As was discussed in Section 3.3.2 Reach looks at the number of individual people who see companies' piece of content. Reach is useful as a metric because it tells which of the posts are showing up in the most people's feeds. A lot of factors affect Reach in social media, like how many people engaged with post after seeing it, how long they spent looking at it, or what time of day post was published. Because of that, Reach can tell in broad strokes how popular, well-timed, and engaging posts are.

Last but not least defined KPI for the campaign is "Likes". With Likes, the post makes it clear that product or service is interesting to someone, that people are interested in it and they like it. If a post scored a good number of likes, comments, and saves, the Instagram algorithm decides that it is an interesting post and shows it to more people, raising it in the feed above. If the subscribers to the post do not respond (do not like, do not write comments), the algorithm decides that the post is not interesting enough and cannot be shown to anyone.

*Table 4 Results Review*

	<b>Followers</b>	<b>Likes</b>	<b>Web traffic</b>	<b>Reach</b>
<b>Campaign I (Sprint II)</b>	845	358	49	7769
<b>Campaign II (Sprint III)</b>	974	161	77	7830
<b>Campaign III (Sprint IV)</b>	229	63	27	3113

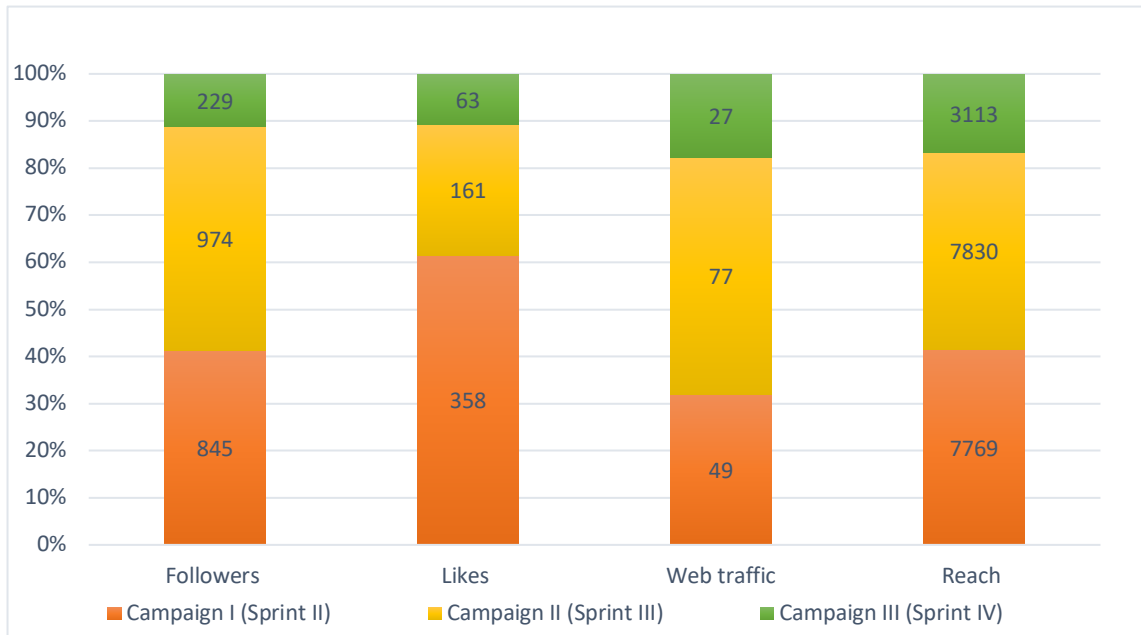


Figure 33 Survey Results Review

At the beginning of the *Sprint II* Instagram account of the Beauty Salon had 6349 followers (Appendix, Figure 42). A first promotional post was published on Instagram feed on the 12<sup>th</sup> of January. At the end of the *Sprint II* number of followers increased by 845. As for the number of likes during *Sprint II*, result indicates 358 Likes in total.

Based on the data provided in Figure 33, it can be seen that, as well as the increase of Followers and Likes, the number of people Reach is significant 7769. In the result from the Google Analytics (Appendix, Figure 43) during the first campaign and *Sprint II*, we can see that there were 49 new users clicked to the website.

For the *Sprint III*, as mentioned in Section 4.5.3.1, it was decided to use Instagram Stories. Campaign was created and evaluated on a daily basis. From the *Sprint III* results indicated 974 new followers. The main purpose of using Instagram Stories was to share direct URLs with consumers in order to direct them to the Beauty Salon website. This is a reason why from the *Sprint III* campaign the Marketing Team did not expect to have an impressive number of Likes. The total amount of likes from the campaign in *Sprint III* is 161. Reach in Instagram Stories was more impressive than from the *Campaign I* and the total number from *Sprint III* is 7830 accounts. Statistics from Google Analytics (Appendix,

Figure 44) depicts 77 new users who viewed the website during the second campaign (*Sprint III*).

As was described in Section 4.5.4.1 for the *Sprint IV* Marketing team was using Facebook paid advertisements. Important to note is that the post, which was advertised on Facebook, at the same time was reflecting on Instagram Stories and on Instagram feed adv.

From Figure 32 it can be seen that the total number of post Reach in Facebook was 3113 and total number of Likes from Facebook 63. The number of followers on Instagram kept increasing during the *Sprint IV* and reached the number 8383 (Appendix, Figure 46). During *Sprint IV* only 27 new users visited the Beauty Salon website (Appendix, Figure 45).

## 5.2 Scrum Implementation

In Scrum, timeboxing is a critical component of all scrum elements (Section 3.5.4). Results from Table 5 shows four Sprints and the time spend on each event during *Sprints I, II, III and IV*. Important to point out that on-going activity of refining the Product Backlog requires average 10 % of the capacity of the Marketing team, according to the Scrum Guide (Schwaber & Sutherland, 2017). Taking into account that the Marketing Team had only one member, it was decided to eliminate Sprint Retrospective meeting. As can be seen from Table 5, the Scrum events consumed 43,75 % of work during the *Sprint I*; 26,15 % during *Sprint II*; only 25 % during *Sprint III* and 28 % during *Sprint IV*.

