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Digital transformation in small and medium enterprises: Russian regional B2B retailer case

Master's Thesis

by the 2nd year student

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ЗАЯВЛЕНИЕ О САМОСТОЯТЕЛЬНОМ ХАРАКТЕРЕ ВЫПОЛНЕНИЯ ВЫПУСКНОЙ КВАЛИФИКАЦИОННОЙ РАБОТЫ

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АННОТАЦИЯ

Автор	Шафинский Никита Алексеевич
Название ВКР	Цифровая трансформация в малых и средних предприятиях: кейс российского регионального ритейлера для бизнеса
Образовательная программа	ВМ.5669.2019 Менеджмент (Master in Management)
Направление подготовки	Master in Management - MiM
Год	2021
Научный руководитель	кандидат технических наук, доцент С.А.Яблонский
Описание цели, задач и основных результатов	Целью исследования является углубленное изучение кейса цифровой трансформации в российском региональном ритейлере B2B в сегменте HoReCa. Исследование основано на единственном тематическом исследовании компании из города Казани и основано на полу структурированных интервью с генеральным директором, главными менеджерами и клиентами, кроме того, были проведены наблюдения для сбора данных во время реализации одной из инициатив по реализации цифровой трансформации. Эти данные использовались для построения бизнес-моделей компании, анализа изменений, которые цифровая трансформация внесла в бизнес-операции внутри моделей. Кроме того, анализируются несколько будущих предложений бизнес-моделей для исследуемой компании. Помимо анализа бизнес-модели, рассматривается также финансовая сторона моделей. Результаты исследования указывают на возможности роста, которые открываются для компании, изменение многих аспектов бизнес-моделей со стороны компании, а также адаптацию к изменяющимся предпочтениям потребителей и появление возможностей выхода на новые сегменты рынка (например, B2C). Результаты исследования могут быть полезны владельцам малого и среднего бизнеса в России, так как могут быть использованы как пример того, как проводилась цифровая трансформация, какие ресурсы

	необходимы и каковы результаты трансформации. Теоретическим вкладом этого исследования является изучение изменений в бизнес-модели, которые приведут к успешной цифровой трансформации российских МСП, и использование холста бизнес-модели для оценки изменений.
Ключевые слова	Цифровая трансформация, малые и средние предприятия, Россия, B2B, B2B ритейл, HoReCa, бизнес-модели, business model canvas, ценностное предложение

ABSTRACT

Master Student's Name	Shafinskiy Nikita
Master Thesis Title	Digital transformation in small and medium enterprises: Russian regional B2B retailer case
Educational Program	BM.5669.2019 Менеджмент (Master in Management)
Main field of study	Master in Management - MiM
Year	2021
Academic Advisor's Name	Candidate of Engineering, Associate Professor S.A.Iablonskii
Description of the goal, tasks and main results	The goal of the research is to study in-depth the digital transformation case in a Russian regional B2B retailer in the HoReCa segment. The study is based on a single case study on a company from the city of Kazan and is based on semi-structured interviews with the CEO, head managers and customers, in addition observations were conducted to collect data during the implementation of one of the digital transformation initiatives. This data was used to build business models of the company, analyse the changes that a digital transformation has done to the business operations inside the models. In addition, several future proposals of the business models for the studied company are analysed. In addition to the business model analysis, the financial side of the models is also reviewed. The results of the research point to possibilities that open up the growth for the company, changing many aspects of the business models from the company side, as well as the adaptation to changing consumer preferences and the chances to enter new market segments (like B2C). The research results can be useful to owners of small and medium businesses in Russia, as it can be used as an example of how the digital transformation was conducted, what resources are needed and the results of the transformation. Theoretical contribution of this research is the study of changes in the business model that will lead to a successful digital transformation in Russian SMEs, and the use of business model canvas for changes evaluation.

Keywords	Digital transformation, small and medium enterprises, Russia, B2B, B2B retail, HoReCa, business model, business model canvas, value proposition

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INTRODUCTION

Relevance of the study

In today's world, small and medium enterprises are the one of the defining sectors of well-diversified world economies, since they are adaptable, provide people with all kinds of goods and services, create jobs, drive innovation and competition. In the European Union, the amount of SMEs in total businesses account for more than 70% of the share (OECD, 2021). In terms of innovations they are very flexible and innovative compares to regular large businesses and enterprises (Ulas, 2019), and this definitely contributes to the economic growth and can help shape overall development of the world around us.

In the Russian Federation, the share of small and medium businesses is limited and accounts for only about 24% of the employment in the country, according to the Rosstat. But the importance of the sector and how much it can contribute to the economy is very important, and this sector raises its need in the Russian economy every year. This is because such companies are considered to promote and secure the further economic growth and increase the competitiveness of the region on a global scale.

But, small and medium enterprises do have their shortcomings: they can be vulnerable to external shocks, uncertainty, and turbulency in the environment (Pierenkemper, 2020). The last and the most notable recent example is the Coronavirus pandemic lockdowns across the world, which shocked many SMEs across the world (Apedo-Amah et al., 2020). Also, growing pressure of market competition from other companies large and small, systematic lack of funds, knowledge and other factors can hinder the development of SMEs.

Digitalisation of business can offer a range of additional opportunities for small and medium enterprises, such as performance improvements, innovation spurring, increasing productivity and a chance to compete with larger firms with things like economies of scale, operation and transaction costs, less information asymmetry, business intelligence or automation, better customer and market outreach and more (OECD, 2021).

But, despite the significant benefits that are offered to small and medium enterprises thanks to the digitalisation, often this smaller size plays the opposite: it becomes the barrier to adoption, and thus smaller companies still continue to hold-up on digital transformation initiatives. Some of the problems include the lack of resources, awareness of such technologies, the financial side, and one of the most important problems, knowledge gaps of how and why to do the digital transformation. These problems in the adoption of more advanced digital technologies can weigh down on productivity, and consequently come to additional concerns among firms about the real life benefits of digital transformation (Depaoli et al., 2020)

However, despite the significant benefits on offer, smaller size often acts as a barrier to adoption and, as such, smaller businesses continue to lag in the digital transformation, in particular dragged back by a lack of internal resources and awareness, skills gaps or financing issues. These gaps in digital uptake weigh down on productivity and in turn contribute to inequalities among people, places and, of course, firms, where there are additional concerns that the benefits of digitalisation could accrue mainly to early adopters. Overcoming these barriers and allowing SMEs to fully embrace the benefits of the digital transformation, cannot be met by SMEs alone.

Coronavirus crisis has brought up the question about the importance of digitalisation across all business sectors, including small and medium businesses, and served as an accelerator. Many firms have moved their operations to online and have started to implement many remote working solutions to remain in operation during the pandemic lockdowns and to deal with the disruptions in the supply chain. Online platforms for example played an important role in connecting users with businesses more efficiently. Early reports suggest that up to 70% of SMEs have intensified their use of digital technologies in part to COVID-19 pandemic, and they have shown some gains to businesses (OECD, 2021).

