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Digital marketing plan for a book using service-oriented marketing mix

MASTER'S THESIS

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Declaration

Hereby I declare that this paper is my original authorial work, which I have worked out on my own. All sources, references, and literature used or excerpted during elaboration of this work are properly cited and listed in complete reference to the due source.

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Abstract

This thesis aims to propose a digital marketing plan for a book on software engineering using the 7C service-oriented marketing mix. The theoretical part describes the structure of the digital marketing plan. It analyses different digital channels and techniques in the context of this marketing mix, which are used in the case study of the marketing plan. The plan contains situational analysis, marketing objectives with relevant KPIs, marketing strategy of 7C marketing mix, based on which, tactics, actions and their control mechanisms are defined. The actions were divided into two phases, initial and follow-up. Actions realized during the initial phase are summarized at the beginning of the marketing plan.

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Introduction

Marketing is a necessary discipline for all kinds of businesses, and its mastering is a crucial prerequisite for the success of any product on the market. Understanding of how marketing works and how it can be used in our favor brings us a significant advantage over our competitors. On the other hand, ignorance of marketing can lead to missed opportunities, loss of business, or burial of a promising product [1].

The development of the Internet transformed marketing, giving customers a more extensive choice of available products and services, possibilities to select from different sellers, and price ranges. Companies have opportunities to expand to new markets, propose new services, apply new digital communications techniques, or compete with larger organizations on a more equal level [2].

The marketing plan identifies the key opportunities for the business and outlines how to expand to its target markets. It is a communication tool that combines elements of a chosen marketing mix in a coordinated action program in order to achieve defined objectives, which in our case are connected to the marketing of an educational book [3].

The Essentials of Modern Software Engineering [4] is a book bringing a fundamentally different perspective on software engineering and its teaching/learning method. Its purpose is to liberate people to learn many different methods of software engineering by introducing Essence, universal kernel, and language for defining software engineering methods and practices. Even though it is mainly aimed at students and educators, this book is beneficial to people in the industry as well.

The main goal of this thesis is to propose a digital marketing plan for the mentioned book using the 7C service-oriented marketing mix. In the first chapter, we focus on what marketing is, explain the difference between digital and offline marketing, and present different types of marketing mix. The second chapter is devoted to various digital marketing channels and techniques, which will be used later as part of the proposed tactics in the case study. The third chapter defines the structure of the digital marketing plan, that will be applied in

the proposed digital marketing plan, and describes its parts. The last, fourth chapter, is dedicated to the proposition of a digital marketing plan for a specific business, the book on software engineering named *The Essentials of Modern Software Engineering*.

1 Marketing

According to Kotler [5], marketing consists of creating, communicating, and transmitting value to the customer. Today's marketing needs to be understood in a new sense, not as the ability to sell, but as the ability to satisfy customer needs. It identifies customers' needs and satisfies them while the company makes a profit.

Karlíček [1] defines marketing as the core of every business, determining its success or failure. The focus is on value for the customers, the quality of satisfaction of their needs. However, customers' satisfaction must be profitable for the company. To be able to create and deliver such value, the company should know who its customers are, understand what their needs, expectations, problems are, and what they would appreciate.

The company must know the answers to the key strategic marketing questions: who are our customers, what value we offer to them, how we ensure their long-term satisfaction, what competitive advantage we have, and how we will maintain it. Although someone might assume that marketing is about customer acquisition, the core of marketing activities is mostly based on building relationships with existing customers or building customer relationships with the brand. Marketers should, therefore, perceive the value of their customers in the longer term. If possible, they should continuously measure their satisfaction, monitor the loss rate, and carefully analyze why customers leave the company.

1.1 Digital marketing

Chaffey [6] defines digital marketing as an application of digital technologies and media with a combination of traditional marketing media in order to achieve marketing objectives. It includes usage of paid, owned and earned digital media channels as well as other technologies, for example, databases for customer relationship management.

One might be confused, what is the difference between digital, online, and Internet marketing. Internet and online marketing are synonyms representing a subset of digital marketing activities, requiring a live Internet connection. According to Chris [7], the main channels of Internet marketing include:

- website,
- search engine marketing,
- social media marketing,
- e-mail marketing,
- content marketing,
- display advertising.

Digital marketing uses different digital channels, platforms, or devices to promote products and services or to build brands and is not limited to the usage of the Internet. The main channels apart from Internet marketing channels include traditional media such as TV, SMS, direct mail, or print.

Practically, digital marketing involves managing different forms of a company's online presence, including websites and social media pages, in combination with online communications techniques, including search engine marketing, social media marketing, online advertising, or e-mail marketing with the integration of offline media. The goal of these techniques is to acquire new customers and provide services to existing ones [6].

As the Internet is becoming one of the most used tools, digital, or, more specifically, online marketing is essential for business nowadays. Figure 1.1 shows that more than half of the population are Internet users, and almost half of the population is actively using social media. We are living in a digital age where more and more people use the Internet, spend more time on the Internet, and do more things online.
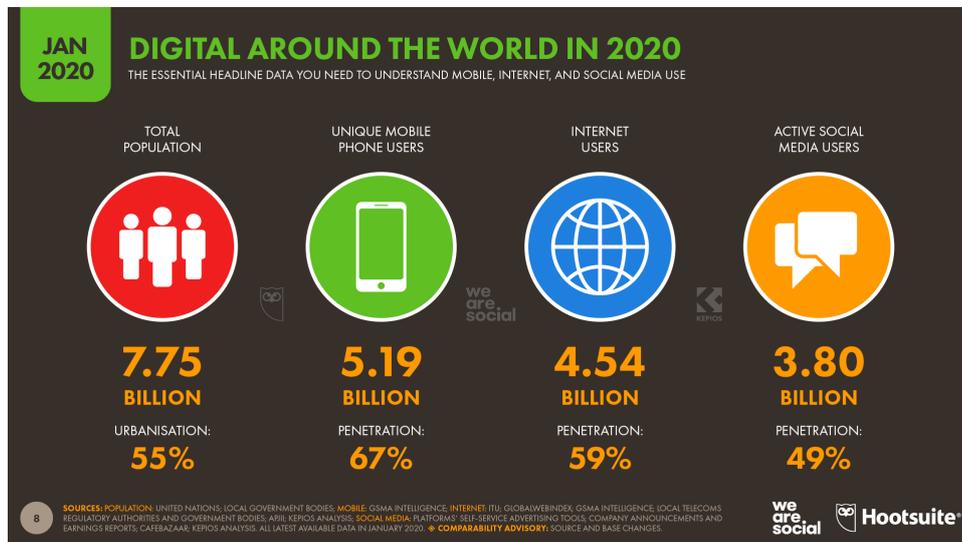
Figure 1.1: Digital around the world in 2020 [8]

1.2 Offline marketing

Traditional or offline marketing is a type of marketing, using different offline advertising and promotional methods targeting potential customers using channels with no Internet involved. This type of marketing can be still effective, but according to Standberry [9], it is connected to many problems or disadvantages compared to online marketing:

- little interaction,
- higher costs,
- hard to update,
- hard and ineffective campaign measurement,
- limited customization options and customer targeting.

On the other hand, traditional marketing can still be helpful in building brand awareness or company promotion. Therefore, highly effective marketing strategies take advantage of the potential of combining online and offline activities. When it comes to offline marketing, there are many different ways to communicate with the customer, to facilitate their decision-making process or information finding, and thus reduce their costs. These activities become a valuable marketing

channel that can effectively complement the whole marketing mix. Main offline marketing channels include:

- print advertising,
- workshops or lectures,
- broadcast,
- direct mail,
- telephone,
- articles in theme-related magazines.

When choosing offline activities for the company's marketing mix, it is a key to maintain consistency of communication over different channels, as well as the compatibility of online and offline marketing activities, such as the uniformity of appearance and information between printed materials and the website of the company.

1.3 Product vs. service-oriented marketing mix

A marketing mix is one of the most important and popular tools used to create marketing strategies and achieve marketing objectives. The product-oriented marketing mix is focused on tangible products, and the customers' need to own these products. This approach lacks interaction with the customers and does not reflect their needs.

The service-oriented approach is not targeting the ownership of the product but the service, bringing value to the customers, and satisfying their needs. This approach relates to the term Service Science, defining Service-Dominant Logic. Associated services require non-trivial information and knowledge in order to be provided successfully [10].

Vargo and Lusch [11] defined ten fundamentals of Service-Dominant Logic, creating a new view on the process of service delivery and the economy itself. These principles define that we live in a world of services where service is exchanged for service. The value of goods is defined by the value and beneficiary they provide for the customer. The creation of this value is interactional, based on the interaction with the customer; he is then its co-creator. The service-centered view is customer-oriented and relational. Co-creation demands a shift from short-time relationship to a long-time mutually beneficial relation-

ship with the customer, and prioritization of long-time profit over short-time.

1.3.1   4P marketing mix

Jerome McCarthy [12] originally proposed a marketing mix in 1960 referred to as 4Ps of Product, Price, Place, and Promotion. It aims to develop the right product that can be for the right price and with the right promotion delivered to the right places.

- Product – is a specification of sold or distributed goods and services bringing value to the customers. Product is considered as a customer's satisfaction and benefits derived or expected from its purchase. It records all aspects of the product, from its planning, creation of product policy, its implementation to final products for customers.

- Price – represents total costs and effort spent on obtaining the product. Price can be seen as money, list prices, discounts, allowances, or something else. It includes price determination, pricing policies, pricing objectives, pricing strategy, and price legislation.

- Promotion – is a process related to publicity, advertising, and PR of the product. It includes the development of promotion strategy, personal selling, mass selling, sales promotion. It should convince consumers why they need a particular product, and why they should pay a specific price for it by explaining what it is, how to use it, and how it will satisfy their needs.

- Place – comprise everything related to the acquisition of the product by the customer. It includes developing a place strategies, retailing, wholesaling, transporting, storing, financing as well as a selection of channels.

1.3.2   4C marketing mix

As the product-oriented approach to marketing mix was criticized for not being focused on customers, Robert F. Lauterborn [13] in 1990

suggested 4C marketing mix, taking 4Ps from the perspective of the customer. The focus on the customers, their needs, and ability to pay for it, represents the main notion of this approach. Every part of the 4P marketing mix has its equivalent in 4C marketing mix:

- Customer (equivalent for Product in 4P) – defines target customers, their division into segments. It describes what their needs are, what problems we want to solve for them. It is necessary to research and analyze the actual problems of customers, their needs so the company could sell what the customers want to purchase.

- Costs (equivalent for Price in 4P) – defines the total costs incurred by the customer while obtaining the product. Total costs include not only the price of the product or service but also opportunity costs, shipment fees, payment fees, or time spent acquiring product or service.

- Convenience (equivalent for Place in 4P) – this section covers the customer satisfaction issues. It defines ways how to satisfy the customer in all aspects, from finding and purchasing the product, finding information about the product, providing customer service, and building a long time relationship with the customers. Usually, the most used and the easiest way, how to find out the customers' feelings related to the company, purchase process, or products and services themselves is gathering customer feedback.

- Communication (equivalent for Promotion in 4P) – describes the communication basis of the company with its customers, for example, the subject of communication, information that needs to be communicated to customers, ways of communication, competitive advantage, ways of promotion, gathering of feedback. Communication is cooperative and can have any form. Its goal is to create a dialogue with potential customers.

1.3.3 7C marketing mix

L. Walletzký [10] in 2014 formulated the concept of the service-oriented marketing mix called 7C. This approach is based on the 4C concept

and reflects the trend in the field of Service Science. Compared to 4C marketing mix, it contains the following three additional areas:

- Community – denotes people that should receive information about some product and ways how to get information to and from these people. It is often built using different social networks. The phenomenon of communities is the conviction of customers that by using specific products or services, they become part of a particular community.

- Channels – ways, how to distribute information, products, or services to our customers as well as get feedback from our customers. There are two types of channels, marketing, and distribution. Marketing channels are used to distribute marketing and other types of information, whereas distribution channels serve for goods and services delivery.

- Co-creation – represents a system of how a company uses gathered information and feedback from all parts of the marketing mix to improve its products and services. The customer is not just a recipient of goods and services but is actively contributing to their development. As the process of co-creation is long-term, it is necessary to define the way how customers will be involved in the overall value creation process and how information coming from customers will be used for all life cycles of products and services.

2 Digital marketing channels and techniques

Digital marketing includes usage of paid, owned, and earned digital media channels shown in Figure 2.1, aiming to support the achievement of defined business objectives. Digital communication, compared with traditional marketing communication, brings many benefits such as interactivity, intelligence, individualism, integration, independence of location, accountability, testing, flexibility, micro-targeting, or cost-control [6].
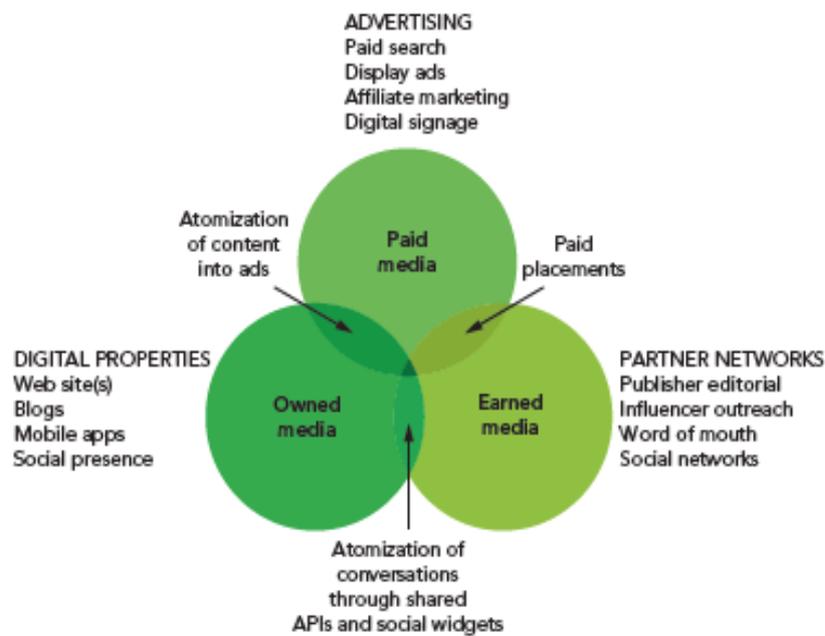
Figure 2.1: Paid, owned and earned digital media channels [2]

2.1 RACE

RACE, the framework developed by Smart Insights [14], aims to help engaging potential customers with the brand during the whole customer lifecycle or marketing funnel.