Table 5 Time boxed Scrum Events

Events (Sprints)	4	3	2	1
Product Backlog Refinement (Grooming) meeting	0	0	0	180
Sprint Planning	60	45	60	90
Daily Scrum	75	75	75	75
Sprint Review	75	60	60	60
Sprint Retrospective	0	0	0	0
Total Scrum events minutes	210	180	195	405
Total Scrum events hours	3,5	3	3,25	6,75



Total Sprint hours	20	20	20	20
Percentage of time on meetings	18%	15%	16,15%	33,75%
Percentage of time producing Backlog	10%	10%	10%	10%
Percentage of time for work	72%	75%	73,85%	56,25%

### 5.3 Results of survey

Primary data was collected in a form of a questionnaire survey. Regarding the time limitation, according to the project schedule, the questionnaire was released in November 2019. A survey was done in order to determine the general idea regarding the preferences of people who use beauty salons. In order to select the most used social media channels and identify the most desirable features in the beauty salon services as well as, to identify special offers that might attract potential customers. The questionnaire was submitted via phone or computer with Google Forms. The survey takes short time, in order to attract more people. A total of 77 samples of the questionnaire were collected. Subsequently, all data were processed and recorded in a data matrix in MS Excel, which also was used for the construction of individual needed tables and graphs.

The following figure shows the structure of the respondents who filled in the questionnaire online. As it is illustrated in Figure 35, the people between age 30-39 were most willing to participate in the research 38%. The second's largest group is women age 18-29 years 32%; 22 % of respondents age 40-49 years and 8% age 50+ participated.

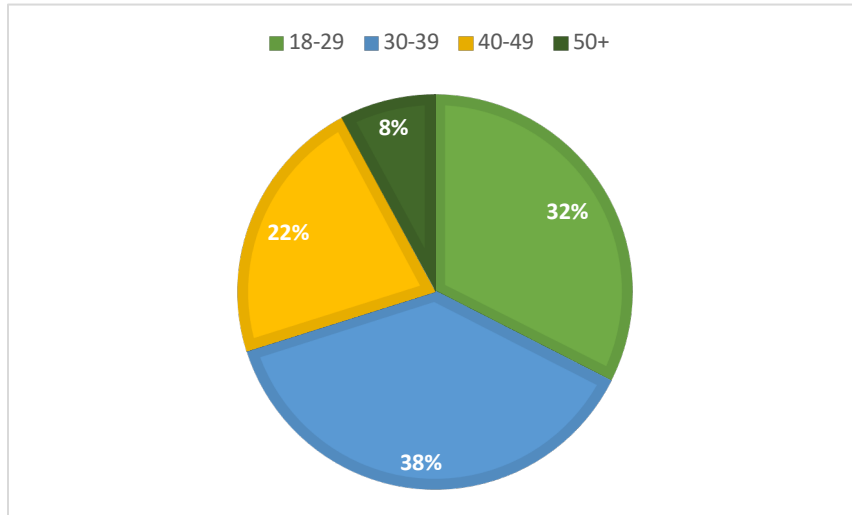


Figure 34: Sample Structure According to the Age

The employed clients participated in the survey more frequently and accounted for 55% of all responders, followed by students with 23%, and then 13 % moms on maternity leave; 6% of unemployed respondents, and last but not least 3% Other (Figure 36).

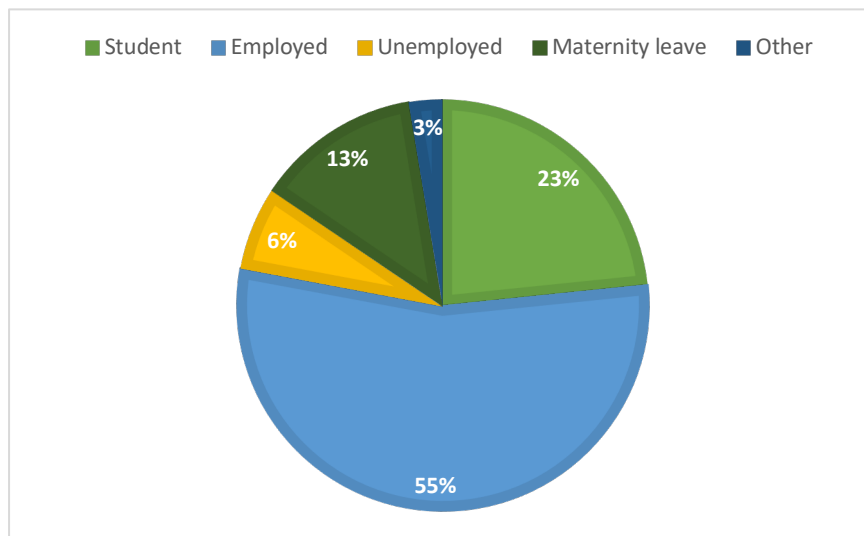


Figure 35: Sample Structure According to the Status

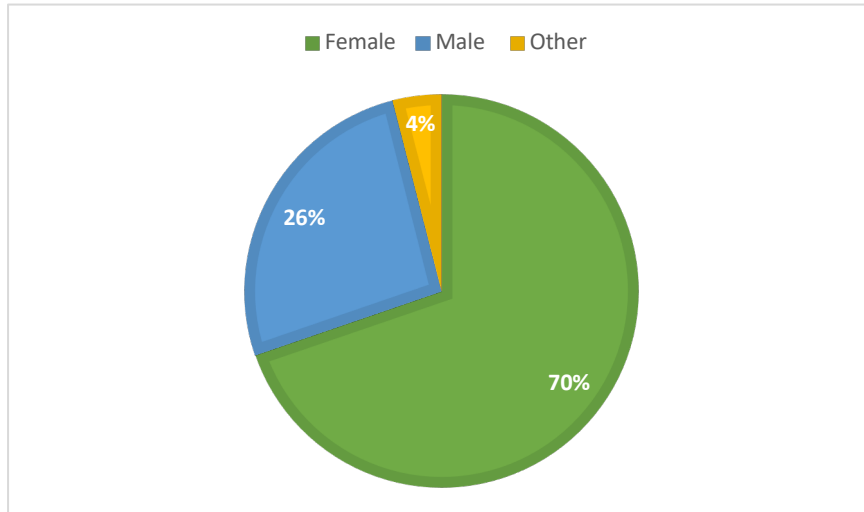


Figure 36: Sample Structure of Gender

We can notice that the majority of respondents participated in the sample is female 70% while 26% males, 4 % respondents didn't specify their gender.

Figure 38 shows the perception of the frequency of beauty salon visits. The figure demonstrates that the majority of respondents visit Beauty salon occasionally. The first and second-largest groups are respondents, who visit Beauty salon frequently more than twice per month 31% and one time per month 31%, then 21 % of clients visit Beauty Salon one time per two months, and 8 % of the respondents once per six months and less often; 1% of respondents visit beauty salon once a year.