The COVID-19 crisis has heightened the importance of SME digitalisation, and served as an accelerator. Firms have moved operations online and implemented smart working solutions to remain in business during lockdowns and overcome disruptions in supply chains, with online platforms playing an instrumental role in connecting users to new markets, suppliers or resources. Early evidence from business surveys worldwide point to up to 70% of SMEs having intensified their use of digital technologies due to COVID- 19. Most of these changes are poised to last since some investments are irreversible and the efficiency gains have now been demonstrated.

In the context of this thesis, it is very important to understand how SMEs in Russia can use digital technologies in their activities and how they will change overall with the use of such technologies in their everyday operations. Thus, it is important to understand the digital transformation from all sides and all of the major points of contact to get a clear view of the changes and how they affect the overall picture.

The B2B retail industry was chosen for the empirical research purposes, since this sector has many growth points that are enabled by digital technologies. But, most of these growth points for Russian companies are underexamined by academics and practitioners, especially considering other regions of Russia. All things considered, this industry will fit the objectives of the research in a way that will show to other companies how the digital transformation can be done in small and medium enterprises.

Research questions and aims of the study

The research goal is to investigate and understand the changes inside Russian SMEs during a digital transformation.

For reaching the research goal, several research questions were formulated:

1. How business model's elements are changed after a digital transformation in retail?
2. Which new opportunities can be opened in business model's elements after a digital transformation in a B2B SME retail firm?

The object of the research is the Russian regional small and medium enterprise in the B2B retail industry for HoReCa segment undergoing a digital transformation

The subject of the research is the results of the digital transformation initiatives, evaluation of business models that a company had before and after digital transformation.

This study is based on examination of a case study of a small and medium enterprise company in the B2B retail industry. This is a very traditional type of enterprises – both in regular business processes and the adoption of digital technologies. Usually, the usage of digital technologies is low, and there is no clear understanding of what digital transformation can bring to the table. At the same time, however, the digital technologies available for such companies can bring huge potentials for growth.

The study aims to have an in-depth investigation of the digital transformation on example with one of the Russian SMEs, while at the same time showcasing this case as an example for other small and medium enterprises to help make their decision into investing into digital transformations. The findings will help to gain insights on how exactly digital transformation can impact the business as a whole – from the business model side, and from the financial side, which can be used by other companies as an example.

CHAPTER 1. THEORETICAL FRAMEWORK FOR DIGITAL TRANSFORMATION

This chapter is concentrated on investigating the digital transformation concept in businesses. The aim of the literature review in this paper is to provide an overview of the studies regarding the digital transformation from different spheres: academic and business perspectives. Since the work is concentrated on investigating small and medium enterprises, the topic of how the digital transformation is working in such firms is also touched. Business models are an important part of the digital transformation process, so in this paper this topic was also researched. The research gap is defined after a conducted literature review.

1.1 Change management in organisations

Before beginning the review of the materials on digital transformation, it is important to understand the concept of change management in organizations and how it is applied to digital transformation.

One of the main objectives of the firm is to develop in the long term (Bejinariu et al., 2017). The ever-changing global market conditions, constant innovation, pressure from the outside and the decreasing economics can lead to a complex and active environment around the company. For the companies to remain competitive, they should manage changes effectively (Wanner, 2013).

For the firm to be able to adapt to such changes, management in the organizations should understand their strengths and weaknesses, quickly identify potential threats and respond quickly (Bejinariu et al., 2017).

Wanner (2013) defines change management as “an organized, systematic application of the knowledge, tools, and resources of change that provides organizations with a key process to achieve their business strategy”. Change management is an approach for dealing with any big change, whether it is of an organization or on the individual level.

Change processes that concern organizational issues are complex and can meet with reluctance on the part of the employees. When knowledge is gathered by the firm, it aims to start the organizational change processes. Changes in the organizational processes are “the facts of life” (Bejinariu et al., 2017), they involve changes of the organisation’s mission and vision, that can impact the whole organisation. Some organizations do accept such changes (if they are considered necessary) and quickly adapt their operations and behavior, but most of the firm consider this very difficult (Bejinariu et al., 2017).

As mentioned by Harvard Business School article (Stobierski, 2020), organizational change factors faced by the managers include:

- New leadership in the company or department

- Changes in the team structure
- New technologies
- Adoption of new business models

Many different types of organizational change exist, and as a whole could be described as "two ends of the spectrum": adaptive changes and transformational changes (Stobierski, 2020). Adaptive changes are usually small changes that companies need to address over time as the company evolves. Usually these are minor modifications that leaders do for execution upon business strategies. Transformational changes are often larger and involve big shifts in strategy, company, teams or business processes, and because of this, they often take more time and resources (Stobierski, 2020). Most of the changes will be somewhere in between these two groups, and for this reason, managers need to understand that the change process should be custom designed to each situation.

There are multiple options to do changes in the company: implementing new strategies, systems, new culture or processes – but for all of them change management is crucial for company's success (Wanner, 2013). Unfortunately, change projects often fail, as was pointed out by a report from McKinsey, over 70% of the digital transformation change projects inevitably fail (Martin, 2018).

1.2 Change management and digital transformation

For a successful digital transformation, the change management is crucial – since the reasons of the digital transformation can vary, from bad time management and planning, lack of finance to the lack of skills for digital transformation (K. Murphy, 2021). But the long-term results outweigh the potential problems that could occur, and thus to meet the organisation's changing needs and business strategies a good change management strategy is needed.

One of the core tasks of change management is adapting "corporate objectives, strategies, structures and processes to changing conditions", but it also can include the vision of the company, business models and adapting products and services that are offered by the company (Kreutzer et al., 2018)

In order to correctly align the entire company for the digital era and prepare it for a successful digital transformation requires a systematic method of change management (Kreutzer et al., 2018). For companies it is important to understand that this process must always start internally within the employees – only then to start transforming structures and processes, which in turn will help the company to show the results of its work to the world.

Comparing to project management, in which it is easy to understand schedules, objectives and outcomes, change management's route is "more reactive, and indefinite" (Impact Networking, LLC, 2021). All strategies of change management will lead to these three primary goals:

- ROI of the employees improvement: changes that are associated with digital transformation should be done for improving the efficiency and productivity, whether it is certain technology that can help them communicate or tools for improving their productivity (Impact Networking, LLC, 2021);
- Creation of a competitive advantage: by giving the process of evolution and change a certain structure, change management will help organisations to understand and find their opportunities for gaining an advantage over competitors (Impact Networking, LLC, 2021);
- Support employees by giving them energy and power to change: change for people can be frightening, especially in cases when people have done their operations in a certain way for a long time, and change management can help to make sure that employees feel supported, therefore empowering them for change. According to (Impact Networking, LLC, 2021), 70% of change initiatives fail due to the lack of support from co-workers.