Each phase of RACE Planning incorporates various digital marketing channels, techniques, activities, as well as key performance indicators, helping to achieve the objectives of each of the phases. These should be managed as a part of digital marketing.

RACE Planning framework consists of four main steps summarized in Figure 2.2:

1. Reach – building awareness about the brand, its products, and service as well as building traffic toward the company's web and social media accounts.

2. Act – encouraging the audience to act or interact with the company or other customers. These interactions can take place over different channels and touchpoints, such as the company's web, social media accounts, or e-mails.

3. Convert – achieving different types of conversions.

4. Engage – building long-term customer relationships in order to reach retention goals.

Additionally, RACE Planning includes an initial phase called Plan. This phase involves creating the overall digital strategy, setting of objectives, and plan.

RACE will be used in the case study as a framework for objectives determination.
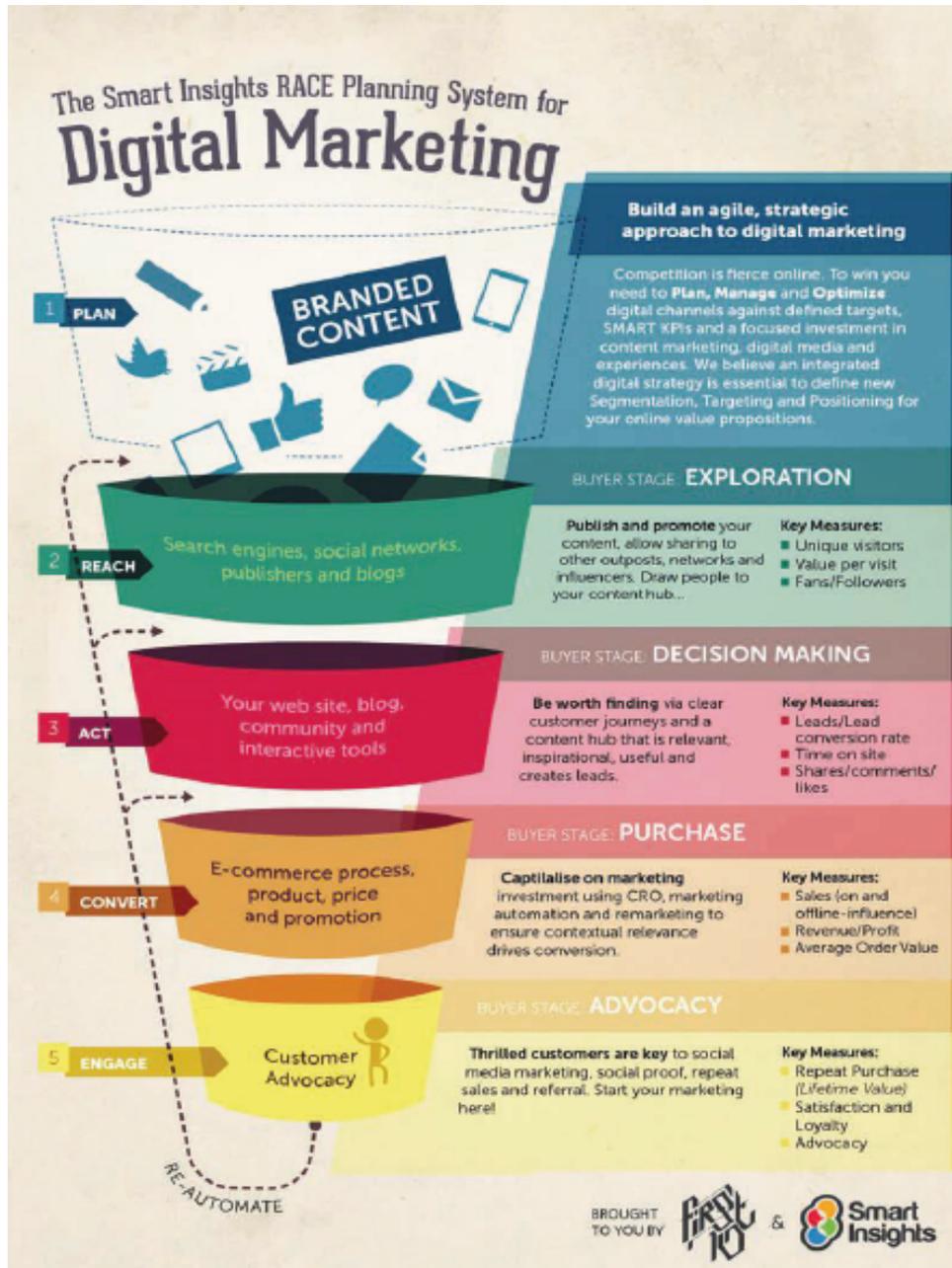
Figure 2.2: RACE Planning System for Digital Marketing [14]

2.2 Website

According to [15], the goal when creating a website is to think about its effectiveness. It should fulfill the business goals and the needs of the target market. The company should know what it wants to achieve from the website and what is its target market before actually building it.

Knowing the business goals, mission, and vision, the market in which the company operates, the customers, what they expect, and reasons why they should want or need particular products or services, can lead to website becoming one of the most effective *Channels* of the marketing mix.

2.2.1 Conversion is the key

The key to digital marketing success is the conversion. Conversion goals related to the website could be anything from an online purchase, sharing the website to the subscription to the online newsletter, or whatever that can be important to the business and suitable to its customers [16]. The content is often considered a key to conversion success as it makes visitors visit the website, helping them decide whether to do a conversion action or not.

2.2.2 Web design

The process of creating and innovating the web involves the multidisciplinary activity – web design. It includes different phases, from planning, designing, to its development, evaluation, deployment, eventually maintenance. It should result in user-friendly websites containing relevant, quality, and regularly updated content with modern design. According to Řezáč [15] the website should possess features such as:
- meaningfulness,
- findability,
- availability,
- accessibility,
- usability,
- credibility,

- persuasiveness,
- enjoyment,
- bonding with the users.

Such features could affect not only customers' *Convenience* with the website but also its findability on search engines.

2.2.3 Information structure

The information architecture of the web is particularly important. Precisely categorizing information on the website is essential to make it easy for users to understand and find them. The overall structure of all information, its correct and logical division, the interconnection of subpages, their naming, help to guide the users where they need, and to enable them to search the web effectively and to accomplish their goals almost effortlessly [17]. Information structure can have a significant impact on the visibility of the site to search engine spiders and its rank in search engine result pages (SERP), with keywords and key phrases playing a significant role. Well designed information architecture can help to make the website more visible, the information more accessible, and to reduce customers' *Cost* of time spent searching for information or purchasing.

2.2.4 Web analysis

Analytical tools, like Google Analytics, can help to gather information about the website. The key elements of web analytics are metrics used to quantitatively measure and detect statistics that describe events or trends on the webpage. Typical metric examples include the total number of sessions, page views, bounce rate, exit rate, or average session duration. The tool must be accurately configured, and gathered data should be interpreted correctly to be able to deduce the right conclusions.

2.2.5 Website and other channels

It is vital to find out what channels will drive visitors to the website as, without marketing support, the website has a significantly lower chance of success. All the marketing channels and tools mentioned in

the following sections are designed to drive traffic on the website, and the website should convert this traffic into something valuable for its business [16].

2.3 Search engine marketing

To use the potential of a well-designed and implemented website, it is essential to make sure that people can find it. Search engine marketing is the basis of Internet Marketing and consists of two important activities, search engine optimization (SEO) and paid search advertising (PSA) [7]. The goal is to gain visibility of the business on the first of the search engine results pages (SERP) as these sites gain more clicks than the sites on other result pages [2].

Search engine marketing increase the *Convenience* of our customers by enabling them to find the website more easily and rapidly, and reduce the *Cost* of time spent to search for the website. SEO and PSA also bring information to relevant search engine users, that is the reason why we consider them as an important digital *Channels* in our marketing plan.

In the practical part of the thesis, we will use only SEO as a tactical tool for objectives accomplishment due to the limited funds. However, we consider it useful to present also PSA as a considerable search engine marketing activity for future marketing purposes.

2.3.1 Search Engine Optimization

Search engines are continuously trying to improve the service they provide to be able to optimize the relevance as well as the quality of the results they return to the users every day. Their goal is to deliver precise, relevant, and high-quality search results as the reputation of search engines depends on the search experience of the users. Search engines gather information about billion of web pages using automated programs called *bots* or *spiders*. These follow hyperlinks and collect information about pages they find. The main process includes crawling, indexing, ranking, and query request and results serving.

Search engine optimization includes achieving the highest possible position in the organic listings on the SERP related to typed in a specific

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combination of keywords. Usually, organic listings are below Pay-per-click (PPC) or sponsored links. The position in the organic listing is dependent on an algorithm of the used search engine used to match the relevant website content with entered keywords.

Google uses around 200 factors within its search engine algorithm, including positive as well as negative factors [2]. In this work, we focus on Google in SEO, as it covers over 91% of search engine market share worldwide [18].

On-page SEO

On-page SEO implies optimization of different parts of the company's website that affect its search engine rankings. These parts can be therefore controlled over by the company and can be changed on its website. According to [19], the most important ones include:
- document metadata (title, description, keywords),
- headings (H1),
- URL structure,
- page content,
- internal linking,
- page load speed,
- content length,
- alternative image text.

Content is the most important thing on the website, and even though we are talking about search-engine friendliness, it should be written for a human audience, not robots. Relevant, unique, and informative content is a crucial aspect of the SEO and sets the site apart from its competition.

Off-page SEO

Off-page SEO relates to actions taken outside of the company's website to impact its rankings within SERP. It focuses on growing popularity, authority, and relevance of the domain by the act of getting inbound links, links to the company's website from external sites. The crucial factor, in this case, is the number and quality of inbound links [19].

2.3.2 Paid Search Advertising

We can divide searching into two categories: organic and paid. While organic search is free and focuses on unpaid rankings in the results of search engines, the paid search focuses on paid rankings.

Pay-per-click (PPC) advertising is a type of paid advertising where companies pay a fee per user clicks on their ad. In the context of paid search advertising, PPC ads are placed on search engines like Google. When users search for keywords related to the business, the PPC ad will appear at the top of the result page in their search query. As well as in content creation, also in PPC ads is crucial to use relevant keywords. Especially long-tail keywords will help drive more qualified traffic to the website for a lower cost [20].

2.4 E-mail marketing

E-mail marketing is one of the best and universal methods of retention marketing and one of the most powerful digital tools as it lets companies communicate easily with their customers on a personal level by the globally accepted digital *Channel*. It can be used to deliver product and service offers, promote sales, to do marketing research, to send news, and valuable information.

E-mailing, as a form of direct marketing, is not only about sending e-mails, but also about receiving them. Such bidirectional *Communication* increases the chance of conversions and helps to build long-term relationships with customers and gain valuable feedback. However, the legal requirements should not be forgotten, and the e-mail marketer must always stay up-to-date with the law in a particular jurisdiction.

As long as customers recognize the brand of the company, expect to receive communication from it, and know that the content will be valuable or beneficial for them, they will welcome regular e-mail communication and open such e-mail. The key to accomplishing such expectations is to make the e-mail messages relevant and attractive for the chosen audience.

E-mail, in the simplest form, usually contains sales phrases or pitch and a call to action, for example, in the form of an encouragement to click on a hyperlink. When creating the e-mail design, we should keep

in mind that the top of the e-mail should immediately capture the attention of the recipient and convince them to read on. The design should reflect identity and branding.

People will not open or respond to random e-mail communication. To be able to start e-mail marketing, it is necessary to build an e-mail list of customers or potential customers wanting to receive messages from a particular business. When it comes to the way how to add a customer to the e-mail list, between frequent, we can include initial purchase, inquiry, or website.

When planning a marketing strategy, it is necessary to define the target customers. Digital customer relationship management can help with customer segmentation and target specific groups with tailored e-mail offerings. The more the customer is interacting with the message, the more the company is likely to achieve established objectives. Objectives can be related to sales or bookings, engagement with the brand, or brand recognition. When it comes to measuring success, many metrics could be monitored, analyzed, and used for further improvement. Between the main behavioral metrics belong open rate, click-through rate, unsubscribe rate, or bounce rate.

The frequency of e-mail sending should be carefully considered. Too rarely and too often can both cause a loss of recipient's interest and can have an impact on the online reputation of the business. The frequency or time to send the message can be hard to predict, and it is vital to track and analyze aspects of the e-mail campaign [16].

2.5 Content marketing

Content marketing should be the core of the company's marketing activities as it is a powerful tool for a brand or business building. Sharing of valuable, relevant, and consistent content can lead to attraction, retention, and interaction with the target audience.

The content marketing strategy should even come before social media marketing strategy because, without quality content, it is almost impossible to attract, influence, engage potential customers on the social media platforms [21]. Social media users visit these sites primarily because of the content they are consuming, whether it is in the form of shared links to videos, posts from their friends and family,

or online content from their favorites brands. Content also plays an essential role in search engine marketing, as Google prefers sites with more quality content.

Content marketing is a long-term approach focusing on building a long-term and stable relationship with the chosen audience by planning, developing, and regularly providing relevant and valuable content [22]. It fulfills customers' requirement for information, engage them without using compulsive selling methods. Content allows companies to contact their potential customers during the whole customer cycle: research, purchase as well as review.

Content marketing is a long-term approach focusing on building a long-term and stable relationship with the chosen audience by planning, developing, and regularly providing relevant and valuable content [22]. It fulfills customers' requirements for information and engages them without using compulsive selling methods. Content allows companies to contact their potential customers during the whole customer cycle: research, purchase as well as review.

When talking about a buyer's journey, it usually comprises three stages: awareness, consideration, and decision. These stages are represented in Figure 2.3, with the examples of the relevant content formats for each of the stages.

Before creating a marketing strategy, it is recommended to think about what our business objectives might look like and analyze all accessible data. What website or social media content is shared or visited, what the target audience usually talks about online, what the competitors are doing for success, what people are searching online [16].

Content strategy should be consistent across all online as well as offline platforms and should complement other company's marketing strategies.

Figure 2.3: Content marketing sales funnel [22]

2.6 Social media marketing

There are 3.8 billion active social media users worldwide, out of which Facebook advertisements can reach 1.95 billion of people. An average of 2 hours and 24 minutes per person is spent on social networks and messaging daily [8]. An average user has an account on more than nine different social media platforms [23]. These are only a few statistics indicating that social media could be very beneficial and effective *Channel* for many businesses.