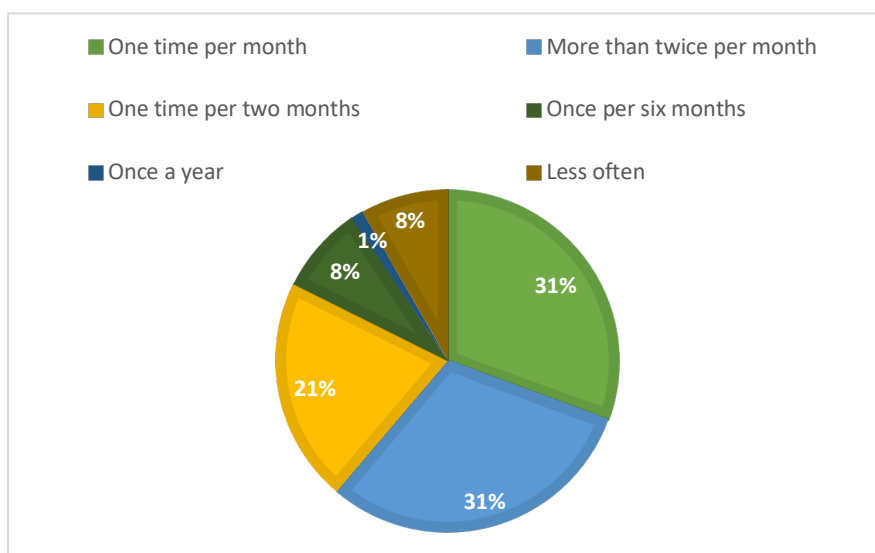


Figure 37: Sample Structure of Frequency of Visits of Beauty Salons

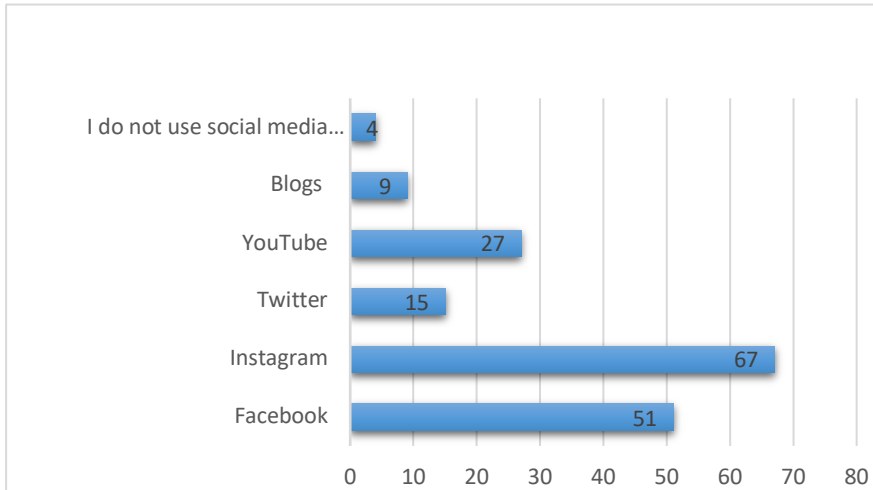


Figure 38: Sample Structure of Usage of Social Media channels

Figure 39 depicts the perception of respondents in regard to preferences for social media channels. They could mark one or all possible choices. The two most popular social media channels, according to the samples survey are Instagram and Facebook, followed by YouTube and Twitter. Less used social media is blogs. Finally, four of the responders don't use social media platforms at all.

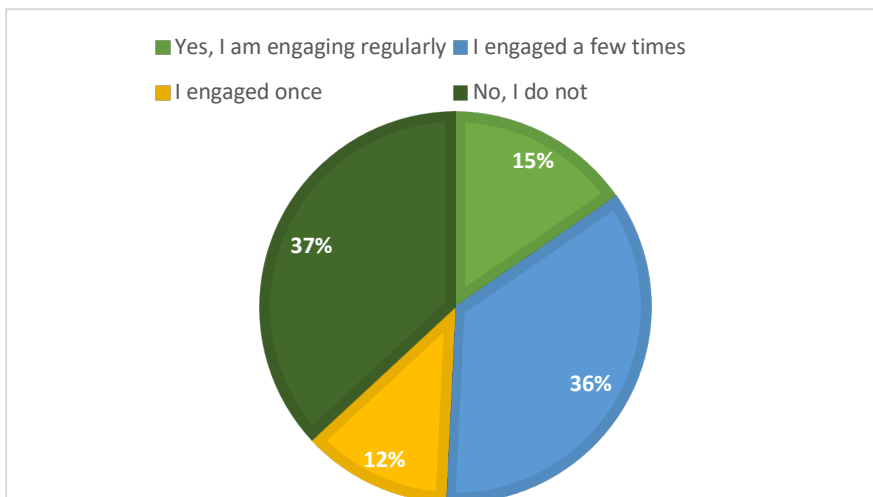
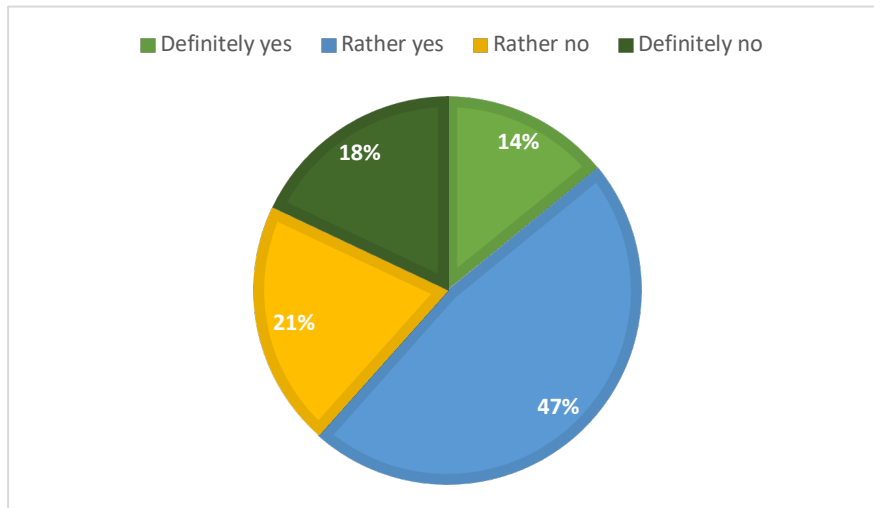


Figure 39: Sample Structure of engagement in competitions in Social Media



*Figure 40: Sample Structure of wiliness to participate in competition in Social Media*

According to responses on Figure 40 and Figure 41 participants are willing to participate in competitions in social media or already have a previous experience engaging in SMM competitions. Figure 41 depicts 47 % (Rather yes) and 14 % (Definitely yes) of respondents would be interested in participation in such events; it can be beneficial to use competitions on social media as a communication strategy.