Managing change is an important step for any big transformation process, and for the digital transformation it is just as important. Any business should consider how to manage change inside of them before starting to implement any step of the transformation. In the next paragraph, the discussion on the Digital transformation will be conducted.

1.3 Digital transformation in business

1.3.1 The definition of Digital transformation in business

In the period of increased knowledge use and digitalised economies, the importance of using business models seem as an element of strategic innovation and it is one of the main contributing factors to winning positions for a firm. And these things are creating demand for understanding how companies should design and use their operations, create value for consumers, figure out the costs structure and revenue streams, plus other elements of the business model (Landeta Echeberria, 2020). Bharadwaj et al. (2013) assume the existence of a digital business strategy, which is at the same time strategic and technological, because of having a presence of digital in all spheres, even down to business strategies overlap with information technology and systems strategies.

As quoted by Nandico (2016), “IT no longer supports the business, IT is the business”. They state that this play on words really show the vector of changes for the business core: IT not just is supportive, but also offers new possibilities.

The use and roles of digital technologies in firms and enterprises is one of the most discussed issues among consultants, experts, politicians and in the academic field. To be precise, the emphasis is on how such digital technologies and tools can help to contribute to creating market prospects, then to improving the management and in the end improve the company’s competitiveness (Gong & Ribiere, 2020).

Several studies are available to show how organizations and industries have used and adopted digital technologies, as well as how they demonstrate their impact. A McKinsey study (2018) revealed that at least 60% of their respondents use technologies like cloud services, mobile internet, and big data. Also, the percent of usage for such technologies is higher in companies that have successfully adopted a transformation. Out of all of the respondents, 70 percent of teams were changed – most common is when the is a person with deep understanding of digital. Berman (2014) proposes the following key transformational opportunities for businesses: creating new business models, improving operational processes and enhancing customer experiences. Bharadwaj et al. (2013) suggest that digital transformations as a opportunity to reconsider the role of IT strategy from that of a functional level plan to a plan that will integrate both IT and business strategies.

All of these factors indicate the fact how organizations are being involved more and more in digital technologies. In today’s digital era, preparing businesses for digital has become an everyday agenda item.

In the always changing market environment, companies have to always be competitive, and to stay competitive, they have to always be in line with the latest trends and constantly innovate on their products and services, as well as improving their current operations (Kutnjak et al., 2019). Today, in a vast availability of information and digital technologies, as well as their quick improvement and fast adoption, presents a new form of transformation for businesses: digital transformation. In businesses, such format of organizational transformation (supported by technology) is concerned with using information and digital technologies to influence all sorts of aspects in the company. Examples include adopting technologies like social media, “internet of things” technologies, “cloud” services, big data analytics and other for improving their daily work and processes (Morakanyane et al., 2017). And, as a consequence, these technologies change the behaviours of the business: how they operate, create value and deliver the experiences to their stakeholders.

The discussion of theoretical background on digital transformation will start from the definition. As it was pointed out by Morakanyane et al. (2017), the spread of the term “digital

transformation" is quite scares, it can depend on the different researchers. Vial (2019) proposes a definition of Digital Transformation as "a process that aims to improve an entity by triggering significant changes to its properties through combinations of information, computing, communication, and connectivity technologies". DT is a phenomenon that has multiple dimensions, that are driven by technology. It can affect things like society and economy, and also create disturbances in the industries that require quick but strategic reactions from companies to remain 'on-float'. For digital technologies to develop into an indispensable part of value creation inside of companies, they should implement organisational and managerial changes that allow them to challenge the necessary changes for achieving such objectives.

At first, researchers put a strong effort on evaluating the usage of digital technologies, but over time, it was discovered that DT is not just about using digital technologies, but it is also a combination of strategy, people management, cultural changes, and leadership (Gong & Ribiere, 2020). A few researchers concentrate their defenitions on the impact that DT can offer. Other reseachers include customer value creation, like optimizing customer needs and experiences (Rogers, 2016). While some researchers tend to associate DT with business models (Bharadwaj et al., 2013) and strategy (Bharadwaj et al., 2013; Rogers, 2016), other authors look at DT as a process (Berman & Marshall, 2014). OECD (2021) considers DT with economic and social effects of digitalisation.

In the scope of this thesis, a unified definition of DT proposed by Gong & Ribiere (2020) will be used. They define DT as "a fundamental change process, enabled by the innovative use of digital technologies accompanied by the strategic leverage of key resources and capabilities, aiming to radically improve an organisation and redefine its value proposition for its stakeholders".

DT was a theme of many research efforts over the last two decades (Vial, 2019), with the evovling of information technologies. Before, companies were mostly worried on implemeting and deploying such systems like enterprise resource planning and customer relationship management, but the transformations that these systems introduced were limited to improving areas in business models like cost reduction and business process optimisation (Boersma & Kingma, 2005).

In recent years, technologies like e-commerce and social networks like Facebook and Instagram have been quickly and widely adopted by all sorts of firms. And thus, such transformations that are driven by externally oriented IT go beyond changes to just internal business processes. They also include severe changes to business models (Berman, 2012), organizational strategy, and culture (Cui & Pan, 2015; Zeng, Chen, & Huang, 2008).

Even though the exact scenario for digital transformation should change the IT infrastructure of the company (and in drastic ways), it is "totally business driven": as explained by

Nandico (2016), the drivers for the changes are rooted in the business itself, and the company as a whole should decide on executing the correct digital transformation scenario. As a final product of this change, the vision, mission, and goals of the company may completely change, and so will the business architecture.

This is different from any IT only change plans in the companies. Such plans, for example, are used for implementing service oriented architecture, and was only affecting the IT. From the author's perspective, business respected the pursuit of IT, but it did not recognize IT as something like an enabler for new business prospects.

Today, for many industries IT has or will become a crucial part of the business, with the vast availability of smartphones, rapid development of wearables and internet of things, businesses who had a digital transformation will find their partner from the consumer side (Nandico, 2016).

Digital transformation of businesses is being done in a big number of companies, from big to small ones. As it was previously managed, digital transformation is not about introducing new digital technologies, it is about how a business can use these digital technologies to transform their business models. Many companies have now already undergone a digital transformation, with most of them being big enterprises (Morgan, 2019). Some of the well-known examples of digital transformation include companies like Best Buy, Hasbro, and even Microsoft, which as many would suppose itself is an IT company.

The Best Buy example is interesting, because the people's perception of this brand was "it is dead", following it's losing market positions for selling electronics to digital marketplaces like Amazon. The digital transformation of their business model changed the perspective from just selling products, to "trying to enrich people's lives with technology", with initiatives like changing the focus from selling products to assisting them to make the best choice, plus switching to a fully digital marketing strategy – with customer profiling (Joly, 2020). The results of the transformation showed that Best Buy more than quadrupled it's stock price from 2012 (Yahoo Finance, 2021).