Social media comprehend web-based software and services, allowing its users to exchange, communicate, and participate online in any form of social interaction. Such interaction can incorporate text, images, audio, video, and other media and enable users to produce new

content, share or recommend existing content, rate, or review products, services, or even brands, discuss hot topics, and more. Conversations between users transcend cultural, temporal, and geographical boundaries.

Social media enables companies to raise a more productive and meaningful relationship with their customers to get insight into the customers' perceptions of their products, services, or brand. Their target audience is not only an audience anymore; costumers are rather active participants as they can actively contribute and collaborate in the companies' business.

When using social media, it is essential to talk to the customers, not at them, and listen to what they are saying. That is the way to find what they are interested in, what they are talking about to be able to produce valuable content for them. Content can be anything distributable in digital form, for example, links to other websites, articles, blog posts, audio, video, or photographs [16].

Social media are closely related to the term *Community*, as their users are usually part of many different communities. Such a community can be a school-related group, work-related group, or business page of a favorite brand. Social networks provide the possibility of bidirectional communication, enabling the organizations to gather relevant information about its customers and, eventually, also their feedback. This information can be used for future improvements, and social media users so become members in the process of *Co-creation*. Therefore, social media platforms will make an essential tactic in our digital marketing plan.

Ryan [16] outlines various forms of social media:

- Social network sites – represents typical social media sites. They let users build their group or network of connections where they can share the content of all sorts of ways. Between popular, we can include Facebook, Instagram, Twitter, or LinkedIn. Regarding marketing, these sites can be used for advertisement, as social networks often offer flexible advertising possibilities, usually based on the Pay-per-click model, or for the creation or improvement of the online reputation of organizations.

- Forums and discussion sites – enable anyone to sign up, start their discussion on any topic, or contribute to other discussions.

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These sites enable companies to get closer to their customers by checking what they are talking about, to raise their profile by contributing to the discussions or generate traffic by adding one or two links to the signature appended on the bottom of the submitted posts.

- Media sharing sites – incredibly popular and fast-growing, usually serve to upload or share different types of media, mainly images and videos. Pinterest enables users to save and share images and videos grouped by certain topics. YouTube is a video-sharing platform, enabling users to upload, watch, comment, or like videos. SlideShare is a site that allows uploading, sharing, and discussing presentations slides. These sites can be used by companies for content distribution and to find out what is valuable and interesting for their target customers.

- Reviews and rating sites – as the name suggests, these sites serve for reviewing and rating all kinds of products or services. They represent valuable and free feedback for companies as they can find what customers think about certain products or services. Companies can use them to demonstrate good customer service by responding to negative feedback constructively and monitoring customers' reviews for further improvement.

- Blogs – provides the possibility of self-expression and communication with a global audience. The blog is not only for blogging individuals but is often used by companies as part of their business marketing, enabling them to reach out and make connections with customers.

- Podcasts – episodic series of digital audio media files that can be downloaded and listened by users. Companies can use different podcasts to listen and learn or to do their own podcasts. Doing a podcast could represent an effective way of offering an additional valuable channel to reach target customers.

2.7   Customer relationship marketing

Customer relationship marketing strives to develop, grow, and maintain customer loyalty, interaction, and long-term, meaningful, and cost-effective relationships. It creates strong connections with customers by providing them with content and information that are suited to their needs, problems, or interests. Therefore, it is necessary to have all the important information about the customer and the target market.

The strategy in customer relationship marketing in order to satisfy customers focuses on:

- personalized and customer-focused services,

- engagement with customers where they are,

- incentives and rewards for customer loyalty,

- valuable and relevant content,

- regular customer feedback gathering.

This type of marketing forms the basis of a customer-centric and service-oriented approach to digital marketing since it affects every element of the service-oriented marketing mix. Its goal is to understand the customer needs, satisfy them, and be able to forecast them in order to create a long-term buyer-seller relationship [24].

In our case study, it will not be used as an individual tactic, but it will be reflected within other tactics, such as social media, content marketing, or website.

2.8   Feedback

Customer feedback is the most important part of the 7C marketing mix, especially of the *Co-creation* section, because it represents the way how costumers become value co-creators. Feedback is crucial for companies to understand the needs of their customers, what problems they face, and how they can be satisfied. Satisfied customers create a *Community* of loyal customers, which can help the business to grow. There are several methods and metrics for collecting, processing, or

evaluating feedback. The result can then become a solid foundation for each company's marketing mix.

Feedback in the practical part of the thesis will be represented as a part of certain marketing tactics, such as website or social media.

Halligan [25] defined four stages of the customer feedback loop:

- ask the customers for feedback,

- categorize the feedback into business-relevant buckets,

- act on the feedback,

- follow-up with customers who shared feedback.

3 Digital marketing plan

A marketing strategy outlines how a business will fulfill a specific mission or goal, including campaigns, channels, content, or marketing software needed to succeed. A marketing plan contains one or more strategies connecting each one to the business goal. It summarizes the planned marketing activities for a specific company for a defined period [1].

Digital marketing planning includes marketing planning in the context of the online business environment. A digital marketing plan is based on traditional marketing methods and techniques, which are adapted for the digital environment and mixed with new techniques of digital communication [2].

We can find numerous marketing plan structures that are more or less different from each other. The purpose of this thesis is to create a digital marketing plan, so we decided to create our plan based on the principles of the SOSTAC digital marketing planning guide [26], with minor modifications. The original components of the SOSTAC plan are shown in Figure 3.1.

Figure 3.1: SOSTAC digital marketing plan components [26]

The structure of the digital marketing plan, we are going to use in the practical part of the thesis, contains the following parts, described in detail in the following sections:

- Situation analysis
- Objectives
- Strategy
- Tactics
- Actions
- Control

3.1 Situation analysis

The situation analysis should answer the question of where the company currently is. It summarizes the most important information about the factors affecting its online business situation. Situation analysis is based on marketing research, and its conclusions are often presented in the form of SWOT analysis, allowing to organize the most relevant factors to consider when preparing the marketing strategy [1].

The online marketplace is dynamic and complex; thus, it is necessary to analyze the market context in which the company operates, identify its opportunities, and accordingly plan how they can effectively compete. The organization's marketing environment consists of two levels, the internal and external environment, upon which the marketing strategy is created or refined. Analysis of the internal environment should potentially result in the company's strengths and weaknesses identification, while analysis of the external environment should identify the company's opportunities and threats. The external environment is further divided into two categories, macroenvironment and micro-environment [6].

3.1.1 The Macro-environment

The macro-environment includes external factors that can significantly affect the success of the business. The company can not immediately control these factors as they originate from the marketplace. These factors affect all organizations within the marketplace and should be identified, understood, and analyzed [6].

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Every company should analyze which factors are relevant and can influence its business. Analysis of the PEST (political, economic, social, and technological), or PESTLE (add legal and ecological) factors, should result in the identification of potential threats and opportunities for a particular company [26].

3.1.2 The Micro-environment

The micro-environment focuses on actors shaping the intermediate trading environment [6].

Customers

One of the basic characteristics of service systems is customer engagement in the value creation process. To be able to provide value to customers, we need to obtain information about customers' characteristics, behaviors, needs, and technology usage. Customers' analysis should contain answers to questions about who, why, and how. Customer profiling helps to prospect, win, and retain profitable customers.

A frequently used technique is the creation of personas. Persona is a detailed description of customers belonging to a particular segment, including characteristics, needs, motivations, and their environment. There are many helpful platforms, giving insight on the visitors, for example, Facebook Audience Insights, LinkedIn Website demographics, or Google Analytics demographics [26].

Competitors

To be able to create an effective marketing plan, we need to know who our competitors are, what strengths and weaknesses they have, how they compete against us, or what is our competitive advantage.

We should review competitors' websites, social media platforms, the content they share, keywords, and inbounds links they use, and other elements of their online presence [26].

Partners and Intermediaires

Marketing intermediaries are businesses helping a company to promote, sell, and distribute products and services it offers. Online market-

ing intermediaries provide information about target sites connecting Internet users with product or service information. The most known online intermediary sites are, for example, web portals, price comparison sites, or newspapers and magazines in their online versions [6].

Besides intermediaries, this category includes:

- affiliates – sites promoting company's products or services or link to its website;

- influencers – bloggers, tweeters or journos promoting company's products or services;

- strategic alliances – partners whose brands add value to each other's customers;

- link partners – partners helping to boost the company's SEO;

- syndication partners – partners sharing their content online;

- advertising partners – partners sharing their space for ads in the long-term.

3.1.3 The Internal Environment

The internal environment includes all elements within the organization, which can be managed, influenced, and controlled by it. By analyzing the internal environment, we find information about physical, financial, human, material, tangible, and intangible resources.

This analysis will be carried out in the case study of this thesis using the 7C service-oriented marketing mix.

3.1.4 SWOT analysis

SWOT framework categorizes significant environmental key factors, internal and external to the organization, resulting from situation analysis, into four groups, usually represented in a 2x2 matrix:
- strengths,
- weaknesses,
- opportunities,
- threats.

Strengths and weaknesses imply internal factors that are under the direct influence of the company and thus can be influenced by marketers. In contrast, opportunities and threats imply external factors, which are hard to influence from the marketer's or the company's position. It should not contain too many factors, but only the significant ones.

SWOT analysis is the starting point for marketing goals determination. These define what marketing activities should be used for their achievement and represent a criterion upon which the effectiveness of these activities can be evaluated [1].

3.2 Objectives

The situation analysis explains where the company actually is. On the other hand, the objectives define where the company is going and where it wants to get [2].

According to Smith [26], there are many different approaches when creating objectives:

- The RACE Approach – framework, looking at objectives as the customer moves through the whole customer lifecycle. Each stage can be quantified as an objective.

- The 5Ss Approach – *Sell* targets sales; *Serve* adds value to customers by setting customer service targets; *Save* saves money as well and time; *Speak* is about conversations, participations, and listening; *Sizzle* delivers added value to a brand online.

- The KPI Pyramid – Return on investment, sales, and market share form the top level of the pyramid accompanied by other board-level KPIs. On the second level are objectives for managerial reports, for example, visits, visitors, conversion rates, orders, or cost per visitor.

- The turned-up KPI Pyramid – Sales funnel approach to objectives. On the top-level are site visits, the middle contains engagement, and the last level includes sales objectives.

- VQVC Objectives – classifying objectives into Volume, Quantity, Value, and Cost Objectives categories.

In general, marketing objectives can be divided according to whether they are intended to influence customer perception or behavior. They should be SMART (specific, measurable, agreed, realistic, timed). After setting marketing objectives, a marketing strategy serving to their achievement is proposed [1].

3.3 Marketing strategy

While marketing objectives represent a planned outcome or what should be achieved, marketing strategy is a manner to achieve these objectives. It should be based on situational analysis: make use of strengths, beware of its weaknesses and threats to which company is or may be exposed, and actively exploit market opportunities [1].

Westwood [3] explains the difference between strategies and tactics. Strategies define broad ways or methods to achieve specific objectives. They do not contain detailed steps and actions that the company should follow, which is part of the tactics.

There are many types of strategies; marketers can adopt defensive, developing, attacking strategies, or their mixture. Defensive strategies prevent loss of existing customers; developing strategies offer a wider range of products or services to existing customers; attacking strategies should acquire new customers.

The individual strategies should cover the main elements of the marketing mix:

- strategies related to the product,

- strategies related to the price,

- strategies related to the promotion,

- strategies related to the distribution/place.

The marketing mix helps to focus on key attributes that should be considered by the company in order to meet defined objectives. Although Westwood [3] talks about the 4P marketing mix, in this thesis, we will focus on the 7C service-oriented marketing mix.

3.4   Tactics

Tactics compared to strategy tend to be shorter-term and more flexible. They are details of strategy and must be developed after the strategy is defined [2]. Tactics define the usage of different tactical digital tools and channels. Smith [26] described ten tactical tools and their offline and online equivalents, for example:

- advertising – Google Ads, Facebook, LinkedIn;

- public relations – newsletter, online editorial, discussion groups;

- sponsorship – sponsoring online events;

- sales force, agents or telemarketing – affiliate marketing, chat;

- exhibitions, events, and conferences – webinars, virtual events, virtual exhibitions;

- direct mail – opt-in e-mail, newsletter;

- retail store – website (SEO, automated marketing opportunity);

- word of mouth – recommendations, feedback, social media platforms, forums;

- sales promotion – content marketing, rewards;

- merchandising and packaging – QR codes, virtual and augmented reality, original packaging displayed online.

Some tools are better than others at achieving specific tasks or objectives. For example, advertising tools are primarily suitable to build awareness and credibility; the purpose of sales promotion is the conversion action; direct mail focuses on sales, relationship building, and information gathering.

3.5   Actions

Actions specify what should be achieved for each tactic in order to reach the objectives of the marketing plan [26].

In this part of the digital marketing plan, the individual activities that will be implemented are defined. Often, a description is prepared for each of the planned activities, which explains the goal of the activity, and the strategy or tactics it helps to fulfill [1].

To list which tactical tools will be used or which actions will be carried out, along with their timetable, it is possible to use, for example, the Gantt chart.

3.6 Control

The last part consists of control mechanisms, which serve to monitor the fulfillment of the plan. Usually, objectives and budgets are set for each month or quarter. This makes it possible to check the results of individual periods and to identify what activities meet or do not meet the set objectives. Corrective actions may then be determined [5].

According to Smith [26], this part of a digital marketing plan should clarify whether the company is on target to accomplish the defined objectives. It is usually not suitable to wait until the end of some period because it can be too late to change tactics.

This section of the plan includes the list of measured KPIs with the information on how often they will be measured (for example, on a daily, monthly, or quarterly basis) and what the target values for each KPI and each time period will be. It specifies what will be measured, by whom, how frequently, and what if the results are way below or above the target.

When measuring website KPIs, we can focus, for example, on website visitors, unique visitors, bounce rate, session duration, page views, or most popular pages. We can also set KPIs for social media pages and monitor metrics such as likes/followers, post engagements, link clicks, or reach of our posts.

4 Digital marketing plan proposal – case study

This chapter is devoted to the presentation of the created digital marketing plan for a book named *The Essentials of Modern Software Engineering*. To form the foundation of our marketing plan, we have to know our business, our competition, our customers, what we want to achieve, and how we are doing.

4.1   Introduction of the book

The book *The Essentials of Modern Software Engineering* represents an in-depth introduction to software engineering. Using a universal kernel, called Essence, it teaches the essential elements of all software engineering methods. This kernel is a vocabulary for defining methods and practices. Essence is scalable, extensible, concise, agnostic to any particular method and does not depend on any programming language or lifecycle. It is aimed at people from both academic as well as industry domain [4].