The survey also includes the question about the most attractive promotions for beauty salon services. Responders were asked to choose between seven different promotions, which they might be interested in, responders could select as many options as they wanted. According to data, the most attractive promotions were discount for a haircut, hair colouring + haircut package discount and 20% discount for bringing a friend. The second most attractive group is special packages (e.g. hairstyle + make-up) and discount for a kid's haircut. And the last group of promotion is discounts for the nail and hair services.



Figure 41: Sample Structure of factors influenced choice of hairdressing / beauty salon

Figure 43 shows interest in the information that responders would like to see on a beauty salon website. The goal of this question was to find out which adjustments have to be done on a Beauty salon website. Subsequently, decision about the order of the information can be used for campaigns.



Figure 42 Sample Structure: Information on a beauty Salon Website

### **5.3 Discussion and Recommendations**

The research was motivated by the increasing popularity of Agile Methodology. The previous chapter was primarily concentrated on the analysis of the findings from the survey for the beauty salon and results of the implementation of Agile Marketing for the SMM campaign. This chapter is designed to summarize how Agile Methodology can be implemented in SMM for SME's.

Social networking sites rocketed from a niche activity into a phenomenon with millions of users. Social media activities can translate into an increase in sales (Andrew T, 2012). Many types of researches were done in order to study consumer purchase decisions in social media.

The research of (Xia Wang, 2012) pointed out that peer communication in social media affects product attitudes which in return enhance purchase intentions. It is also pointed out by researchers that online advertising effectiveness is related to consumer engagement with a website. Therefore, advertisers should identify the most important attributes of the product and use those attributes in advertising. Another important research carried out by (Reczek, et al., 2012), presented positive coloration between mini-connections with consumers created content via SMNs, in fact, generate positive effects on brand evaluation and purchasing intentions. It appears for researchers that Facebook can play an important role in a customer purchasing intention. The results of the study support the fact that consumers are influenced by the Facebook "Like" application and reinforce firm's active presence on Facebook.

The idea proposed by (Gohar Feroz, 2017) supports the findings of (Luo X., 2013) by revealing empirical knowledge concerning social media as a leading indicator in predicting business performance. The results from the study showed that social media presence (e.g., Facebook, Instagram, YouTube, etc) affects website analytics in a positive manner which in return affects financial performance. Furthermore, the study also explains that internet traffic has a significant positive effect on website analytics and the financial performance of the firm. These findings are in line with some finance and marketing studies (Luo, 2009), (Zhu, 2010), (Tirunillai, 2012) have shown that web traffic and user-generated online content have a significant relationship with firms' financial performance.

In Marketing, purchasing intention is considered as an important phase of the decision making process in which consumers demonstrate a willingness to buy or not to buy a brand or a product (Jonh D, 2011). In the context of above-mentioned researches, it can be concluded that users' interaction (e.g. Likes, reposts, tweets, followers, comments, etc.), as well as website traffic volume, indicate a positive effect on users' purchasing intentions and firms' financial performance. This research was inspired by the mentioned above studies and based on them the author selected KPIs to measure execution of the social media marketing campaign implementation. Therefore, highly focusing on Likes, Reach, follower's growth, and website traffic volume. The results from the implementation of social media campaigns tell that the second campaign was the most successful, and generated greater number of Followers, Website traffic volume and people Reach.

A very important point of this research is about how companies can accelerate the speed of operating by using Agile Methodology. As discussed in Section 3 many Agile Marketing techniques today are borrowing from Agile and Lean methods, leaving plenty of room for marketers to adapt them in a way that suits the best to their organizations.

This work implemented Agile Methodology and one of the most popular Agile framework Scrum. In the context of this work it can be seen how to use Scrum time-boxed events to avoid time waste and to ensure that an appropriate amount of time is consumed for the events and for Sprints itself. For the part-time (20 hours/per week) marketer in the four-week project which consist of four *Sprints*, the Scrum events took at most 43,75 % of time. Important to mentioned that the Scrum events consume more time at the beginning, as the Product Backlog Refinement meeting should be timeboxed at least for 3 hours. The shorter the duration of the project, the shorter the timebox should be for the Product Backlog Refinement and for the Sprint Planning meetings. Results of implementation of this project suggests for the project scheduled for one month, dividing it into four *Sprints*; dedicate at least three hours for Product Backlog Refinement meeting, and one-hour for each Sprint Planning meeting. As it was mentioned in Section 5.2, the Marketing team had only one member, as a result the Sprint Retrospective meeting was not a part of implementation of Agile Methodology. Nevertheless, for the Marketing teams with a greater number of



members author suggests to have Sprint Retrospective meeting for at least forty-five minutes after each *Sprint*.

Instead of long-term plans is better to have numerous small experiments. The frequency of *Sprints* provides more opportunities to experiment and test new ideas. The more ideas can be tested, the higher the probability to discover the better one. Because the scope of each *Sprint* is relatively small, it reduces the risk associated with the investment. If *Sprint* shows a good result, it worth to growing it in the future *Sprint*. It is important to note that the problem of using the waterfall approach is that it expects managers to know upfront, in the earlier stages of planning and designing, what a client wants. Quite often, SMEs tend to have less well-rounded approach to marketing than larger firms, the implementation of this project was designed specifically for SMEs to ensure that strategies are focused on practical action and results. In this project author of this work demonstrated how to plan, execute, and build collaboration with the Client by applying Agile principles. Important to point out that in Agile Marketing, collaboration is a key, and individual ideas are more important than a one-size-fits-approach.

Another factor to take into account is that SMEs are often short of necessary resources to large and expensive marketing campaigns, with marketing agility companies encourage to develop their marketing in a way that it can be reconfigured at short notice with fewer resources involve. This requires marketers to plan activities on social media, but more than that to be Agile and respond rapidly to customers' needs.

The social media marketing landscape is in constant change; this is one more reason how Agile can help to test, learn, and iterate plans with greater speed and insight. Noteworthy that the Agile process, which was implemented for this project, is not suggesting doing things quickly and lose quality, on contrary, it suggests produces things quickly by emphasizing iterative and incremental deliverables and allow the team to focus on a clear set of priorities in each *Sprint*. The second way that the Agile Marketing enforces quality is through *Sprint* reviews meetings between the Marketing team and the Owner, it allows them to analyse the performance during the *Sprint* and collaborate both within the Marketing team and, probably even more important, outside the Marketing Team.