Another example is Hasbro, which is well-known for toys for kids. In 2012, their big change in marketing strategy was a change of focus from kids to parents, who were the actual buyers of toys, and the usage of data analytics really helped Hasbro to target parents more efficiently. Plus, they also leveraged the power of digital storytelling through social media to better promote their products (Morgan, 2019). But, Hasbro might just lose the online board game market growth, since they have not considered taking advantage of developing digital versions of their most popular board games, like Magic (ADW, 2018).

Microsoft is an interesting example of digital transformation, which had touched an IT player. With the new CEO Satya Nadella, the company started to switching focus to cloud systems. They have changed both business models for personal and enterprise use to leverage more cloud

solutions – which itself helped to change the Microsoft's image of an outdated company to a forward-thinking cloud company (Microsoft, 2019), which helped it to be the third US company with a $ 1 trillion capitalisation, and, after COVID-19 situation in 2020, the only company with a $ 1 trillion capitalisation (Baker, 2020)

All in all, we can say that digital transformation for business is the next big step of evolution for companies, which can't be achieved by just only implementing an IT solution, but by also rethinking other parts of the business. Further in the research, a topic of the raise in popularity of DT is examined.

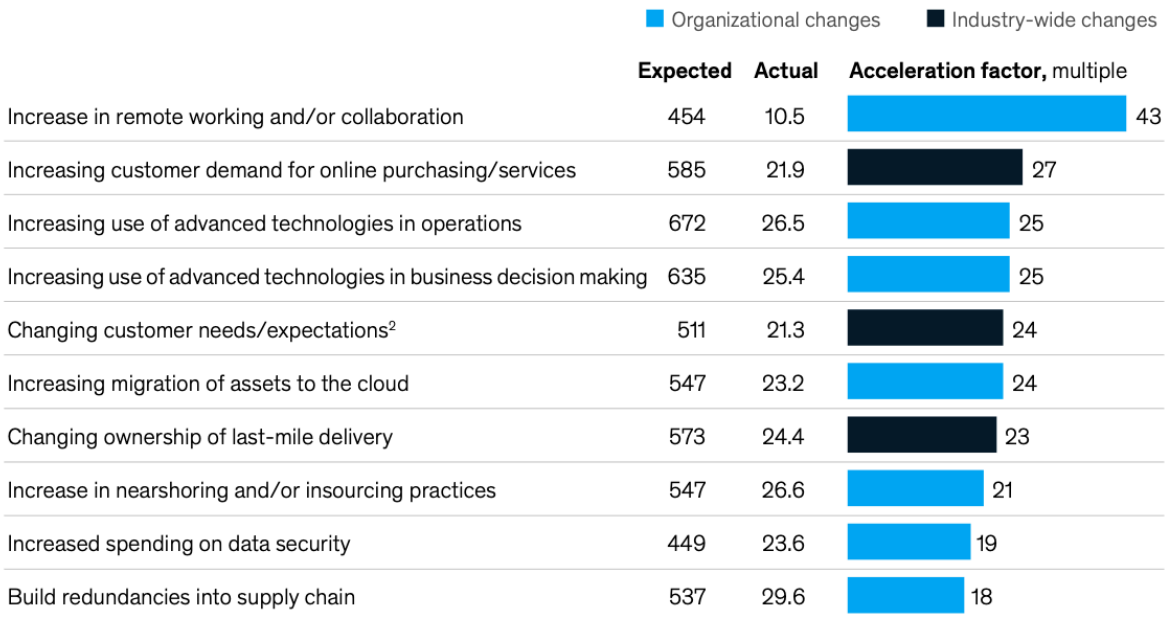
1.3.2 Popularisation and reasoning behind digital transformation: examples from before and after COVID-19

After looking through the definition of the digital transformation, let's now take a look at the reasons behind the popularity of digital transformation. DT has become one of the most popular business improvement operations in the last few years. According to IDC (2019), the worldwide spending on DT is going to hit a record-high $2.3 trillion in 2023. That is more than half of all the world's spending of information technology. Digital transformation is most popular in the US market, followed by Europe and China. This market will continue to grow at a compound annual growth rate of 23%, to $3.3 million by 2025 (Research and Markets, 2020). At least 40% of all spending on technology spending will go towards DT (Stackpole, 2018), and DT is expected to add $100 trillion dollars to the world economy by 2025, with platform-driven interactions expected to enable approximately 2/3 of that 100 trillion dollar value (World Economic Forum, 2018). All of these statistics suggest that digital transformation practices are very popular in businesses nowadays and will continue to grow. Another potential accelerator for using digital transformation practices is the COVID-19 pandemic, which had affected and disrupted many of the businesses' operations during 2020 (Apedo-Amah et al., 2020).

COVID-19 exposed a number of critical challenges for businesses, like exposure to security risks, creating and operating digital channels, optimisation of business processes and a shift to a remote workforce, as stated by KPMG (2021). The urgency in all processes is the key storyline behind the pandemic's effect on business.

Executives say their companies responded to a range of COVID-19-related changes much more quickly than they thought possible before the crisis.

Time required to respond to or implement changes,[1] expected vs actual, number of days



[1]Respondents who answered "entry of new competitors in company's market/value chain" or "exit of major competitors from company's market/value chain" are not shown; compared with the other 10 changes, respondents are much more likely to say their companies have not been able to respond.
[2]For instance, increased focus on health/hygiene.

Fig. 1 Time required to respond to or implement changes, expected vs actual (McKinsey, 2020)

The COVID-19 situation severely accelerated the demand for digital transformations within companies of all sizes. In the report by McKinsey (2020), most of the respondents of their survey said that their programs for digital transformation in spheres like customer interactions has been accelerated by at least three to four years, and the portfolios share of digital products has accelerated by seven years. Most of the respondents said that they had at least implemented a temporary solution for their clients in order to fulfil the customer needs, plus they expect that these changes and the effects from changes will be long-lasting. The effects of lockdowns in most countries is the result of massive increases in funding for digital transformation programs in companies. As most consumers turned into digital online channels for interacting with businesses, companies had to adapt to this behaviour quickly. The average share of digital interactions globally in July 2020 was 58%, while in December 2019 it was only 36%. The biggest acceleration of adoption (years ahead of average rate of adoption from 2017-2019) for digital interactions with customers was in Asian regions, with companies being ahead of their plans to digital interaction with customers by 4 years, while globally it is 3 years. Also, companies average shares of products that are digital partially or fully had reached 55% globally in July 2020 (a 20% improvement from

December 2019), with the adoption acceleration on average being 7 years. Most businesses in this survey stated that they have not been implementing changes in terms of digital transformation because it "was not a business priority".