This book has many additional materials, such as various games, videos, quizzes, or slides. Some of them are easily accessible through the website created for this book.

4.1.1   Book as a service system

We can describe the relationship between the book and its customers as an example of a service system aiming to satisfy the customers, fulfill their needs, thanks to the value proposed by the book. The value proposition of the book may be represented by the knowledge and information it provides, but also by other linked services. The optimized and user-friendly website, additional materials related to the book, positive customer relationship, or appropriate marketing activities can represent an added value for customers of the book and can be directive in their decision process.

4.2 Marketing plan design

The activities of the proposed marketing plan were divided into two phases, initial and follow-up.

The initial phase was realized from November 2019 till March 2020. Its goal was to carry out the activities that arose during the steps of forming a marketing plan and were possible or recommended to be executed immediately. For example, registration of the website within Google Analytics and Google Search Console allowed us to observe website traffic and, based on these observations, create more realistic plan objectives for the follow-up phase. The details of the actions implemented in this phase are described in Section 4.2.1.

The follow-up phase is planned from April 2020 until September 2020. It aims to carry out the activities that resulted from the marketing plan proposal and have not been carried out yet in the initial phase. The summary of these activities is in Section 4.7.

4.2.1 Realization of the initial phase

In this section, the actions realized during the initial phase of the plan will be presented, eventually with an evaluation of their impact/results.

SEO

To inspect the book's website and analyze its on-page SEO, we used Screaming Frog SEO Spider website crawler[1]. It gave us insight into what should be fixed or improved.

We fixed the incorrect internal links to eliminate the URLs causing *Client Errors*. Usually, one page of the website was linked to another page of the website, but the link was not valid, probably because it has changed over time. When we located the pages causing the error, we replaced the incorrect links by the right ones.

As part of on-page optimization, we filled in the meta title, meta keywords, and meta descriptions for the chosen pages of the website to enable search engine users to easier find the website, as well as navigate them to the right landing page based on their search queries.

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1. See `https://www.screamingfrog.co.uk`.

To be able to fill these keywords, we first needed to find the right ones for each page. We used Google Ads, Google Search Console, and Google Analytics as a source of information, as well as Wordtracker[2]. Google Ads and Wordtracker gave as interesting suggestions related to the keyword and queries we filled in, Google Search Console and Google Analytics gave as insight about queries that were used by users to get to the website from Google.

After the creation of social media accounts, we incorporated the link to the website as well in the account information, as seen in Figure 4.1.

Social networks

We first created a Facebook page along with the Twitter account, shown in Figure 4.1, and LinkedIn account. We created some content in the form of short posts and agreed on it with the author.

We used the contact of the authors to people from the domain of software engineering. We sent them an e-mail announcing the existence of the book on social media platforms and kindly asking to follow these accounts, and eventually share these accounts with other relevant people.

We joined different Software Engineering/IT related Facebook pages and groups in order to promote the page between relevant people by sharing some posts related to the book, with a link to the website or Facebook page.

During this time, we shared agreed content on social media platforms and observed the insights from social networks.

These activities helped us gain approximately 150 followers on Facebook and 28 followers on Twitter, which was, especially for Facebook, a positive surprise as we expected a maximum of 100 followers without using any paid advertisement.

In March, we launched two ads on Facebook, one to get likes to the Facebook page and one to generate traffic towards the website. Even though note having an Instagram account, since Instagram and Facebook are connected, and we can enable the possibility of sharing

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2. See `https://www.wordtracker.com`.
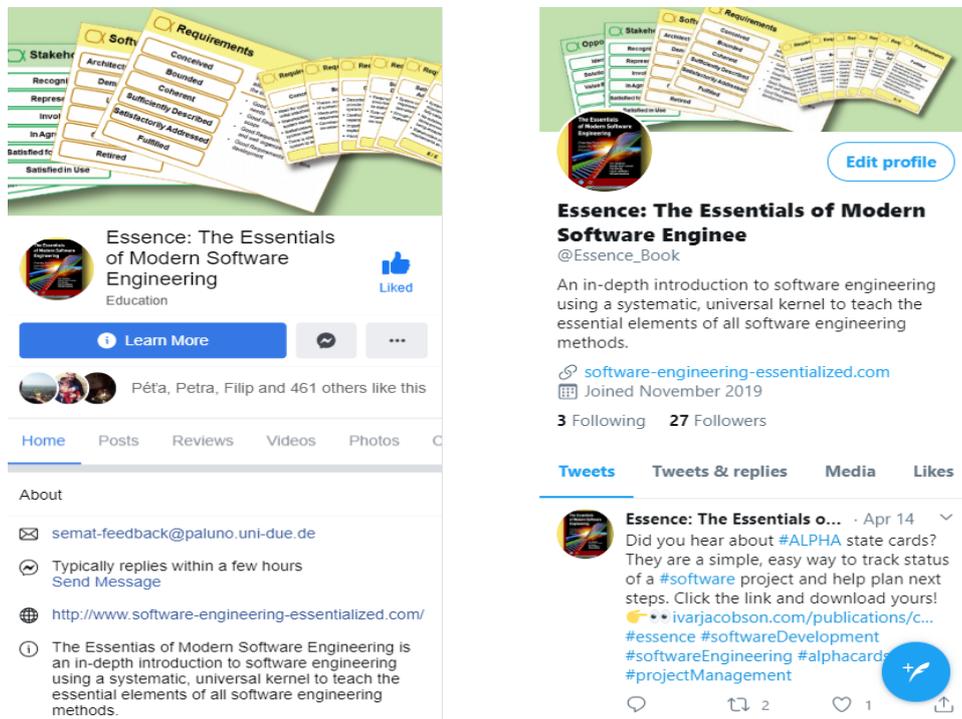
Figure 4.1: Facebook page and Twitter account for book

our advertisements on Instagram as well. So, we allowed it to enable Instagram users to see our ads.

For a total of CZK 300 rounded, 36 296 people saw any of our ads at least once, 455 people took action involving any of the ads, and 257 clicked on the link toward the book's website. The summary of those ads can be seen in Figure 4.2.

In percentage terms, as shown in Figure 4.3, the reach of posts increased by 24.7k%, the total number of actions people take involving our posts increased by 3.8k%, and likes on the Facebook page increased by 21.2k%.

The performance of Facebook page propagation can be seen in Figure 4.4. This ad cost CZK 150 rounded, reached 955 people, and resulted in 203 likes on our Facebook page. The price of one click was CZK 0.74. The performance of website propagation is represented in Figure 4.5. It cost CZK 150, reached 35 336 people, and resulted in 257 link clicks. Each click cost CZK 0.58.

Advertising Summary Create Ad

Performance ⓘ
Silvia Nagyová spent Kč299.98 on 2 ads in the last 60 days.

Currently viewing
Last 60 days ▼

Reach
36,296

Post Engagements
455

Link Clicks
257
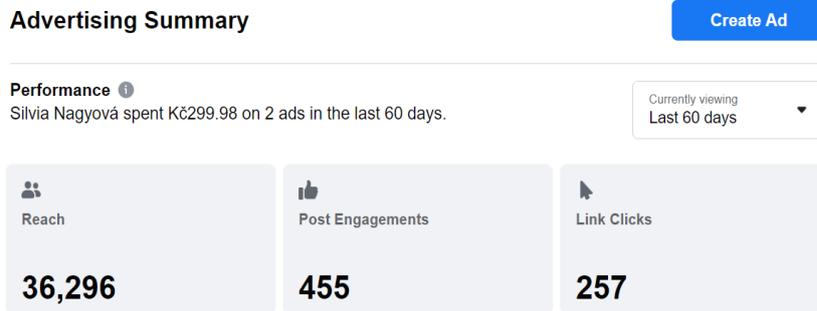
Figure 4.2: Facebook advertising summary

Mar 23 - Mar 29   Last 7 days ▼

Post Reach
35.7k
▲ 24.7k%

Post
Engagements
616
▲ 3.8k%

New Page Likes
213
▲ 21.2k%
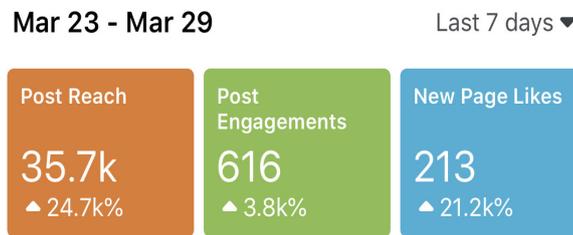
Figure 4.3: Facebook advertising summary in percentage

We consider these ads as very effective for such a relatively small amount of money, and we recommend to continue with the paid promotion of the website and Facebook page at least once a month during the follow-up phase duration.

📊 Performance   Demographics   Placement   Delivery

203
Results: Page Likes

955
People Reached

Kč149.98
Amount Spent

Custom

203 **Results: Page Likes**   Kč0.74 **Cost per Result**   16.82% **Result Rate**

Mar 23   Mar 24   Mar 25   Mar 26   Mar 27   Mar 28

Figure 4.4: Facebook page propagation performance

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Figure 4.5: Website propagation performance

During the initial phase, we monitored the social networks using their insights. Based on this data, we were able to set more precise objectives for the follow-up phase of the digital marketing plan.

Website

First, we registered the website within Google Analytics and Google Search Console to collect and evaluate relevant data. Within Google Analytics, we configured our reports, serving to give us desired insight about the website traffic. This information was necessary for the estimation of values determined in the marketing objectives of this plan.

After the determination of the objectives of the marketing plan, we configured an automated report, presented in Figure 4.22, that will, on month/week bases, present results of surveyed metrics by sending them to the specified e-mail address. This report will make it easier to evaluate and compare all the currently monitored indicators to their target values defined in the plan.

Following the creation of accounts for the book within Facebook, Twitter, and LinkedIn, we added links to these accounts in the footer of the book's website in the form of clickable icons, as manifested in Figure 4.6. Mouse cursor over the individual icons changes the icon's color to the primary color of the relevant social network. Clicking on each icon opens the book's account on the corresponding social network in a new window.

Figure 4.6: Social media buttons on the website

In the banner on the top of the home page, besides the possibility of buying the book on the publisher's website, we added the possibility to buy the book also on Amazon represented in Figure 4.7. By clicking on the button, the book's offer on Amazon is opened in a new window.
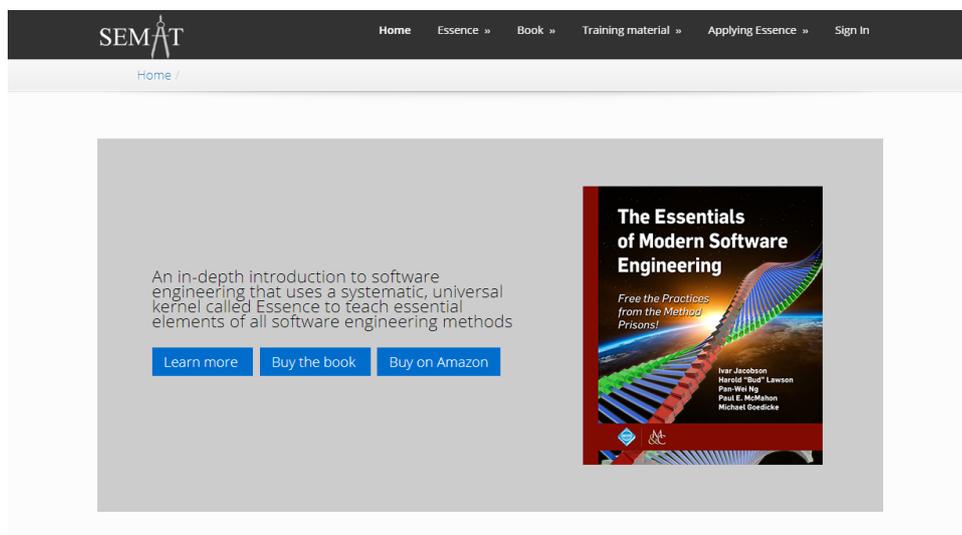
Figure 4.7: Possibility to buy the book on Amazon from the website

The analysis showed that it is necessary to add some elements to the website, including contact form, newsletter form, and blog section. We designed their wireframes using Balsamiq[3]. The contact form should serve to collect feedback or other information from visitors, and its wireframe is represented by Figure 4.9. The newsletter registration form should serve for subscribing to receive news via e-mail, and its wireframe is represented by Figure 4.10. The blog section should display valuable articles related to the book, including the ones already published on different platforms but not reflected on the site. Its wireframe is in Figure 4.8.

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3. See `https://balsamiq.com`.

Figure 4.8: Mockup of proposed Blog section page

Figure 4.9: Mockup of proposed Contact Us form

Figure 4.10: Mockup of proposed newsletter registration form

Content marketing

Concerning content marketing, it was mainly used for content creation on social networks. As mentioned above, we created several posts before creating social media accounts, which we agreed on with the authors and were later shared on social platforms. We made sure to use relevant keywords. As well as sharing our posts, we also shared book-related posts of other accounts, such as the publisher's or authors' accounts. A few examples of posts posted by us are visible in Figure 4.11

Figure 4.11: Posts shared on book's social media accounts

4.3   Situational analysis

Situational analysis will explore the external and internal environment of the company. From the acquired knowledge and information, the SWOT analysis will be carried out with an emphasis on forces with significant influence.

4.3.1   The External Macro-environment

PESTLE analysis, developed in collaboration with the people involved in this book, was used to analyze the macro-environment, focusing on the factors with a significant impact on the company. These factors are mainly from political, economic, socio-cultural, technological, and environmental domains. Thanks to this analysis, we will be able to identify the main opportunities and threats in our target market.

Political factors

In different countries, some social media or search engine platforms are restricted or banned. Facebook, for example, is blocked in China, Iran, or North Korea. That means that the target audience in these areas will probably not see business updates on our Facebook page. Twitter and YouTube are as well blocked in several countries [27].

Economic factors

Like all other businesses on the market, the sale of books is as well affected by the economies of the countries in which it is sold. The rising level of income and standard of living make services and products more accessible to people, increasing the number of potential buyers.

However, we should think about the expected level of disposable income of our target segments of customers. This level can motivate us to consider lowering prices, proposing alternatives to the leading products and services for a lower cost, or offering different discounts and promotional offers.