From the sample survey (Section 5.2), we can know that women's participation in social media significantly higher than that of men; and the age groups are focused on 18-29, 30-39 and 40-49 years old. The structure of the user's status suggests that the relatively more than seventy percent of the responders are working professionals and students. In terms of using beauty salon services habits, people go to the salon once or twice per month, this result indicates that beauty salon services play an important role in people's lives. Results of the survey also suggests that Facebook and Instagram are the two most popular social media channels. The findings also illustrates that in general, users have previous experiences or willing to participate in competitions in social media. Next, the survey showed is that customers are more influenced by the content of images of beauty salon work, rather than salon awards, profiles of hairdressers or pictures of the salon itself.

SMM can play a better role if we grasp the target group and understand the needs of potential customers and it ideally suits to the incremental campaigns. Based on all received and analysed information from the survey the following recommendations for Beauty Salon SMM campaign implementation can be proposed. First, the insight from the survey should be taken into consideration: the most important and numerous target groups are working or studying women aged 18 to 49. Thus, the beauty salon should create a content and publish information according to the age groups. Additionally, received data shows that users are willing to engage in competitions in social media and it can be considered as a possible investment which supposed to bring financial compensation in the form of an increase of followers and therefore potential customers.

Moreover, future researches can have different results by examining a broader range of industries and could shed more detailed insight as to what kind of communication is needed for different markets. Nevertheless, this research can provide a theoretical and practical prototype for SMM campaign implementation by applying Agile Marketing practices.

## 6 Conclusion

As mentioned throughout this paper, Agile Methodologies encourage project managers and teams to adapt to change rather than following a strict plan. This was proved especially valuable during the execution of the third marketing campaign, in which the scope of the project changed. Furthermore, applying Agile values such as to value customer collaboration over contract negotiation (daily Skype stand-up meetings were carried on) was fundamental to the execution and design of the marketing campaign. It needs to be pointed out that applying Agile Marketing principles provided a safe way to build trust between the Owner and the Marketing team, to reduce unpredictable risks and to the successful execution of the project. Overall, it can be strongly argued that the use of Agile Marketing in conjunction with social media strategies improves the design and executions of social media marketing campaigns.

According to (Nicolaas, 2018) the duration of a sprint should be between two to four weeks. Nevertheless, given the nature of this project and the fact that campaign statistics can be obtain in real-time, *Sprints* with duration of one week provided enough data to evaluate each marketing campaign. On the other hand, due to the fact that the project was limited to one-month duration, the execution of sprint planning, sprint reviewing, and sprint retrospective meetings was challenging, in fact, these meeting were carried out during weekends. In a real scenario, it would be advisable to add at least one day at the beginning of each *Sprint* for the sprint planning and add another two days at the end of the sprint (one for the sprint reviewing and one for the sprint retrospective).

It was of great benefit the use of a Kanban board to organise and visualise daily activities. What is more, it allowed to evaluate the status of each *Sprint* by a simple glance at its column *Sprint Backlog*. It also helped the Marketing Team to execute tasks in a logical a prioritised order and to prevent chaos. Each task in the board was clearly defined and contained an *Acceptance Criteria (Definition of Done)* so misunderstandings regarding when a task can be marked as done were avoided.

As stated in Section 3.4, Google Analytics, Facebook Ads Manager and Instagram Analytics were used to gather quantitative data. KPIs defined in Section 5.1. served as base to the analysis of this data. The result of the data analysis allowed to quickly test, compare and fine-tune different social media strategies. For instance, data analysis suggests that the social media strategies used in Campaign II generated the most website traffic volume and it had the most significant effect on frequency exposure of social media accounts. Therefore, it is strongly suggested that Instagram stories are the most effective strategy to enhanced website volume traffic in addition to increase the frequency exposure of social media accounts. At the same time, data showed that the worst-performing campaign was Campaign III. Consequently, it can be argued that Facebook Ad is the less recommendable social media strategy.

Nevertheless, it needs to be taken into account that the majority of quantitative data came from users in Russia. A further study that compares the popularity of different SMNs in the context of executing the same marketing campaign in different countries may offer further insight on the effectiveness of different social media strategies. Intercultural implications on the use of different SMNs were not part of this research.

Other important limitation to be taken into account is related to the sampling size of the initial survey. Due to time and resources restrictions, the number of completed responses was just 77. The project may have benefited from a greater number of responders. Furthermore, the survey was executed using only Google Forms. In order to reach a greater audience, other survey mediums such as conducting interviews may have been used.

Overall, the execution of this project can be marked as successful; general and specific objectives were achieved. The Beauty Salon Gavrosh increased its web volume traffic and its social media frequency exposure in Instagram and Facebook expanded. Nevertheless, due to privacy restrictions, neither the number of clients nor the financial performance of the company were not available to the author.

## 7 References

- Accardi-Petersen, M., 2011. Agile marketing. In: Jeffrey Pepper ed. s.l.:CA Technologies.
- Andreas M. Kaplan, M. H., 2009. The fairyland of Second Life: Virtual social worlds and how to use them. *Business Horizons*, pp. 563-572.
- Andrew T, S. a. J. G., 2012. The Effects of Traditional and Social Earned Media on Sales: A Study of a Microlending Marketplace. *Journal of Marketing Research*.
- Anon., n.d. [Online]  
Available at: <https://wordpress.org/support/article/introduction-to-blogging/>
- Bernal, J., 2010. *web 2.0 and Social Networking for the Enterprise*. s.l.:Person plc.
- Bistra, V., 2017. Marketing 4.0: How Technologies Transfrom Marketing Organization. May.
- Brinker, S., 2016. *Hacking Marketing*. s.l.:s.n.
- Business, F. f., n.d. *Facebook for Business*. [Online]  
Available at: <https://www.facebook.com/business/help/710746785663278>
- Chalkiopoulos, A., Boykin, P. O., Polatkan, G. & Szabo, G., 2018. *Social Media Data Mining and Analytics*. s.l.:Wiley.
- Clement, J., 2019. *Social Media & User-Generated Content*.  
Available at: <https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/>
- Clement, J., 2019. *www.statista.com*.  
Available at: <https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/>
- Cross, M., 2014. *Socila Media Security*. s.l.:Elsevier Inc..
- David Edelman, J. H. a. S. S., 2016. Making your marketing organization agile: A step-by-step guide. *Marketing & Sales*, Issue November .
- Eric Fettman, S. A. F. A., 2016. *Google Analytics Breakthrough*. s.l.:s.n.
- Ewel, J., 2011. Getting started with Agile Marketing.
- Fowler, F. M., 2018. *Navigating Hybrid Scrum Environments: Understanding the Essentials, Avoiding the Pitfalls*. s.l.:Apress.