Reasons behind the digital transformation could be different depending on the company, customer segments and industry. In a study by Forrester Consulting (Forrester Consulting, 2015) companies working in B2C segments, most of them want to use digital transformation as a mean to 'improve experience with their customers', with the majority of them responding that they want to improve "customer online experience", "cross-channel customer experience" and 'improving mobile experiences'. The key drivers for digital transformation are profitability, customer satisfaction and increased speed-to-market.

In B2B segments, the key benefits for digital transformation are following (Geyer, 2020):

- Customer engagement – the use of alternative channels for customer engagement have skyrocketed, and customer prefer using online services for communication
- Supply chain optimisation – the use of ecommerce has been proven to be more reliable than face-to-face communications or call centres
- Lowering costs – the usage of data analysis for uncovering expenses and finding new insights

The main reasons that all companies go through the digital transformation are for improving key complexity in IT operations, to improve their processes while at the same time improving their business processes (Robinson, 2019). Future proofing the business is also one of the key reasons for businesses to undergo a digital transformation. (Böringer et al., 2019), show that they businesses that have undergone a digital transformation significantly outperform their competition.

Also, many companies that are undergoing a digital transformation or are planning to do it are starting to move towards ecosystems, which are often seen as 'underpinning the value creation and capture of firms' (Hanelt et al., 2020). In recent times, there was a move by companies from hierarchical supply chains and moving towards more fragmented networks of partnerships, and in terms of DT, we see businesses go towards digital business ecosystems, which previously were only interesting for information technology firms and software companies but is now becoming more connected to regular business models and increasingly relevant as digital technologies spread through different industries. Such ecosystems define a business environment as one that is "shaped by a network of interdependencies specifically generated through digital technologies" (Kopalle et al., 2020). One of the key factors of digital business ecosystems being distinctive is their turbulence, which can vary because of environment changes in customer needs and technologies.

This turbulence becomes apparent when there are a lot of competition, adoption of technologies and constantly changing customer choices (Hanelt et al., 2020)

1.3.3 Elements of digital transformation

Digital transformation is not a simple and a straightforward process for companies to accomplish, and it might require the company several years or tries for a successful implementation of the transformation. A McKinsey study (Martin, 2018) revealed that the success rates for such transformations in low, at around 30%. Usually, the more a company uses new technologies for its DT, the more a chance of DT been successful, which was seen by the author of the research "counterintuitive", but in reality it was the opposite. Some of the technologies used in such companies that had successfully completed a digital transformation are artificial intelligence, Internet of Things, and advanced machine learning techniques.

The authors of this research also point to a set of factors that can help a company to improve the chances of a successful implementation of the digital transformation. They have developed 5 categories of such factors (Martin, 2018):

- The availability of "digital-savvy" leaders
- Creation of capabilities for the "workforce of the future"
- Inspiring colleagues to work in innovative new ways
- Having a "digital upgrade" of "day-to-day tools"
- Frequent communication (both traditional and digital)

Academic researchers point out many different phases or elements of a digital transformation. A review of different papers on digital transformation (Zaoui & Souissi, 2020) show that there are at least 17 different phases of digital transformation that a company can go through. The most talked about phases of digital are the following groups:

- Evaluating the need for digital transformation. It is linked to the existing state of digital skills and technologies of a given company, and this evaluation should be multi-dimensional (Rueckel et al., 2020). The importance is linked to the need for the company to do a self-reflection on the maturity of the company. The main activities of this group include a digital maturity assessment, and preliminary definition of the strategic guidelines.
- Defining a strategic orientation for the digital transformation, determining and setting strategic goals. The definition of strategic orientation include setting goals, internal and external evaluation, and setting objectives for action. This is the most important phase for a further successful transformation. The main activities of this

phase group are the definition of strategy milestones and directions for the company's digital transformation, evaluation of current business models in the company.

- Implenting DT. Of course, there is no need to mention that digital transformation in any case requires preparation and guidance, but the implementation remains the most concrete phase of the whole digital transformation strategy and project. This phase group has the most operations that a company could do during a digital transformation. Some of them include:
    - Customer experience transformation for digital
    - DT on operations
    - DT design
    - DT of business process
    - Organisational DT
    - Product and/or service DT
    - DT of the company's culture
    - DT of the value proposition

Rogers (2016) in his work concentrates on several domains of strategy for a successful digital transformation process. These domains include Customers, Competition, Data, Innovation and Value, and across these five domains technologies can change many of the fundamental principles of strategy, plus they can change the potential rules by which companies operate around the globe.

Table 1. Changes in Assumptions for strategy from analogue to digital age (Rogers, 2016)

	From	To
Customers	Customers as mass market Communications are broadcast to customers Firm is the key influencer Marketing to persuade purchase One-way value flows Economies of (firm) scale	Customers as dynamic network Communications are two-way Customers are the key influencer Marketing to inspire purchase, loyalty, advocacy Reciprocal value flows Economies of (customer) value
Competition	Competition within defined industries Clear distinctions between partners and rivals Competition is a zero-sum game Key assets are held inside the firm Products with unique features and benefits A few dominant competitors per category	Competition across fluid industries Blurred distinctions between partners and rivals Competitors cooperate in key areas Key assets reside in outside networks Platforms with partners who exchange value Winner-takes-all due to network effects

Data	Data is expensive to generate in firm Challenge of data is storing and managing it Firms make use only of structured data Data is managed in operational silos Data is a tool for optimizing processes	Data is continuously generated everywhere Challenge of data is turning it into valuable information Unstructured data is increasingly usable and valuable Value of data is in connecting it across silos Data is a key intangible asset for value creation
Innovation	Decisions made based on intuition and seniority Testing ideas is expensive, slow, and difficult Experiments conducted infrequently, by experts Challenge of innovation is to find the right solution Failure is avoided at all cost Focus is on the "finished" product	Decisions made based on testing and validating Testing ideas is cheap, fast, and easy Experiments conducted constantly, by everyone Challenge of innovation is to solve the right problem Failures are learned from, early and cheaply Focus is on minimum viable prototypes and iteration after launch
Value	Value proposition defined by industry Execute your current value proposition Optimize your business model as long as possible Judge change by how it impacts your current business Market success allows for complacency	Value proposition defined by changing customer needs Uncover the next opportunity for customer value Evolve before you must, to stay ahead of the curve Judge change by how it could create your next business "Only the paranoid survive"

1.3.4 Measuring the impact of digital transformation

For companies, it is vital to know and understand how business transformations perform, and to quickly adapt to any challenges that may occur during it. That is why key performance indicators are the most popular tool for keeping track of the progress, metrics and goals in companies, from small ones to enterprises.

Just as KPIs are used in tracking things like budgets, it is important for business to set new metrics and goals when conducting a digital transformation process (LeHong, 2016).