Socio-cultural factors

Since this is an educational book with a specific theme, it is necessary to take into account, in particular, the level of education, the working environment, and the interests of our customers. We should think about education and career trends and different language mutations because even if the English language is common in the IT area, many people can still prefer to read, for example, in their native language. Between social factors, we can also include Internet usage habits as well as the level of access to the Internet.

Technological factors

As we develop a digital marketing plan for the book, we should not forget about the technology used, whether it is a desktop, a mobile, or tablets. We should think about the display devices our potential customers are using because the website should be displayed correctly and be usable across all the channels. We should think about the simplification of the user journey, for example enabling them to find our website more quickly. It could be suitable to use multiple different technological platforms, including social networks, enabling us to reach a larger audience and gain popularity. As smartphones and tablets become omnipresent, and the number of e-book readers rises, we should not forget about the importance of books in digital formats.

Environmental factors

From an environmental point of view, more and more people concerns about the environment and try to be environmentally friendly. As books are usually made from trees, some customers could prefer books in digital format.

4.3.2 The External Micro-environment – Customers

Survey

We created a survey using Google Forms[4] online application to get information about the potential readers of the book. This survey was

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4. See `google.com/forms/about`.

aimed at people with at least basic knowledge of computer science. It contained a total of 17 questions divided into three categories.

Questions
Questions 1 to 4, forming the first category, touched the work and studies of our potential readers. Respondents could mark only one correct response, and if any of the suggested responses were not suitable, in each question it was possible to mark and fill in *Other* field with their response. The purpose of the first question was to find out whether their primary field is Software Engineering/IT industry or education, or something else. The second question asked whether they are Software Engineering/IT students, educators, professionals, or something different. The third question covered their reached level of education and the fourth their working position.

Questions 5 to 12, forming the second category, involved software engineering and education. In the fifth question, the respondents should mark on the scale from 1 to 5 their level of software engineering knowledge, with 1 being None and 5 being Expert. The sixth and seventh questions asked about the length of Software Engineering/IT working experience and the frequency of educating themselves in the Software Engineering/IT domain. By the eighth question, we wanted to find out which learning method is the most convenient for our respondents. We gave them some suggestions, such as a book, online and offline tutorial or written step-by-step tutorial, as well as an *Other* option field to write anything else. The ninth question, which was voluntary, asked why the methods they selected are convenient for them. The tenth question touched the frequency of reading news from the domain of Software Engineering/IT, and the purpose of the eleventh question was to reveal the problems and needs of our customers, motivating them to improve their knowledge of Software Engineering/IT. The last question from this section was voluntary and aimed to collect favorites publications, channels, or blogs involving Software Engineering.

The third section, containing questions 13 to 17, was concerned about social media and information. The thirteenth question revealed the time spend on social media platforms and the fourteenth the most used social networks by our respondents. The purpose of the fifteenth

question was to find ways of finding information. Besides suggested response as search engines, review websites, or social media, we added *Other* option field to write anything that is not between suggested responses. The sixteenth question asked about the frequency of using social media as a source of information, and the last question of the questionnaire was voluntary and served to add any additional comment by our potential customers that could be relevant for the survey.

Results of the survey
The survey was conducted on a total of 100 participants belonging to the Software Engineering/IT domain. We tried to reach people from the industry as well as academics, including students, educators, as well as industry professionals, to obtain input from people of different education levels, environments, or levels of knowledge of Software Engineering. The full data-set can be found in the electronic archive.

Answers form the *Other* field in the first four questions, corresponding to any of the main categories of responses, were counted in these.

Figure 4.12 shows the percentage of people with primary occupation either Student of Software Engineering/IT (40%), Educator in Software Engineering/IT(5%), Software Engineering/IT professional(55%). From Software Engineering/IT professional category, most of our respondents were software developers (63.6%), followed by project managers (16.4%), product managers (3.6%), and executives (3.6%).

The majority of respondents achieved a bachelor degree (38%), followed by people with a master degree (30%), high school diploma (28%), and doctoral degree (4%). The results are shown in Figure 4.13.

Figure 4.14 reveals the level of knowledge of Software Engineering of our respondents. They evaluated their knowledge using a scale from one to five, with one being None and five being Expert. 54% rated their knowledge level as three, 20% as four, 16% as two, 6% as five, and 4% as level one. The filtering of these responses by the second question changed the ratio. The percentage of people with knowledge on level five or four was much higher for educators (80%) and professionals (38.18%) than for students (2.5%). In contrast, the

46
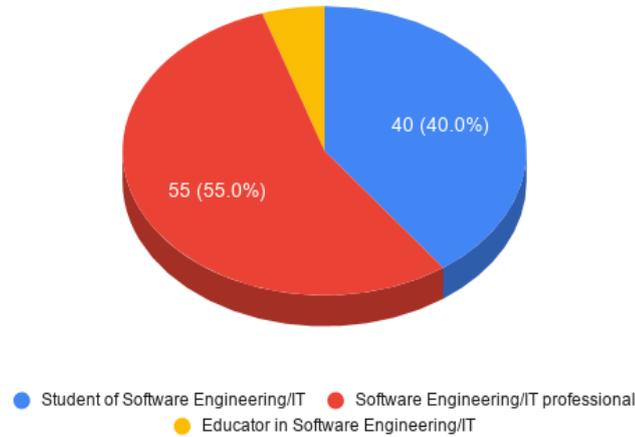
Figure 4.12: What is your primary occupation?

percentage of people with level one or two was more eminent for students (37.5%) than for professionals (9.09%) and educators (0%).

Most of our respondents have 2-8 years of working experience in the domain of Software Engineering/IT (41%), followed by people with less than two years of experience (36%), more than fifteen years (14%), and 9-15 years of experience (9%).

In the question regarding people's time spent educating themselves in Software Engineering/IT, Figure 4.15 reveals that 39% educate themselves daily, 36% weekly, 15% monthly, and only 10% less than once a month.

Between the most popular methods, our respondents included video tutorial (60%), written step-by-step tutorial (56%), online course (52%), book (42%), and offline/live course (31%). Respondents were asked to state, while selected methods are convenient for them via an open question. The answers for an online course and video tutorial usually contained reasons such as time flexibility, availability, findability, accessibility, self-pace, and video features such as start/stop, or skip forward/back.

The majority of our respondents reads news from the domain of Software Engineering/IT multiple times a week (36%) or less than once a week (36%); fewer of them read this news daily (15%), and
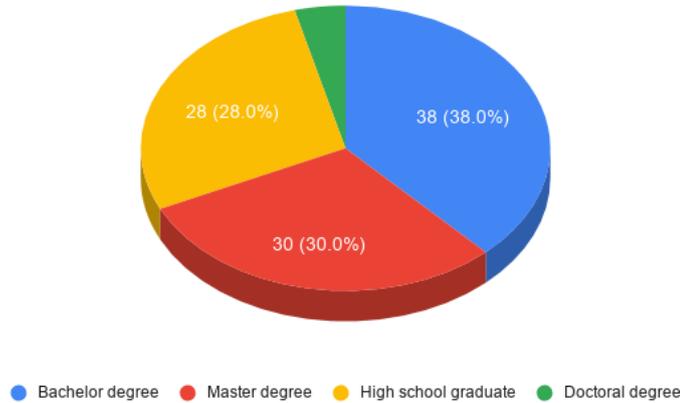
Figure 4.13: What is your highest level of education completed?

once a week (13%). Our respondents ranked among the most used sources of information search engines (96%), review websites (44%), social media (42%), word of mouth (35%), and books (32%).

Figure 4.16 shows that 36% of people use social media as a source of information daily, 29% less than once a week, 27% multiple times a week, and 8% once a week. If we filter these responses by the second question, the ratio will change. The percentage of people using social networks as a source of information daily or multiple times a week is higher for educators (80%) and students (77.5%) than for professionals (50.9%).

Between the most actively used social networks were included Facebook (84%), YouTube (72%), Instagram (44%), LinkedIn (43%), and Twitter (18%). In the question concerning the number of hours spent on social networks per week, each category reached equally 25% of respondents' votes, represented by Figure 4.17.

Via an open question, we asked to state the problems or needs that could be motivational for our respondents to improve their Software Engineering/IT knowledge. Among the most common reasons belonged finding a job, passing exams, work-related issues, work promotion, progress to a more senior position, money, joy of learning, and interest to keep up with the latest trends.
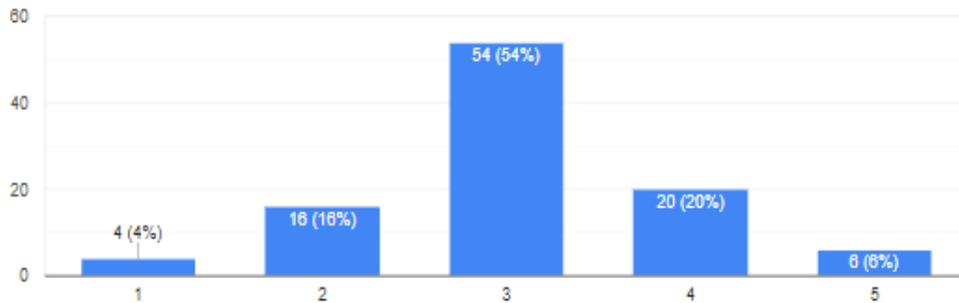
Figure 4.14: How would you rate your level of Software Engineering knowledge?
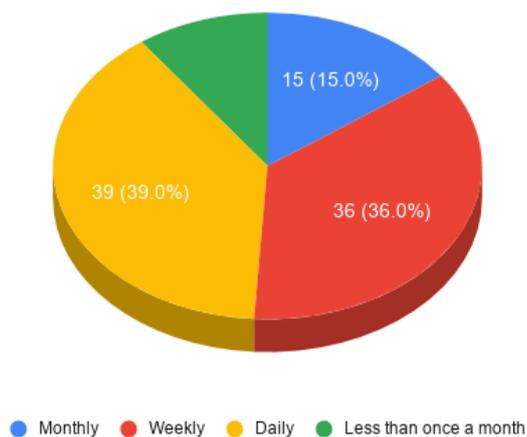
Figure 4.15: How often do you educate yourself in Software Engineering/IT?

Concerning favorite publications, news channels, or blogs about Software Engineering/IT, Medium and Stack Overflow prevailed in the answers.
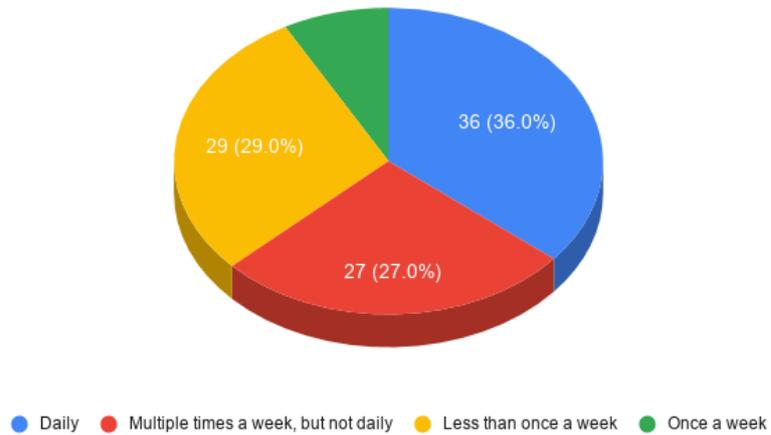
Figure 4.16: How often do you use social networks as a source of information?
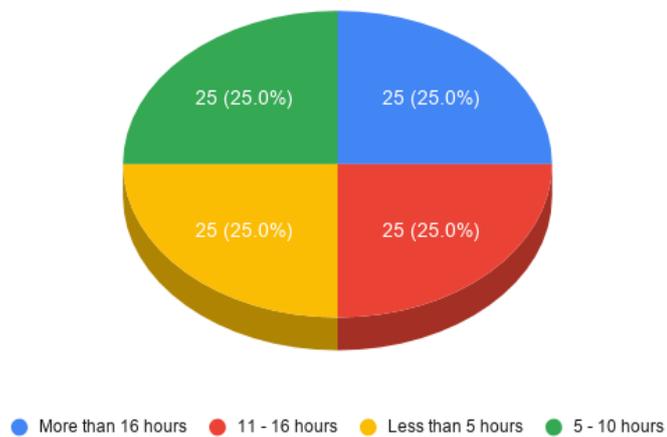
Figure 4.17: How many hours per week do you spend on social media platforms?

Segmentation

Different people have different needs, and problems. Each of these people requires different products, different product's benefits. Each can buy the same product for different reasons.

Market segmentation allows us to split our potential customers into groups based on their characteristics, needs, and problems. Customers with similar characteristics constitute a market segment. For products and services, end-users are usually classified by methods of classification separating consumers by age, sex, socio-economic group, occupation, or region [3].

To define our market segments, we used results from the survey, along with different resources related to the book. As mentioned on the website of the book [4], the audience of the Essence standard is the whole software engineering community, including industry as well as academics. Testimonials papers from professors using Essence in their courses [28][29], prove the value of this book and its concept for the academic environment, including students as well as professors. Moreover, the website name multiple projects from industry, that are using Essence [30].

According to these findings, we divided our potential audience based on their field and level of knowledge of software engineering:

- University students – academic field, none to basic knowledge of software engineering;

- University educators in the domain of software engineering – academic field, advanced knowledge of software engineering;

- Developers – industry field, basic knowledge of software engineering;

- Executives – industry field, advanced knowledge of software engineering;

- General public.

The last segment is formed by people not belonging directly to the software engineering community. However, they can represent potential customers as they are, for example, interested in the domain of software engineering.

Personas

Personas are a detailed description of customers existing within defined segments, summarizing their characteristics, needs, motivations, and environment [26].

To fully understand our target customers, we first have to understand their needs and how this book can help in achieving them. When describing full versions of our individual personas, we realized that the general public is a broad term and hard to specify particular characteristics, needs, or problems of such persona. Thus, we decided to reduce the total number of personas to four:

- Clare, a university student;

- Mark, a university professor;

- Susan, a software developer;

- Steve, a project manager.

Student persona

Clare is a 22 years old undergraduate student living in Brno. As she is good at mathematics and physics and she is also a logical thinker, she decided to study computer science at the Faculty of Informatics. She understands some basic terms from the domain of software engineering but has not yet had the opportunity to meet them in practice.

This term she attends a software engineering course, including the delivery of a group project at the end of the term. This project is a simulation of a real IT project where students can experience various stages of software development and use gained theoretical knowledge in practice. As she struggles to apply abstract theory in a real project, she has to search for practical examples and exercises.