- Gohar Feroz, J. W., 2017. Internet Presence, Website Analytics, and E-Retailor Financial Performance. *International Journal of Economics and Management*, pp. 85-106.
- Green, D. D. D. et al., 2018. In a World of Social Media: A Case Study Analysis of Instagram. *American Research Journal of Business and Management*, pp. Volume 4, Issue 1, 8 Pages.
- Green, M. D., 2016. *Scrum: Novice to Ninja*. s.l.:SitePoint,.
- Greene, A. S. & J., 2015. *Learning Agile*. s.l.:O'Reilly Media.
- Gupta, R., 2016. *Agile Automation and Unified functional testing*. s.l.:Pearson.
- Hansen, D. L., 2010. *Analyzing social media networks with NodeXL*. s.l.:Elsevier.
- Hazzan, O. & Yael, D., 2014. *The Agile Manifesto*. s.l.:s.n.
- Holloman, C., 2014. *The Social Media MBA Guide to ROI: How to Measure and Improve Your Return on Investment*. s.l.:Wiley.
- Iblasi, W., Bader, D. M. & Al-Qurini, S. A., 2016. The Impact of Social Media as a Marketing Tool on Purchasing Decisions (Case Study on SAMSUNG for Electrical Home Appliances). *International Journal of Managerial Studies and Research*, pp. 14-28.
- Jara A., 2012. *Marketing 4.0: A New Value Added to the Marketing through the Internet of Things, Innovative Mobile and Internet Services in Ubiquitous Computing (IMIS)*, Palermo: s.n.
- Jonh D, 2011. What Signals Are You Sending? How Website Quality Influences Perceptions of Product Quality and Purchase Intentions. *MIS Quarterly*, Volume 35, pp. 373-396.
- Kaushik, A., 2010. *Web Analytics 2.0: The Art of Online Accountability and Science of Customer Centricity*. Canada: s.n.
- Keller, K. L., 2008. *Strategic Branding Management: Building, Measuring, and Managing Brand Equity. 3d Edition*. s.l.:Upper Saddle River, New Jersey 07458: Prentice Hall.
- Kotler, P., 2017. *Marketing 4.0 Moving from Traditional to Digital*. s.l.:s.n.
- Larman, C. & Vodde, B., 2016. *Large-Scale Scrum: More with LeSS*. s.l.:Addison-Wesley Professional.
- Linda D.Hollebeek, M. S. R. J., May 2014. Consumer Brand Engagement in Social Media: Conceptualization, Scale Development and Validation. *Journal of Interactive Marketing*, pp. Pages 149-165 .
- Luo X., Z. J. D. W., 2013. Social Media and Firm Equity Value. *Information Systems Research*, pp. 146-163.

- Luo, X., 2009. Quantifying the Long-Term Impact of Negative Word of Mouth on Cash Flows and Stock Prices. *Marketing Science* 28(1), pp. 148-165.
- McGreal, D. & Jocham, R., 2018. *The Professional Product Owner: Leveraging Scrum as a Competitive Advantage, First Edition*. s.l.:Addison-Wesley Professional.
- Mills, D., Sherrell, L., Boydston, J. & Wei, G., 2006. *Experiences Using Agile Software Development for a Marketing Simulation*. s.l.:s.n.
- Moriuchi, E., 2019. *Social Media Marketing*. Second Edition ed. New York: Business Expert Press.
- Nicolaas, D., 2018. *Scrum for Teams*. s.l.:Business Expert Press .
- O'Reilly, T., 2005. *What is web 2.0: design patterns and business models for the next generation software*. s.l.:s.n.
- Radtac, P. M. a., 2015. *Afile Foundations*. London: s.n.
- Reczek, R. W., Lamberton, C. P. & West, P. M., 2012. Beyond the 'Like' Button: The Impact of Mere Virtual Presence on Brand Evaluations and Purchase Intentions in Social Media Settings. *Journal of Marketing*.
- Schneider, J., 2017. *Understanding Design Thinking, Lean, and Agile*. s.l.: O'Reilly Media
- Schwaber, K. & Sutherland, J., 2017. *Scrum Guides*.  
Available at: <https://www.scrumguides.org/scrum-guide.html#artifacts-productbacklog> [Accessed 01 04 2020].
- Scott, D. M., 2013. *The New Rules of Marketing & PR: How to Use Social Media, Online Video, Mobile Applications, Blogs, News Releases, & Viral Marketing to Reach Buyers Directly*. 4th Edition ed. s.l.:Wiley.
- Shih, C., 2009. The Facebook Era: Tapping Online Social Networks to Build Better Products, Reach New Audiences, and Sell More Stuff.
- Simon, P., 2017. *Analytics The Agile way*. s.l.:Wiley.
- Statista, 2019. [www.statista.com](http://www.statista.com).  
Available at: <https://www.statista.com/statistics/253577/number-of-monthly-active-instagram-users/>
- Strauss J, F. R., 2009. *E-Marketing*. 5th Edition Upper Saddle River NJ ed. s.l.:Prentice Hall.
- Tabaka, J., 2006. *Collaboration Explained: Facilitation Skills for Software Project Leaders*. s.l.:Addison Wesley.

Taneja, S. & T. L., 2014. Putting a face on small business: Visibility, viability, and sustainability the impact of social media on small business amrekting. *Academy of marketing Studies Journal*, pp. 249-258.

Tirunillai, S. T., 2012. Does Chatter Matter? The Impact of Online Consumer Generated Content on a Firms Financial Performance. *Marketing Science*, pp. 198-215.

Waisberg, D., 2015. *Google Analytics Integrations*. s.l.:Sybex.

Weber, L., 2019. Authentic Marketing. In: s.l.:john Wiley & Sons, p. chapter 4.

www.worldpress.org, 2019.

Available at: <https://wordpress.org/support/article/introduction-to-blogging/>  
[Accessed 10 12 2019].