A Gartner report on Digital Business KPIs for defining and measuring success (2016) proposes a model for laying down a foundation for metrics that are directly connected with the "digital business journey", that is from the very beginning of the evaluation of digital in business

(when the transformation has not yet begun) all the way up to the end of the digital transformation, when the digital metrics are an integral part of the business.

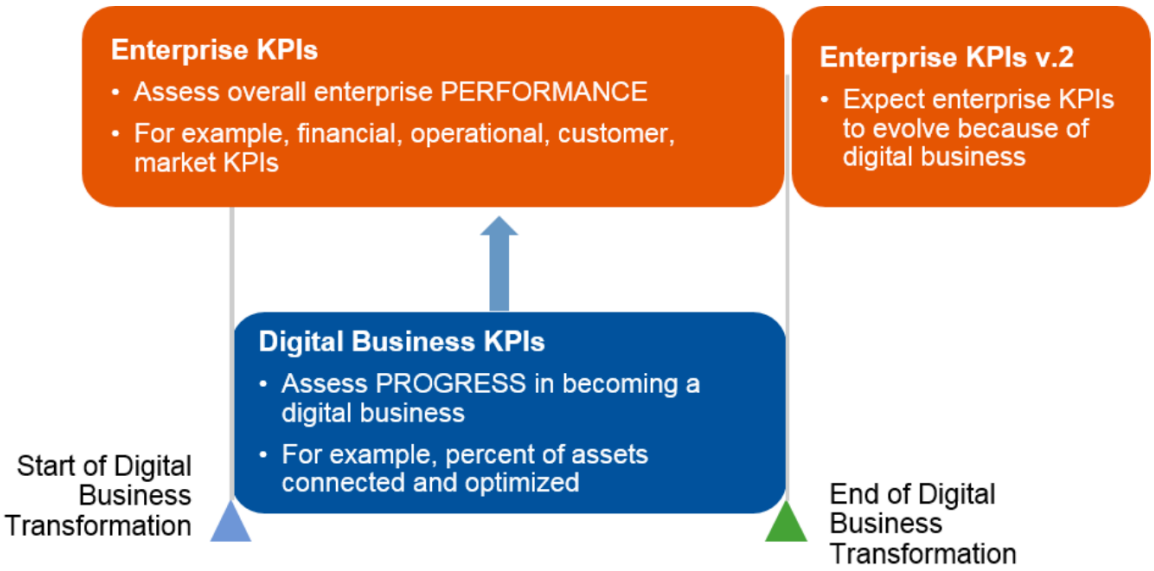


Fig. 2 Framework of using digital business KPIs (LeHong, 2016)

The digital business KPIs are not meant to be used forever, they are a temporary instrument that can help assess progress in becoming a digitally transformed business. Analysts suggest that after the digital transformation is complete, the KPIs of the company may change to reflect the changed nature of the firm, or its changes in business model becoming more digital. They propose two kinds of KPIs:

1. KPIs that will measure the optimisation procedures of the current business model: such KPIs can help to answer such questions like "How digitised is the company?"
2. KPIs that will measure "transformative growth", such KPIs can help to answer questions like "Which digital revenue sources can help the company to achieve the best financial results?"

A division of General Electric, GE Digital proposes to managers and CEOs to answer 4 important questions while preparing a set of metrics for evaluating the successful implementation of a digital transformation (Casto, 2019). The questions are:

- Where is the organisation today in its efforts to go digital?
- Where would the efforts to go digital will take the organisation?
- What are the benefits of having a digital transformation for the organisation?
- What is the plan of the digital transformation in the organisation?

As stated by the Gartner's analyst Paul Proctor in a feature by CIO magazine (Boulton, 2020), "The digital KPI is all about understanding where you're making money or improving an existing business model, how to measure that and work with your non-IT execs to achieve new

business outcomes that you've set based on the fact that you're going digital," and "Outside of that all that you have is a collection of new projects that are using technology to do new stuff and unfortunately that's where most businesses are today."

1.3.5 Digital transformation in small and medium enterprises

Digital transformation can offer a range of opportunities for small and medium-sized enterprises as well: OECD (2021) mentions things like performance improvements, innovation spurring, better productivity and gives a chance to compete with larger firms on things like economies of scale, operational costs and better opportunities for product differentiation and quick following of trends. But, even though the benefits that SMEs have are noteworthy, often their smaller size acts as a barrier to adoption of digital technologies, and in particular they are lagging in internal resources, in awareness of technology availability and in financing.

And, as a result, the adoption of digital transformation has called attention of a number of researchers (Harridge-March, 2004; Kim et al., 2011; Taiminen & Karjaluoto, 2015), and policymakers with governments due to SMEs important role in the development of the economy. In an example by Depaoli et al., (2020), in March 2020 the European Commission has launched a strategy for SMEs, which is focused on sustainability and digital Europe, which has been driven by the fact that "only 17% of SMEs have successfully integrated digital technologies into their businesses" (European Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, 2020), and thus the European Commission will be expanding Digital Innovation Hubs across regions of Europe.

Current research on SMEs digitalisation is limited, and is mostly focused on processes, and not on capabilities (González-Varona et al., 2021). There are a lot of digital technologies that are available on the market, but they may not ensure that they will a good source of competitive advantage for SMEs (Sousa & Rocha, 2019)

Even though digital transformation is one of the main issues in companies for many years, as Pierenkemper (2020) points out, SMEs still face troubles implementing it. Some of the reasons the author suggests are unmanageable risks, not obvious potential benefits and no budget sufficient enough to support a good transformation. Also, SMEs are also stuck with having to choose precisely from their options in the market. As a result, SMEs usually do digital solutions in the form of a prototype, pilot application or stand-alone solution.

Some of the consequences that the author points out are the following:

- More than 90% of all companies are SMEs, according to the World Bank (World Bank, 2020), and they are responsible for being an important part of the value chain;
- SMEs must counteract the market power of big, digitalized companies like Microsoft, Google and Facebook in order to survive;

- Unlike transnational companies, SMEs still often use classic and inflexible innovation approaches, but digital transformation requires a different thinking approach

Pierenkemper (2020) points out that a lack of a methodology for SMEs to develop such strategies is a problem, and a problem that should be noticed.

Most SMEs are following a trend of firstly digitalizing general administrative functions and marketing operation. As mentioned by Li et al. (2018), surveys on digital technologies used by SMEs show that the gap of their usage is smaller between larger firms and smaller firms when concerning interactions with government entities, electronic invoices, social media and e-commerce. But, the gap in adoption between firm sizes increases when the technology becomes more sophisticated, for example, in use of data analytics.

For many SMEs, DT is still considered as one of the options for considering. One of the biggest problems is the cultural problem (Pascucci et al., 2019), which from one side is based on the limited awareness of what digital can offer to a firm, and from the other side, the absence of managerial skills that are required for a successful implementation. Because of these factors, investment in training for developing digital skills within the company or hiring professionals who will be performing the transformation is required (Pascucci et al., 2019).