When learning, she often searches for different video tutorials, online courses, or written step-by-step tutorials to understand the topics discussed at school. She usually finds these materials using search engines or social media platforms. She daily communicates with her classmates, using social networks. On Facebook, she is a member of a private group where she exchanges information, knowledge, and

useful study-related materials with her classmates. Her main goals include passing the exams successfully and finding a job in the domain of software engineering.

University educator persona

Mark is a 38 years old professor at university in Bratislava. He teaches software engineering for more than ten years and is continually searching for news and trends in software engineering to be able to teach software engineering engagingly. He often uses social networks and search engines to search for relevant information. Books are, for him, the most convenient learning method.

Mark wants to prepare his students for real work projects. However, he sees that the actual academic approach is too theoretical and does not prepare students for real work projects as they often lack practical knowledge. There are too many methods, each having a different approach. New methods are replacing the old ones, and it is hard to teach the essentials of software engineering since no one agreed on what those essentials are.

Last month, he got an e-mail from a teacher of software engineering from a university in Brno, introducing Essence, kernel, and language for software engineering methods. He attached links to papers from professors using Essence in their classes. Mark was impressed by the concept and related training materials and determined to use it in his classes.

Software developer persona
Susan is a 26 years old developer in an international company in Paris. She has been working in this position for over three years, and since she is very strong-minded and good at her job, she decided she wanted to progress and become a team leader.

She knows some basics from the software engineering domain, but she knows she has to improve her knowledge in order to become a good leader of her team. She is very active on social networks and uses them also as a source of information together with search engines and review websites. She reads the news from the domain of software engineering multiple times a week. She almost daily educates herself

using books, online courses, or video tutorials, in order to keep up with the trends and have a chance for promotion. She often feels overwhelmed by all the different kinds of methods used in software engineering, not knowing which one is the most convenient to learn to get the desired job.

Today, she noticed an advertisement on Facebook, promoting a new book on software engineering, bringing a new perspective on learning software engineering. That book was what she was looking for.

Software professional persona

Steve is a 42 years old project manager working for an IT company in Stockholm. He manages the delivery of the application for an insurance company based in Croatia. Wanting to be good at his job, Steve follows new trends from the domain of software engineering and applies relevant finding in practice.

Within his fifteen years of experience, he has encountered various frameworks for managing projects, but each contained something inconvenient, was not flexible and did not work universally.

Steve often reads books or takes online courses to educate himself in software engineering. Multiple times a week, he visits social networks as a source of information. In addition to social media, he uses search engines, review websites, or word of mouth to gain news and relevant information.

Last week, he ran into his friend from university, who works as an executive in a different company. As they were discussing their work experiences, Steve's friend revealed that in his company, they started using Essence to lead projects, and they noticed a significant improvement. Steve was impressed by this information and decided to find out whether Essence can be beneficial for his team and project.

4.3.3 The External Micro-environment – Competitors

In our market research, we searched for theme-related books that could be considered as a threat to our book. We used the website of Amazon online store, where the information about user reviews and Amazon Best Sellers Rank of every product is available.

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This research aimed to reveal the digital identity of the selected books. The main focus was on their websites, social media accounts, and related online activities. The goal was to find inspiration between successful books related to software engineering and their digital appearance for our marketing strategy.

To inspect the websites of our competitors, we used website crawler Screaming Frog SEO Spider[5]. This tool allowed us to crawl these websites and analyze technical and on-page SEO. As we used the free version, we were limited to crawl 500 URLs.

Software Engineering by Ian Sommerville

The book Software Engineering, with its tenth edition published in 2015, represents an introduction into the subject of software programming and development. It has been translated into many languages, and it is broadly used as a student text.

The book is available in paperback and hardcover format on Amazon; the price for a new book is $79 for paperback and $154 for hardcover format.

The book has its website[6] containing additional learning materials for students and educators as case studies, slides, video materials or sample chapters for download. As you can see in Figure 4.18, it includes eight tabs: About the book/me, Case studies, Instructors Guide, Slides, Videos, Downloads, My websites, and Privacy policy.

At the bottom of *About the book/me* section, we can find contact details including website, e-mail address, blogs, author's Twitter account, and YouTube channel.

Twitter account is rather personal, and we did not find any late posts about the book. YouTube channel contains videos related to software engineering. Only a few ones are related directly to the book, the last one from four years ago. The Facebook page of the book was not active for the last two years.

We used Screaming Frog SEO Spider tool, to inspect on-page SEO aspects of the book's website. All web pages have titles, 20% are duplicate, and 41% are over 60 characters. Meta descriptions, as well as meta keywords, are missing on all pages. From external links, we

5. See https://www.screamingfrog.co.uk.
6. See https://iansommerville.com/software-engineering-book.

can find mainly links to Wikipedia, Youtube, Dropbox with images, or SlideShare, where we can find presentations devoted to different chapters of the book.

The website, using the HTTPS protocol, provides a secure connection.
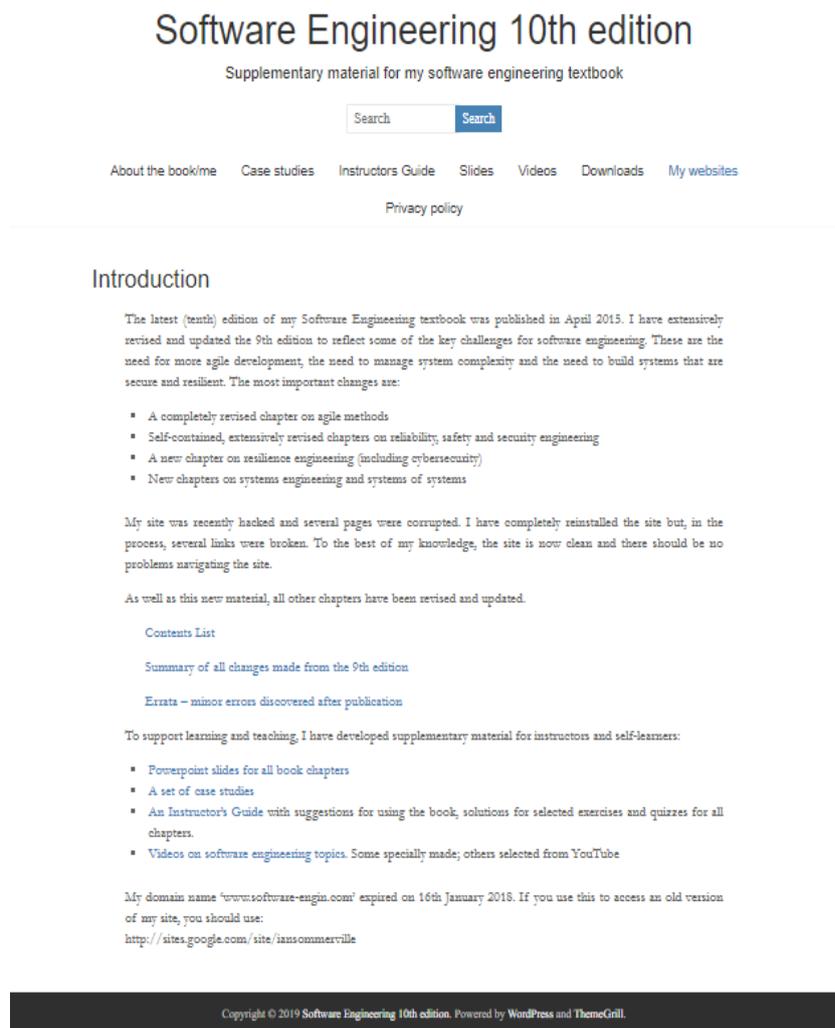
Figure 4.18: The homepage of the Software Engineering by Ian Sommerville's website

Essential Scrum by Kenneth S. Rubin

As the title suggests, this book is a Scrum guide. Essential Scrum is number two in the Software Design Tools category, according to Amazon Sellers Rank. Multiple colleges and universities use this book, and it serves also as a guide for team members, executives, and managers.

The book is currently in paperback and Kindle format on Amazon; the price in both cases is approximately $33.

The book does not have its website, but it is present on the website of the author's company called Innolution[7]. The homepage contains a big banner introducing the book. Besides the homepage, it contains five tabs: Training, Essential Scrum, Resources, Blog, and About us.

In Figure 4.18, we can see the section devoted to the book, accessible via *Essential Scrum* tab. Users can read the reviews, see over the content summary of the book chapters, read about the author, or sign up for the newsletter and get the free copy of the Quick Start Guide to Essential Scrum. In *Universities*, we can find information about universities using the book and in *Book Translations* section, languages that the book was translated to. According to the website, there are nine translations of this book, including Chinese, French, German, Polish, and others. The book can be bought on Amazon by clicking on *Order on Amazon* option redirecting to the seller's site.

The footer contains links to different social media accounts, telephone and fax numbers, and e-mail of the author. By clicking the links, we can find the Twitter and LinkedIn account of the author and the Facebook page of the company. On all of the above mentioned, social media accounts are almost daily published posts with a link to the website's glossary, explaining different agile terms. These posts usually contain keywords #scrum, #agile, and #glossary. On the Facebook page, in the community section, we can find a link to the group which connects professors, teachers, and other instructors. This group aims to support the development and sharing of lectures and exercises that can be used to prepare students in a university environment.

Using Screaming Frog SEO Spider tool we find out, that all web pages have titles, 25% are duplicate, and 12% are over 60 characters. All web pages have meta descriptions, 27% are duplicate, 7% are over 155 characters, and 33% are below 70 characters. All pages have meta

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7. See `https://innolution.com`.

keywords, 38% are duplicate. From keywords, the most used are: Scrum, Agile, Essential Scrum, Innolution, Kenny Rubin, Ken Rubin, CST, CSM, CSPO, CPO, Certified Scrum Trainer, Certified ScrumMaster, Certified Product Owner, Certified Scrum Product Owner, User Stories, Estimating and Planning, Scrum Alliance.

The website, using the HTTPS protocol, provides a secure connection.

Figure 4.19: The section devoted to Essential Scrum by Kenneth S. Rubin on Innolution website

Clean Code by Robert C. Martin

This book is a guide on how to write clean code by introducing the best agile practices. Clean Code is currently number two in the Software Design & Engineering category, according to Amazon Sellers Rank. It is intended for developers, software engineers, project managers, team leaders, or systems analysts who are interested in producing better code.

The book is currently on Amazon in paperback and Kindle format; the price in both cases is approximately $32.

This book does not have its website. Instead, we can find the website of its author[8], which seems very obsolete. It contains information in nine tabs: Classes & Talks, Recommended Books, Blogs, Ancient Blogs, Old Articles, Subscribe, Invite Me, Clean Code Gear, and Contact.

The author, colloquially known as "Uncle Bob", is very active and organizes many talks and lectures where he presents or teaches the topics related to his books. All upcoming events are listed under the *Classes & Talks* tab. In the *Invite Me!* section, we can even find the possibility to invite him to a meet-up. The website does not contain any particular section devoted to the book, neither links to social media accounts.

The Facebook page is mainly used to promote different talks, lectures, or products, related not only to the book but to all author's activities.

With Screaming Frog SEO Spider, we detected, that all web pages have titles, all are duplicate, and below 30 characters. Meta descriptions and meta keywords are missing in all pages.

The website, using the HTTP protocol, does not provide a secure connection.

4.3.4 The Micro-environment

The following analysis of the internal environment was performed using the 7C marketing mix. The 7C marketing mix is a methodology to set up communication with our customers. It is not used only for business purposes but everywhere, where we need to build the rules for the promotion of our products or service. This type of marketing

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8. See `http://cleancoder.com`.

mix, compared to the most used template for 4P marketing mix, is not oriented on products but customers.

Customers

As mentioned in Section 4.3.2, the target customers can be divided into the following categories:

- university students wanting to understand the fundamentals of software engineering without being overwhelmed by the number of different methods;

- university educators of software engineering wanting to teach software engineering logically and systematically;

- developers wanting to achieve measurable results and to reuse their knowledge systematically;

- executives wanting to follow new trends in this domain of software engineering and improve the way they lead programs and projects.

Costs

The costs represent the price of the book, which depends on the selected format, chosen shop, and, eventually, the shipping rate, which depends on the shop and a country where the book will be delivered. Additional costs can arise if the customer chooses one of the more expensive delivery options to get the book sooner. No other monetary or time costs were found.

Channels

When talking about channels, we need to keep in mind that there are two types of channels, marketing, and distribution channels [10].

The website[9] is the primary marketing channel containing all essential and necessary information, as well as the possibility of buying the book on the publisher's website. Customers can find information

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9. See `http://www.software-engineering-essentialized.com`.

about the book, its concept, reviews, experiences with the book in practices, and several book-related supplementary materials, divided between seven tabs: Home, Essence, Book, Training material, Applying Essence, and Sign in.

Besides this channel, some information related to the book are coming directly from the authors on their social media accounts, mainly LinkedIn, Twitter, or Facebook. Some information can be found as well on the website of the SEMAT organization[10]. On YouTube channel of Association for Computing Machinery[11], we can find some videos related to the concept of the book. We can retrieve these videos as well in the *Training materials* tab on the website of the book. The publisher provides some information about the book on its website[12] and social media accounts. The last channel we can mention is Amazon, where we can find the essential information about the book and relevant customer reviews from people that purchased the book.

The authors have contacts with several people from the domain of software engineering and who are willing to help with the book, for example, by sharing relevant book-related news on their social media accounts.

Convenience

Regarding the buying process, the book is not sold directly on its website. The customer can choose from multiple shops, for example, Amazon, or the publisher's website. In the buying process customer decides from three formats of book, paperback, hardcover, and e-book. The selected format affects the price of the book. After choosing the right format and adding it to the cart, the customer needs to sign in to its account or create a new one. Next, it is necessary to fill in the shipping information, payment information, and placing the order. Eventually, customer can choose the delivery option, and get the book earlier but with an additional charge.

Customer satisfaction with the book is expressed as 4.8 out of 5 stars based on seven customer reviews on Amazon. However, this

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10. See `http://semat.org`.
11. See `https://www.youtube.com/user/TheOfficialACM`.
12. See `http://www.morganclaypoolpublishers.com/essence`.

value is not related to the customers' satisfaction with the buying process; thus, it can not be used as its measure.

Some parts of the website do not have a responsive design, which can cause problems for users on mobile devices, because the website can be hard to use.

At this moment, it is not possible to track and analyze traffic on the website because it is not using any web analytics service. Such a service can actively track the website, create relevant statistics, and help to find related issues. Fix of such issues can increase the satisfaction of the customers with the website and can affect their buying decision.