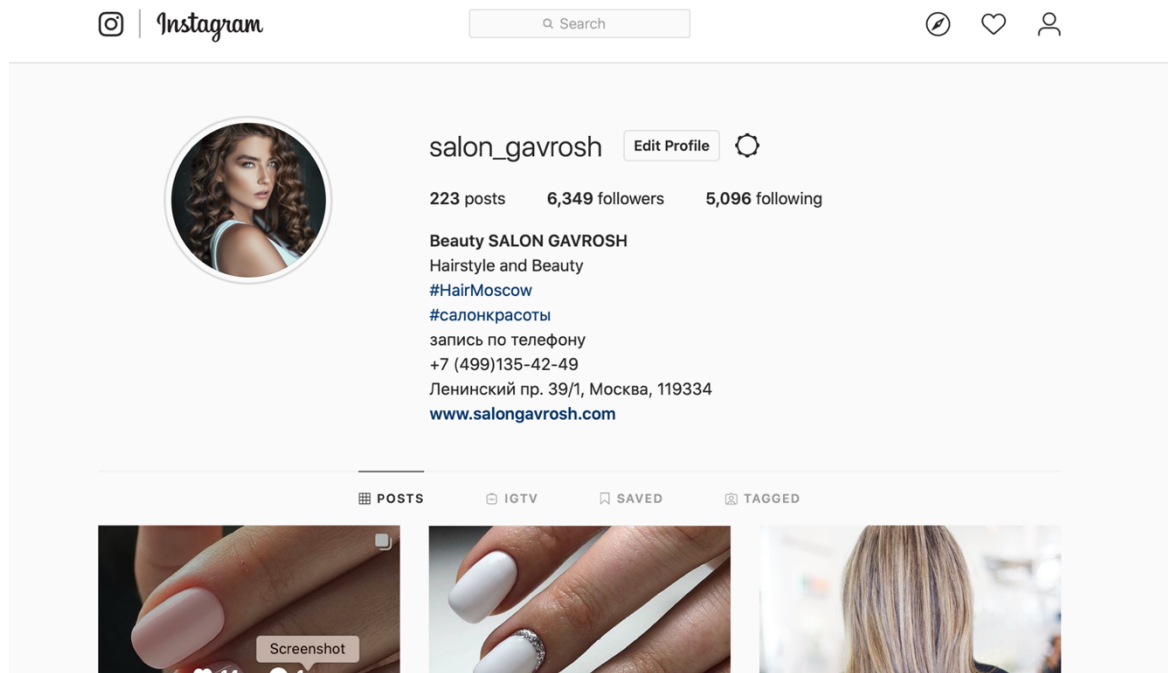
Xia Wang, C. Y. Y. W., 2012. Social Media Peer Communication and Impacts on Purchase Intentions: A Consumer Socialization Framework. *Journal of Interactive Marketing* , pp. 198-208.

Yadav, Y. k. & J., 2015. *Microsoft Dynamics AX Implementation Guide*. Birmingham: s.n.

Zhu, F. ., Z., 2010. Impact of online consumer reviews on sales: The moderating role of product and consumer characteristics. *Journal of Marketing* , pp. 133-148.