COVID-19 related factors have raised the importance of the DT for the SMEs, and also served as an accelerator (OECD, 2021). Companies worldwide have moved their operations to online platforms in any extent, started to implement solutions to remain in business during a lockdown and to overcome problems in supply chains. A study by OECD, (2021) has showed that up to 70% of SMEs have intensified their use of digital technologies due to COVID-19, but at the same time the risks that have existed before COVID to digital adoption still remain.

Li et al. (2018) point out the use of e-commerce by SMEs as one of the main practices of the digitalisation of the business. E-commerce is a disruptive technology that can require extensive changes to the business operations, capabilities, markets, organisation processes and culture (Johnson, 2010). Many large firms often develop and deploy their own e-commerce platforms, but for many SMEs it is a case of relying on third-party digital platforms (Banerjee & Ma, 2012)

As an example, we can take a look at the example of successful cross-border e-commerce implementations by a group of SMEs in China (Li et al., 2018). The cross-border e-commerce for Chinese citizens could be a big hurdle on paper – this is due to a number of reasons that are not digital-related, like cultural differences, language barriers, operations challenges like shipping internationally and customs, plus the experience of the entrepreneurs for such SMEs in international markets was very little. But, nevertheless, they still were able to successfully implement a digital transformation of their company by using third-party platforms like Alibaba,

which allowed such companies to easily open themselves for the international markets (Li et al., 2018).

Another example of a successful transformation of a SMEs is Springfield Community Home Stores (SCHS), which is a non for profit family owned business that serves the local community (Stark, 2020). As seen by the recent trends and successes of the larger retail firms and e-commerce platforms like Amazon, the retail sector tends to increase customer-oriented service using digital technologies, and therefore evolving the business models to fit the trends of the consumer behaviour. (Ferreira et al., 2020). Customer relationships in these firms are supported by the usage of information, computing skills, communication and connectivity technologies. The case of SCHS is interesting because the company has implemented many digital services like a loyalty program, in-store order pickup, plus a variety of mobile applications for customers (Stark, 2020). A survey of their customers showed them that these services were the deciding factors of sticking to a local store instead of switching to a bigger e-commerce platform.

1.4 Research gap

After reviewing the situation concerning DT in business (in the context of SMEs) it was revealed that there is limited research of how DT can be useful for SMEs in Russian firms, with better coverage of information in other regions, like Europe (Velthuijsen et al., 2018) and Asian countries (Li et al., 2018). The lack of research in Russia could be contributed to low demand from leaders of SMEs and poor understanding of the topic. The research into the topic is usually more diverted into the implementation of the digital economy in Russia. The topic of implementing DT in SMEs is more researched in the industry spheres, rather than the services sphere. Little to no research was conducted on researching the impact of DT in Russian SMEs in the context of the firm's performance, and the research of the factors that can help companies to achieve success is rather vague.

After conducting the literature review, the following research questions were formulated:

(RQ1) How business model's elements are changed after a digital transformation in retail?

(RQ2) Which new opportunities can be opened in business model's elements after a digital transformation in a B2B SME retail firm?

The industry chosen for the research is B2B retail, which is a great example of companies in the services sector. B2B retail sector is very traditional in its nature, and based on the research of the industry (Mail.ru Group, 2020), it could be said that the amount of innovation available for such companies is big, but companies seem to adapt in a slow pace. Bearing in mind that this

industry is poorly covered by academics, this industry is deemed an acceptable choice for this thesis.

CHAPTER 2. CASE STUDY OF DIGITAL TRANFORMATION IN A RUSSIAN REGIONAL B2B RETAILER

In this chapter, the description of the research methodology as an exploratory single case study is provided, along with the company case description.

2.1 Research methodology

This thesis aim is to investigate the formulate recommendations to Russian SMEs that are planning to undergo a digital transformation, based on the cases of other countries' SMEs and larger firms from both Russia and worldwide. Even though digital transformation in SMEs worldwide is a widely researched topic, research about the Russian firms in the Services sector is limited, and therefore it is suitable to perform this study from a exploratory research method, with an inductive approach (Yin, 1994). The exploratory method chosen for the thesis is backed by the purpose of the thesis, which is to investigate digital transformation for Russian SMEs in the services field. This methodology has the advantage of being flexible and adaptable to change, if the focus of the thesis narrows during the research (Yin, 1994)

This work is based on a single case study of a Russian regional B2B sales company. The single case study can be used to add to already existing theory in the literature, by analysing and identifying research gaps and later filling them (Siggelkow, 2007).

The choice of using a single case study is comprehensible due to the lack of research on the topic that was done previously. Also, a case study is a good strategy to use when there is a occurrence or a phenomenon has a link to the real life context, particularly when the boundary between the phenomenon and the context may not be evident (Yin, 1994). One of the research question cases is a good example, since the changes in business model elements due to digital transformation is a phenomenon where the impact of the context may not be clear. At last, the single case study allows to get a deeper understanding of a complex research problem, and allows the researcher to get more detailed knowledge of the issue in hand (Yin, 1994). Since the study in question has different stakeholders that are affected (the company itself, customers and partners) and includes different fields of research (business model change, firm performance, factors of DT), the single case study is considered to be an appropriate choice for method in this thesis.

Case studies use data collection by using multiple sources, like verbal reports, interviews with people, doing observations and reviewing written reports (like financial reports, archive documents, electronic systems etc.). The main item of a case study is therefore the depth and focus of the research object, whether it is an individual, a group, a firm/organisation, a situation ot an incident. For a case study, there is a requirement to have sufficient information to characterize and

explain the uniqueness of the case itself, and also to point out the features that could be common to several cases. At last, the case study approach relies on integrative powers of research: the ability to understand and study an object from many dimensions, later to draw the different elements together in a interconnected interpretation (Ghauri, 2004)

An exploratory case study doesn't have a hypothesis as such, but rather has a purpose stated by the author (Yin, 1994). The success of studying the purpose can be measured with a unit of analysis, which defines the case. Zott and Amit (2013) gives an option to use the business model as a unit of assessing the business performance, while Teece (2010) seems to be more skeptical about using business models as a unit of analysis for understanding business performance – he proposes that correlations between business performance and business model can be context dependent. Siggelkow (2007) suggests that it is important to understand that such models are always just a simplification of reality, and their usefulness and generalizability would not be as important if they are as complex as reality. Thus the business model will be used as the unit of analysis.