Another issue is related to search engine optimization and the ease to find our book's website. The website has no HTTPS protection, resulting in worse searching placement as Google prefers sites that are trusted and certified. Another SEO problem can be caused by no meta tags usage. All this is related to the ranking of the website in search engines.

Communication

An important communication tool is a website where customers can find book-related information, as well as an e-mail address, which they can use, for example, in case they have some questions. Some information about the book can be found on the social media accounts of the publisher and authors. The feedback is gathered through Amazon customer reviews.

Community

The community is formed by segments mentioned in Section 4.3.4, people related, or interested in the domain of software engineering. As the book does not have social media accounts, the community is not concentrated on any social networks. It has no potential to actively grow because its members have no place to share content or information.

Co-creation

We see almost no attempt to attract a customer, whether it is content creation and information sharing for other customers, or the product and services improvement.

As the co-creators, we can consider the customers who purchased the book and rated it through the Amazon customer review. Such feedback is crucial not only for the authors but it influences the decisions of potential customers who decide whether to buy or not according to these reviews. However, the amount of feedback is relatively small, seven customer reviews. These reviews are mainly product-related and do not provide the information about any related processes and services, such as level of convenience with the buying process, or feedback to the website and published supplementary materials.

4.3.5 SWOT analysis

STRENGTHS

- Authors are prominent names in the SE world
- New and attractive concept of SE
- Recently improved book website
- Supplementary book-related materials
- Reviews from people using the book in practice (industry and academics)
- Contacts to people from the SE world
- Three different formats of the book, including e-book

WEAKNESSES

- Poor marketing
- Limited SEO
- Limited presence of the book on social networks
- Higher price of the book
- Limited finance for marketing

The Essentials of Modern Software Engineering

SWOT ANALYSIS

OPPORTUNITIES

- Use of marketing techniques to boost the business online
- Social networks
- Internet as a source of information
- Promotional offers
- Neglect of online marketing by competitors
- Increase of website visibility for search engines users

THREATS

- Limited access to the Internet in some areas
- Restricted social networks in some countries
- The traditional way of learning SE in comparison with the new learning approach presented by the book

Figure 4.20: SWOT analysis

SWOT analysis is built upon previous analyses and helps to put all the findings into context. It consists of opportunities and threats of the book, inferred from the analysis of its external environment, and strengths and weaknesses, inferred from analysis of its internal environment using 7C marketing mix, evaluated in cooperation with the authors of the book. Figure 4.20 represents the summary of strengths, weaknesses, opportunities, and threats of the book.

4.4 Objectives

Marketing objectives are based on the analysis from the previous chapters. The SMART method is used to assess the quality of marketing goals. According to this method, each marketing goal should be specific, measurable, achievable, realistic, and time-bound.

As this book is a novelty in the domain of software engineering, bringing a completely different approach to learn software engineering, it is necessary to set goals according to ideas of future development. The marketing goals should lead to dynamic business growth in the first six months after launching the marketing campaign. Initially, it is desirable to choose objectives aimed at spreading awareness of the book and its concept and communication with the customer.

The goal is to increase the popularity and awareness of the book in the digital world, as well as to build a long-term relationship with its customers. To achieve such a goal, we will define numerous partial objectives, using the RACE framework, each one expected to be accomplished within six months, from April 2020 till September 2020:

- **Objective 1. Reach:** Reach via posts on social media platforms at least 120 000 social media users from April 2020 till September 2020.

    - **KPI:** Social media posts reach.

- **Objective 2. Reach:** Gain at least 1 500 social media followers from April 2020 till September 2020.

    - **KPI:** Social media followers.

- **Objecive 3. Reach:** Acquire at least 4 000 website visitors from social media from April 2020 till September 2020.

    – **KPI:** Site visits from social.

- **Objective 4. Reach:** Achieve at least 40 000 sessions from April 2020 till September 2020.

    – **KPI:** Total number of sessions.

- **Objective 5. Act:** Increase the number of pages per session to at least 2.0 by September 2020.

    - **KPI:** Pages/Session.

- **Objective 6. Act:** Decrease the bounce rate to at least 75% by September 2020.

    - **KPI:** Bounce rate.

- **Objective 7. Act:** Obtain at least 4 000 post engagements on social networks from April 2020 till September 2020.

    - **KPI:** Post engagements (likes/comments/shares/clicks) on social networks.

4.5   Marketing strategy

When forming a marketing strategy, it is necessary to keep in mind what our business objectives are and how marketing can help us to achieve them. Thinking about marketing considering our business objectives will help us to reduce the chance of doing something just because it is trendy, or miss valuable opportunities.

In e-commerce, competition and its activities are relentlessly growing; that is why companies are continually striving to improve their business strategies in order to respond to changing needs, expectations, and customer behavior. Marketing strategy thus becomes a game plan to achieve the company's business objectives.

In order to meet the defined marketing goals, it is necessary to define marketing strategies for the specific components of the 7C service-oriented marketing mix.

4.5.1   Customer strategy

As this book has a specific theme, the circle of potential customers is quite narrow. The analysis of the macro-environment of the book presented target segments and their detailed description in section 4.3.2, including characteristics, needs, and problems.

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The target segments are:

- university students,

- university educators,

- developers,

- executives.

It is necessary to continually detect actual needs, and problems of our target customers to be able to provide them with actual services.

4.5.2 Costs strategy

As the aim of this book is to become the primary source for teaching/learning software engineering. Therefore, we recommend considering some benefits for students, whether in the form of discounts or free e-book, as for some students, the price of this book can be relatively high, and not everyone will be able to afford it.

4.5.3 Channels strategy

When we talk about channels strategy, we mean ways of delivering marketing information and products to our customers as well as getting customer feedback.

The website is an essential channel for information distribution; however, it is missing some desirable components. For example, a contact form represents a way how to get feedback from customers, as well as different ideas or remarks that can be useful also in the process of *Co-creation*. The website is also missing the possibility to register for the newsletter, which could help to get the e-mail addresses of potential customers. These could be later used for marketing purposes as part of the e-mail marketing tactic. A suitable part of the website could be a blog section where the authors or other relevant people can share interesting content.

Social media platforms will represent another valuable channel for information sharing as well as gathering. We suggest creating accounts on social media, especially Facebook, Twitter, and LinkedIn. These

should be managed by a person responsible for sharing content and responding to messages from social media users.

The posts on social media should motivate users to interact, share information, and participate in the entire *Co-creation* process. Instead of posts only promoting products, there should be competitions, polls, or visually engaging inspirational content.

Another useful way of how to spread information to potential customers and promote the book are different blogs and forums site.

4.5.4 Convenience strategy

Convenience is significant or decisive to many customers. For example, if getting a product is complicated or lengthy, the customer can decide to opt for another manufacturer's or brand's product.

Currently, the website provides a possibility to buy the book only on the publisher's web page. For example, some customers might prefer to buy the book on Amazon because it is one of the world's largest online retailers, and many people have the experience, are already registered, or trust in this company. It would be suitable to give customers a choice and let them decide where they buy the book by adding an option to buy the book on Amazon.

Another essential factor regarding convenience is the ease of finding our product or related information. In order for its improvement, it is necessary to focus on search engine optimization. As we mentioned in the analysis section, the website of the book is not optimized for search engines, and it could be difficult for potential users to find it. It is suitable to improve the SEO of the website, as well as create optimized social media accounts according to their SEO rules.

Lastly, the design of the book's website is not fully responsive, and some of its parts are not optimized for mobile phones. During two months, we monitored the sessions on the website with an emphasis on the used device. Figure 4.21 shows that more than 86% of users visit the webpage on their mobile phones, meaning that these users can find the website inconvenient and hard to use.

Another problem is related to security, as the website does not have HTTPS protocol enabled, and we want the visitors to provide us with their data, such as e-mail addresses for the newsletter registration. If customers do not feel safe while visiting a website, then they are very
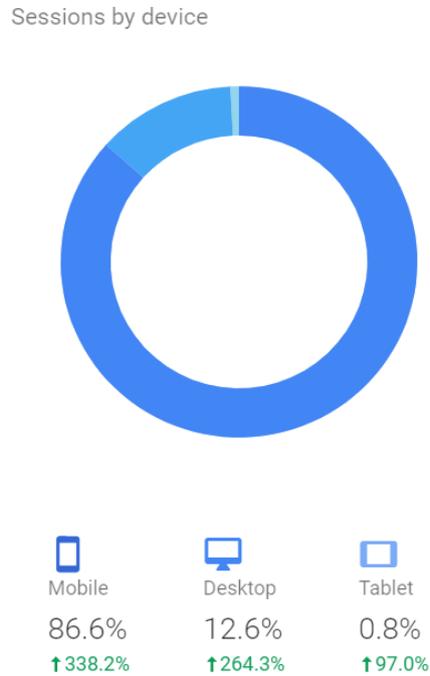
Sessions by device

Figure 4.21: Sessions by device

likely to leave quickly. Alternatively, if they see a "Not Secure" warning appear, they may decide not to proceed to the web page. All this can result in high bounce rates, which could affect the position of that page in the organic search listing. Security is a must and can be critical regarding customer convenience as well as website optimization.

4.5.5 Communication strategy

In order to communicate with our customers or potential customers, we need to create a dialog based on their needs, or lifestyle.

One possibility is using social media. Communication on social media can include sharing of relevant information in the form of valuable and interesting content, direct dialogue with users in private messages or comment sections, gathering feedback from our followers, or promoting our products and services.

The website should be another form of communication with potential customers. The actual possibility of communication is represented by the contact e-mail address in the footer of the website.

In order to enable more effective and convenient communication with our visitors, a contact form will be created. Visitors will choose from multiple subjects of their message, fill in their name, e-mail address, message and send. The subject should include possibilities like feedback, claim, interest in contribution, error in the book, improvement idea, and others.

To be able to promote the book, attract attention, or spread information, we should gather contact addresses of our customers or potential customers. To make it possible, we should create the opportunity to subscribe to the newsletter on the website.

Even though we are targeting digital marketing strategies, we would also like to mention some offline opportunities that should be considered. We are talking about conferences and journals associated with software engineering or computer education where somebody could present the concept of the book or share education experience with Essence.

As this book is primarily aimed for students, it would be appropriate to consider creating a talk about the concept of the book and present it on different IT universities as a new and unique way of teaching software engineering.

4.5.6 Community strategy

The community should consist of categories mentioned in Section 4.5.1:

- university students,

- university educators,

- developers,

- executives.

Social networks will be used to actively build the community and communicate and share information with community members. Responsible representatives should respond in time to received messages

and regularly post engaging content to attract potential customers and keep the attention of current community members. Members could share content and information, and this way, participate in community building.

4.5.7 Co-creation strategy

Co-creators are customers who have purchased, read, or are actively using the book in practice and rated it through user reviews. Besides, we consider co-creators also people who will visit the book's website or social media accounts, or use any book-related service and send us their feedback or any related content via e-mail, contact form, or social media.

Customers can currently post their reviews on Amazon, where they can be accessed by other potential customers and serve as a useful source of information, or using the e-mail address from the footer of the website.

Customers should be able to send their feedback directly from the book's website. As part of the co-creation strategy, it is necessary to add a contact form to the website to enable customers to write their suggestions. These should be carefully recorded, discussed, and eventually implemented.

Our goal is to get feedback from customers also on social networks. Their ratings, stories, suggestions, and other content related to the book or its concept could be published on our social media platforms. They would become the co-creators of our content, which will then serve as a source of information for other customers. This way, we would create an active book-related *Community*. It is required that the responsible representative responds in time, communicates with users, and maintains a long-term relationship with the community.

4.6   Tactics

Presented tactics define the use of various digital tactical tools and channels that will enable us to meet the objectives of this marketing plan. Detailed activities of the individual tactics, together with the timetable of their execution, will be presented in the following section.

4.6.1   Tactic 1: SEO

SEO tactics include increasing the book's website visibility for search engines, notably Google, focusing on its ranking factors.

Relevant keywords should be determined based on which the on-page optimization will be carried out. Each content on the website should have assigned keywords that are relevant so that search engines users will find the content they are looking for by the query they typed in search engines. With every new content added to the webpage, relevant keywords should be repeatedly examined.

Link building is a continuing process, increasing visibility and boosting traffic to the website. We should focus on building quality backlinks to the website, using social networks, forums, blogs, online communities, or other websites. People can only link to our website if they know about it, so it is necessary to promote the website at every opportunity.

Another critical factor for Google is security. The website uses not secure HTTP protocol, but since we want to start gathering data on the website (contact form, newsletter), it is necessary to move the website to secure HTTPS protocol.

SEO also relates the content on the website, but that will be discussed in Section 4.6.4.

4.6.2   Tactic 2: Social media marketing

Social media strategy needs to be implemented in order to ensure the visibility and popularity of the book on social networks. As we observed in the result of the questionnaire, the majority of our potential customers is active on social media platforms and use them as a source of information daily or multiple times a week.

The account of the book will be created on Facebook, Twitter, and LinkedIn. All accounts will be created with a uniform appearance and will contain relevant information, including a link to the website. Some posts will be created in advance with cooperation with the authors.

On created accounts, quality and relevant content should be shared regularly. We will try to gain followers using valuable posts, paid advertisements, communities on social networks, different competitions, and other activities.

It is necessary to have someone qualified to respond to social media accounts promptly to massages or comments from users. We want to build a relationship with our followers on social media accounts, so we need to talk with them, either by posts, in comment sections, or via private messages.

We will make use of different discussion forums, where we will submit relevant content in order to raise the popularity of the book and boost traffic to the website and social media accounts.

4.6.3   Tactic 3: Website

SEO marketing should result in an increase in website traffic by improving the visibility of a website to users of a web search engine.

To be able to monitor and analyze the traffic and relevant website data, it should be registered within Google Analytics and Google Search Console.

Besides, there are additional changes to be carried out on the website, including the creation of newsletter form, contact form, privacy policy and terms of use documents, blog section, incorporation of links to created social media accounts, adding an option to buy the book on Amazon. The website should be regularly updated with relevant content, such as articles on the blog, training materials, or experiences using Essence in practice.

The website should always reflect all the actual book-related events and news so that visitors will not miss anything important.

4.6.4   Tactic 4: Content marketing

The goal is to provide our visitors with quality, relevant, and consistent content across available platforms. Our visitors need the reason why they should follow our social media accounts or visit the webpage repeatedly. Content should be regularly shared on social media accounts. The webpage will be continuously updated with news and valuable content. After creating the newsletter registration option, registered users will receive newsletters at regular intervals.