## 8 Appendix



Picture 3 The beginning of Marketing campaign implementation

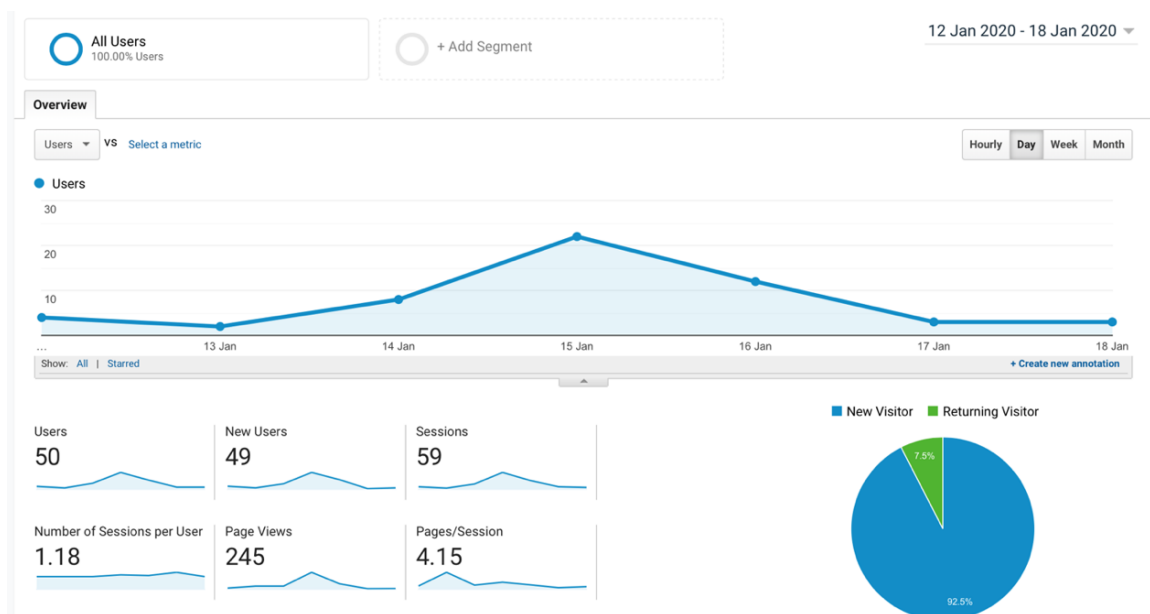


Figure 43 Google Analytics Sprint II

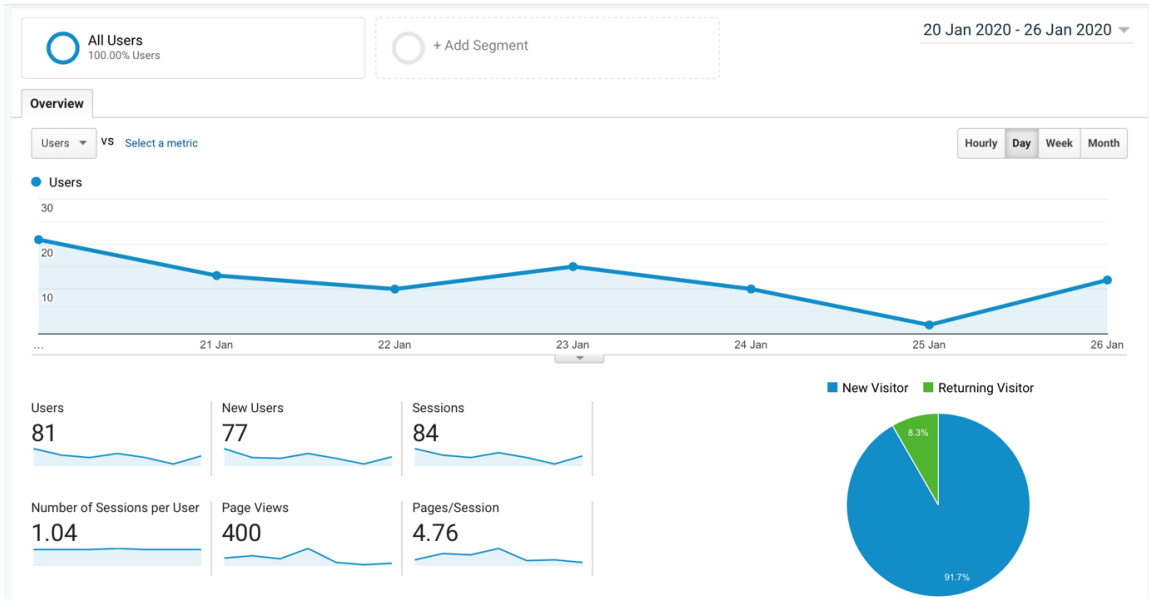


Figure 44 Google Analytics Sprint III

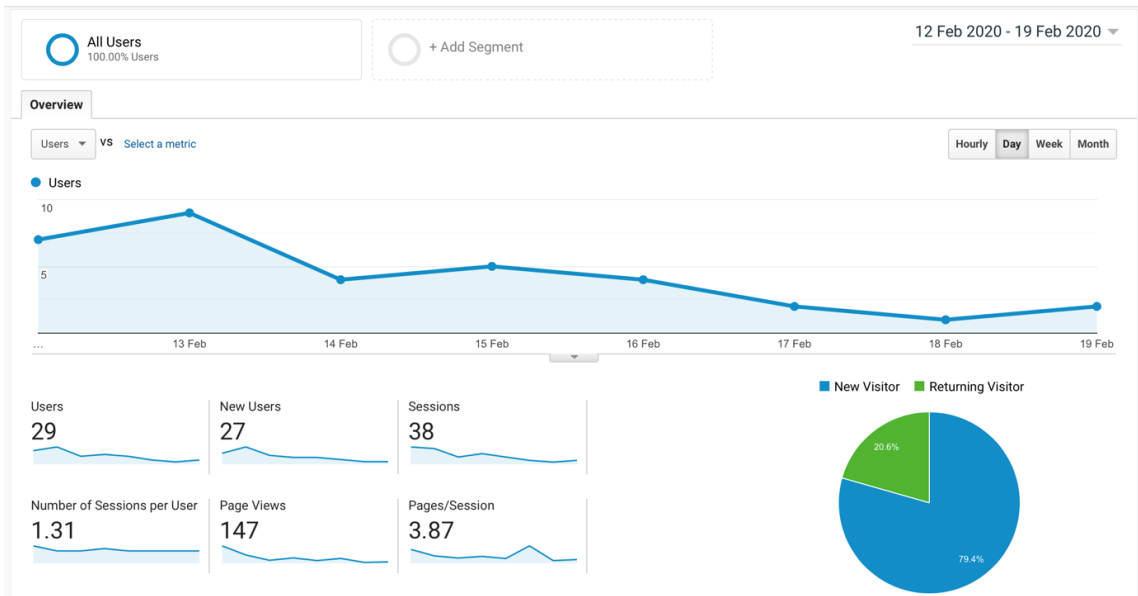
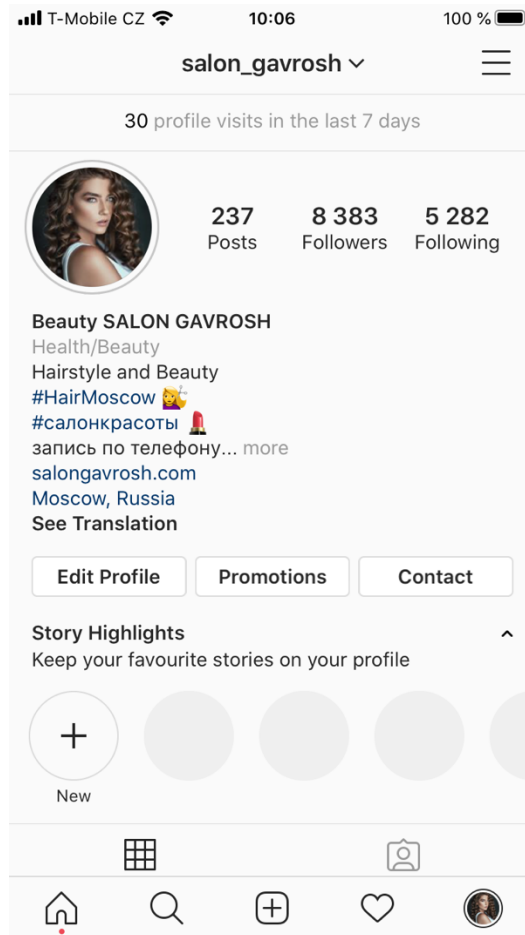


Figure 45 Google Analytics Sprint IV



Picture 4 The end of Marketing campaign implementation

## Beauty Salon Survey

### What is your gender?

- Male
- Female
- Other
- Prefer Not to Answer

### What is your age?

- 18-29
- 30-39
- 40-49
- 50+

### What is your status?

Student  
Employed  
Unemployed  
Maternity leave  
Pension  
Other

**How often do you go to the Beauty Salon?**

One time per month  
One time per two month  
Once per six months  
Once a year  
Less often  
More than twice per month

**Which of the following social media platforms do you use? (Please tick as many boxes as applicable)**

Facebook  
Instagram  
Twitter  
YouTube  
Blogs  
I do not use social media platforms (end of questionnaire)

**Are there any children in your household?**

Yes  
No

**What factors influenced your choice of hairdressing / beauty salon? (Please tick as many boxes as applicable)**

Convenience to home or work  
Pricing  
Special offers / vouchers  
Quality of treatments  
Brand image  
Salon decoration  
Professional Memberships  
Awards  
Customer loyalty rewards

**Imagine that you are looking for a new hair / beauty salon and you are visiting new salon websites. What information would you like to find about these salons?**

Services offered  
Prices

Images of the salon  
Images of their work  
Customer reviews  
Profile of the hairdressers / beauty therapists  
Special offers  
Awards  
Opening times, information about booking  
Location

**Which special offer would attract you more?(Please tick as many boxes as applicable)**

Discount 30% on kind's haircut  
Special packages (e.g Hairstyle + Make-up)  
Tenth manicure for free  
Discount on nail service  
Discount on hair service  
Hair colouring + haircut - 10 % discount on haircut  
Bring friend and get 20 % discount for yourself

**Have you ever engaged in competitions in Social Media?**

Yes, I am engaging regularly  
I engaged a few times  
I engaged once  
No, I do not

**Would be Social Media competition for 25 \$ Beauty Salon service attractive for you?**

Definitely yes  
Rather yes  
Definitely no  
Rather no