4.6.5 Tactic 5: E-mail marketing

E-mail strategy needs to be implemented in order to ensure the receiving of regular newsletters by our registered subscribers. Tactics to be employed include the creation of a newsletter subscription form on the website that will ensure the creation of a customer database. The registration must meet the legal requirements.

Once created, the newsletter should be sent with uniform design. E-mail software usually provides statistical information, such as open rate, click rate, or unsubscribe rate, serving to measure the performance of a newsletter. Link to newsletter registration can be moreover available on social media, for example, by adding *Sign Up* button to the Facebook page, redirecting users to the desired subscription form.

Contact form in another element of e-mail marketing tactic, as it enables website visitors to contact us and, for example, give us feedback.

As authors are in connection with several people from the domain of software engineering, willing to help with the book, we will use these to share with them relevant news ad information and ask them to spread them further.

4.7 Actions

Action program covers all actions that need to be carried out for each tactic listed in the previous section to realize the defined objectives of this digital marketing plan.

4.7.1 Tactic 1: SEO

- Screaming Frog SEO Spider tool – Inspection of the website using Screaming Frog SEO Spider tool, giving us insight about its on-page SEO.

- Keywords analysis – What keywords we want to target?

- On-page optimization – With determined keywords, we need to optimize individual website pages to ensure the best possible ranking within SERP. In the case of new content uploaded to

the website, the metadata should be added/modified accordingly. On-page optimization will also include the correction of found problems resulting from analysis of on-page SEO, such as misleading links, or long titles.

- Link building – Building quality back-links to the website to ensure website traffic and visibility using online communities, social networks, or forums. For example, including a link to the website on social media anytime we post/comment on something relevant.

- HTTPS protocol – A security is one of the top priorities of Google, especially if visitors are required to enter data. The website should be moved from HTTP to HTTPS protocol.

4.7.2   Tactic 2: Social media marketing

- Social media accounts – Creation of social media accounts of uniform design across different social media platforms. Do not forget to include the link to the website in the About/Contact section of the accounts. If possible, create a call-to-action button redirecting visitors to the website.

- Facebook ads – Creation of paid advertisement on Facebook, promoting the Facebook page as well as the website once a month lasting 5-7 days. As we have limited funds, each advertisement will be set up with the lowest possible price, CZK 25 per day.

- Content sharing – Sharing of created content regularly on social media platforms. In case of finding relevant content related to the book, do not hesitate to share it on our social media accounts. Always include relevant keywords in the form of hashtags in shared content, enabling social media users to find your content more easily.

- Book giveaway – Create a book giveaway post, where social media users can win the book in case they are drawn and meet specified rules such as like on the Facebook page, or like and share of the competition post.

- Discussion forums – Submit your content to different discussion forums to catch a broader audience. Do not forget to always add links to our website or social media accounts.

- Communities on social networks – Use existing relevant groups and communities on social media platforms to share your content as own posts or comment/answer to the content of others. Promote our social media accounts as well as the website to build traffic and increase awareness.

4.7.3 Tactic 3: Website

- Google Analytics & Google Search Console – The website will be registered within Google Analytics and Google Search Console, enabling to control the performance of the website and eventually adjust the marketing plan accordingly.

- Blog section – Blog section will be created as part of the main menu as proposed in Figure 4.8. Individual articles will be presented in the form of the title, date of publishing, author, short preview, and a button redirecting readers to the full article. The possibility of searching articles by keywords will be on the top of the Blog page.

- Responsive web design –All pages of the website should have a responsive web design, enabling mobile or tablet users to use the website conveniently.

- Amazon – In the banner on the homepage of the website, add button enabling visitors to buy the book on Amazon.

- Contact form – Contact form will be created upon wireframe represented by Figure 4.9.

- Newsletter form – Registration form for the newsletter will be created on the website in compliance with relevant legal requirements. While single opt-in requires users to submit their information in order to be added to the mailing list, double opt-in requires that subscribers validate their e-mail address.

This validation is in the form of a link, included in a confirmation message sent to their e-mail address after they subscribe to the newsletter on our website. The subscriber has to click on this link to be added to our e-mail list and receive e-mail communication. Newsletter form wireframe is outlined in Figure 4.10.

- Privacy Policy and Terms of Use – The Privacy Policy and Terms of Use have to be added to the website, as we want to interact with user data.

- Social media – After the creation of social media accounts, add links to these in the footer of the website.

4.7.4 Tactic 4: Content marketing

- Keywords – Use keywords identified in the SEO tactic in your content. Include relevant keywords in social media posts or comments in the form of hashtags. Hashtags help people find more results about the topic that interests them. Use relevant keywords in all content uploaded to the website.

- Blog posts – After the creation of the blog section on the website, new as well as existing articles will be shared in this section regularly.

- Social media posts – Before the creation of social media accounts, create several posts that can be shared. Share these posts regularly on social media platforms and add as well new ones. Share content relevant to the book from other social media users. Use the content in relevant groups/communities on social media platforms to get attention and bring people back on your social media accounts or to the website.

- Website – When possible, add new content of the website to individual sections. Share this new content with a link to it on social media platforms to attract users to visit or revisit the website. The website content should be rather in the form of a longer text than short articles since there is a correlation between length of content and SERP position. Also, important

keywords should occur multiple times in specific content since more often they appear in the text, more likely is the text about that word. However, we should avoid overfilling the text with these keywords.

- Newsletter – After the creation of newsletter subscription possibility on the website, outline the design of the newsletter. After the acquisition of some e-mail addresses (10-20), prepare news related to the book and associated activities in the form of designed e-mail. Before sending a newsletter to the subscribed customers, make sure that it contains our contact e-mail and the possibility to unsubscribe from our e-mails in the footer of the message.

4.7.5 Tactic 5: E-mail marketing

- Customer database – The customer database will be created upon visitors, which will subscribe for a newsletter.

- Performance tracking – Sent e-mails will be tracked, and their performance, such as open rate, click rate, or unsubscribe rate, will be analyzed for further improvement.

- Software Engineering domain contact list – As authors have some private contacts to several people from the domain of Software Engineering, use these contacts to promote important news such as the creation of social media accounts or the possibility to register to a newsletter.

4.7.6   Gantt diagram

The Gantt diagram, represented by Table 4.1, is a timetable of all proposed activities that will be carried out during the follow-up phase of marketing plan implementation from April 2020 till September 2020 in order to accomplish objectives of this plan.

Table 4.1: Gantt diagram of proposed activities

	April				May				Jun				July				Aug.				Sept.			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
SEO																								
Keywords																								
On-page SEO																								
Link building																								
HTTPS																								
Social media																								
Posting/Sharing																								
Communities																								
Forums & blogs																								
Facebook ads																								
Book giveaway																								
Website																								
Blog section																								
Responsiveness																								
Privacy Policy																								
Terms of Use																								
Contact form																								
Newsletter form																								
Content																								
Keywords usage																								
Social media																								
Website																								
Blog																								
Newsletter																								
E-mail																								
Contact list (SE)																								
Customer db																								
Tracking																								

4.8   Control

Business objectives define where we want to be, and the marketing plan should lead to the accomplishment of these objectives. The control should clarify whether we are going the right way, whether we already accomplished the objective or whether it is necessary to make certain adjustments. Thus it is necessary to regularly control and analyze the actual situation with the desired final state of the marketing plan and deduce how we are doing.

As part of the control mechanism, we set up a report using Google Analytics, which will be sent every month, with the necessary website-related information, including monitored KPIs. This report enables users to visit the report on Google Analytics, and if necessary, gather more information, or visualize the metrics using different charts. In the control report, represented by Figure 4.22, we included the metric information about the number of users, number of new users, total number of sessions, average session duration, number of pages per session, and bounce rate. In the first table, we included a total number of sessions and bounce rates divided according to whether the traffic came from social media or not. The second contains information about the individual social networks and related sessions and bounce rates, and the third contains keywords typed in the search engines, which brought the users to the website with related sessions and bounce rates. The pie chart shows sessions from social sources split by social networks.

Another source enabling to control the performance, in this case of the social media accounts, will be insights from social networks. These can be monitored on individual social media platforms.

Both types of reports, from the website as well as from social media, will be controlled every month. The relevant metrics will be compared to their target values set for each month, presented in Table 4.2. A deviation of up to 5% is allowed for individual indicators. In the case of the actual result significantly exceeded the expected result, the target values for the given indicator for the rest of the marketing plan duration will be modified accordingly. In case of actual result failed to reach the goal value, the analysis of the cause will be carried out, and the marketing plan will be modified accordingly.
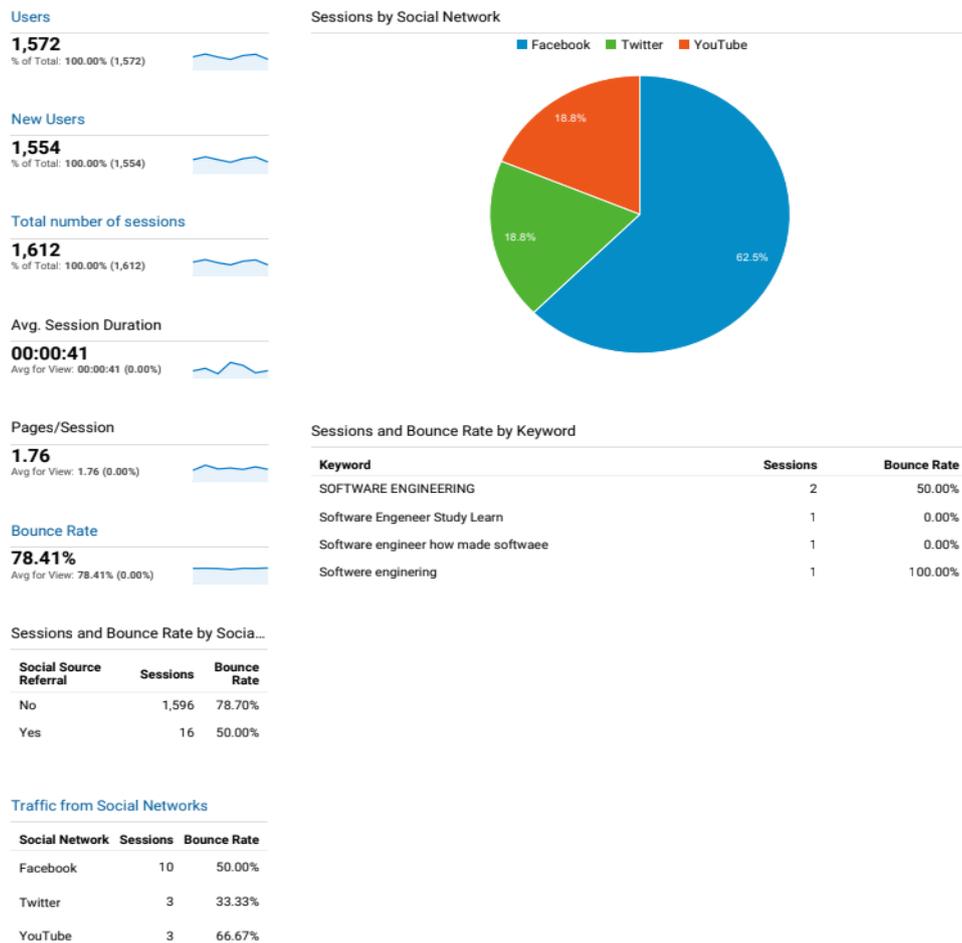
Figure 4.22: Monthly report example from Google Analytics

Table 4.2: Target values for monitored KPIs

	April	May	Jun	July	Aug.	Sept.	Result
Social media posts reach	18 000	19 000	20 000	21 000	22 000	23 000	123 000
Social media followers	500	750	1 000	1 250	1 500	1750	1 750
Site visits from social	200	400	600	800	1 000	1 200	4 200
Total number of sessions	5 500	6 050	6 600	7 150	7 700	8 250	41 250
Pages/Session	1.70	1.76	1.82	1.88	1.96	2.00	2.0
Bounce rate	77.5%	77.0%	76.5%	76.0%	75.5%	75.0%	75.0%
Post engagements	500	575	650	725	800	875	4 125

4.9 Ideas for further improvement

At the end of the follow-up phase of this marketing plan, we would recommend evaluating the results of implemented activities and their impact on the established objectives. Based on this evaluation and actual situational analysis, a new marketing plan for the next period should be developed.

After the end of the marketing plan, it would be suitable to conduct a new customer research in the form of a satisfaction questionnaire. After the realization of this marketing plan, we expect an increase in the website traffic, adding new training materials and other content, as well as raising awareness about the book through social media accounts. Therefore, it would be recommended to find out whether visitors are satisfied with these channels, what they are missing, what interests them, what they find unnecessary or annoying, and review their problems, needs, and motivations regarding the book.

In the case of an increase in funds for marketing purposes, it would be appropriate for the future marketing plan tactics to use paid search advertising in the form of PPC advertising or cooperation with some bloggers or influencers from the relevant domains.

5 Conclusion

The main objective of this thesis was to propose a digital marketing plan using the 7C service-oriented marketing mix for a book on software engineering named *The Essentials of Modern Software Engineering*.

Before the very creation of the marketing plan, attention was paid to marketing and its various forms. Different types of marketing mix were introduced, including the 7C marketing mix, followed by a presentation of relevant channels and techniques of digital marketing. The last part of the theoretical part was devoted to the digital marketing plan, its structure, and its components. This knowledge was later used in the practical part while creating a digital marketing plan.

As part of the case study, the book, its concept, and the marketing plan design were presented. Consequently, an analysis of the external environment was carried out, including an analysis of customers, competitors, and PESTLE analysis. The 7C marketing mix was used to analyze the internal environment, and every part of the book's marketing mix was investigated in detail. Based on these analyses, a SWOT matrix was assembled.

The next step was to set marketing objectives using the SMART method. Seven objectives have been set to raise awareness and increase the visibility of the book and its related services, accompanied by the creation of a complete marketing strategy in the form of the 7C marketing mix processed in a low-cost form due to the small funds for marketing activities. The list of tactics and action plan has then been developed following marketing strategies.

The last part of the case study proposed the target values of monitored metrics for each month of the marketing plan duration. These should be compared with actual results on a monthly basis.

Some of the proposed activities have already been implemented during the design of the marketing plan. The rest will be, also with our help, implemented according to the established timetable. Following this plan, we can expect to increase awareness about the book, increase website traffic, and, ideally, build a relationship with customers and create a community with people sharing their experiences and knowledge about the book.

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