2.2 Case study

2.2.1 Introduction to the case

For the case study, a B2B wholesale retailer company in the HoReCa (Hotels, Restaurants, Café) industry from Kazan (company X) was chosen for investigation into their case of digital transformation. This company was founded in 1997 as the first provider of HoReCa products like draft beer in the city of Kazan, connecting the beer breweries from all over the world to the end-clients like bars, restaurants, cafes etc. In the portfolio of the company there are also various bottled beers, tea, coffee, premium waters and juices, but the biggest amount of the sales share is for the draft beer, accounting to about 40% of the revenue in 2020, according to the company's financial data. This company was picked for several reasons:

1. The company's size ideally suits the Russian law definition of a SME. The company has around 50 employees and earns less than 800 mln rub in revenue per year.
2. Based on the preliminary research of the company and the industry, the COVID-19 lockdown had severely affected the operations of the company and its clients, and based on the literature review on this topic, companies of such nature can have big impacts after a digital transformation.
3. The company is the leader in the industry by revenues, market share and volume of products sold, according to the company's insider data. This was confirmed by the interviewed supplier's data (by which they have also been valuating the market size in Kazan)

4. The uniqueness of the value proposition, in combination with the above-mentioned factors makes the case for Company X a good decision for taking into account the importance of the SMEs as a player in the business world.

2.2.2 Data collection and data analysis methodology

For this case study, there were several data collection methods used. For the basis of the data collection procedure a semi-structured interview method is used to understand the digital transformation story in the company, as well as other topics like the general overview of the company, its operations, and customers. During the conduction of studies that have an exploratory data collection method using interviews is considered as one of the more rational research tactics (Gray, 2014).

Semi-structured interviews were selected as one of the key sources of data collection in this analysis because the knowledge relevant to the research issue is complex and there is a need for a better understanding of the phenomena (Blomkvist & Hallin, 2015). Since the interviews were semi-structured, the interviewees were able to build on their responses and take alternative paths that the interviewer would not have expected (Gray, 2014). The approach would also encourage the interviewer to use the choice of language, thoughts, and the way the interviewees explain a phenomenon to add another layer in the comprehension and analysis of the data gathered, as the interviewees will be granted more flexibility in their answers (Saunders et al., 2015).

The aim of the semi-structured interviews with Company X head managers, CEO and customers was to be able to describe the current business model in use at the company, to understand the impact and challenges that digital transformation has had on the business model, to gain insight into what the head managers and CEO thought will be the company's future business model, and to determine the factors that would lead to a successful future business model.

Since the research problem is strategic in nature, higher and mid-level management interviews were chosen because they provide a more comprehensive understanding of the industry – for example, the CEO of the company has been in the field for more than 20 years. Before performing the interviews, an interview procedure was developed and tested. Different aspects of the interview procedure were explored in greater depth depending on the role of the interviewee. As an example, discussions about the greater picture of the case were discussed with the CEO, while more in-depth segments were discussed with the respected managers, while the evaluation of the results from the outside was checked using interviews with customers. Interviews were over the phone or conducted via a videoconferencing platform (e.g. MS Teams, Zoom, FaceTime, WhatsApp etc.) due to the COVID-19 precautions, the language of the interview was Russian. In total, seven interviews were done, with time frames around from 15 to 90 minutes, depending on

the interviewee. During the interview process, notes were taken, and they were summarized afterwards.

Since the company also had one of the digital transformation initiatives in testing during the research, it was decided to observe this initiative for 1 month for evaluating the outcomes of the test period for this initiative and will be discussed later in this thesis. Participant observation is a data collection approach that is less common in management and business science than it is in sociology or anthropology, for example. But, when combined with other approaches, this approach has the potential to be a useful tool for management and business analysis (Saunders et al., 2015).

The purpose of the observation was to understand the impact of the digital transformation initiatives in Company X, observe their problems and challenges that they had during this period, and analyze them later. Gray (2015) refers to the author of the study as a practitioner-researcher. A practitioner-researcher is a company employee who does research for the company. Since joining the organisation, the practitioner-researcher has a thorough understanding of its function, tradition, ethos, and strengths and weaknesses (Gray, 2015). Since joining the organisation, the practitioner-researcher has a thorough understanding of its function, tradition, ethos, and strengths and weaknesses (Gray, 2015). As a result, the practitioner-researcher can get a better understanding of the organization's context, have greater access to internal business records, and have a more comprehensive view of the case study

The downside is that the practitioner-researcher can be affected by the ethos of the organisation, making it impossible to explore alternative ideas and solutions (Gray, 2015). Due to the practitioner-dual researcher's position, there's also a chance the analysis will be skewed (Saunders et al., 2009). For avoid bias during the collection process, some of the concerns were raised to the head managers of Company X.

To complement the semi-structured interviews, two interviews were done using the unstructured interview method. These two interviews were a follow-up discussion to the observation period, which was discussed previously. The unstructured interview is the most open-ended interview method, with more flexibility in terms of the interview's course (Gray, 2014). Several times during the data collection process, this approach was used to discover new directions and ideas. In general, unstructured interviews were shorter than semi-structured interviews. During the interview, no notes were made, but they were outlined later. The downside of this approach is that the interviewer can guide the conversation in a desired direction, and the data gathered is difficult to interpret (Gray, 2014). This is avoided by collecting data from various sources and triangulating the results during study.

For the purposes of data collection through interviews, several people were interviewed. For a comprehensive view of the case study, after the first interview with the CEO of Company

X, it was decided to interview different stakeholders of the Company X that are directly in contact with the scope of the initiatives. These groups include the company's head managers of two divisions, one of the Company's largest suppliers of products, and several customers. The CEO was chosen as the main managerial persona in the Company X, and also the owner of the business since its opening in 1997, which could be helpful to get a great background of the industry and company, plus as being a person at the top of the company-wide decision making process, it can be useful to understand the vision behind the changes. Head managers were interviewed due to them being the key managerial personas that know their divisions very well, and also can give some insights that a CEO may not care or know about, and in some cases have a different opinion on. Plus, as the main project leaders of the digital transformation, it is important to get the clearest information on the reasons behind DT. The regional representative of a Company X supplier interview was organized by one of the head managers in the company to get an opinion on the transformation process from the key partner perspective, in questions like benefits for the manufacturer. Customers were interviewed on the basis that the changes of the digital transformation directly touch them, and it is important for the research to understand their feelings and opinions on the initiatives introduced in the company. Finally, head managers and the CEO were interviewed two times for the reason of getting the full picture of the initiatives' results and to make final conclusions of the case.

Below presented is the interview information for the thesis:

Table 2. Interviews for the research (source: own research)

Interview	Role
1	CEO (owner) of Company X – 1st interview
2	Head manager of the beer division – 1st interview
3	Regional representative of a Company X supplier
4	Head manager of the tea/coffee division
5	Head manager of the beer division – 2nd interview
6	Customer 1 – large restaurant in the city centre, head manager
7	Customer 2 – small bar in the city centre, owner
8	Customer 3 – coffee shop in the city centre, owner
9	CEO of Company X – 2nd interview

For the duration of the research period, access to numerous internal documents and the reports from the internal systems , and financial documents was provided during all phases. This data was used to understand the business model of Company X, and also to evaluate the results of the digital initiatives.

2.2.2 General overview of the company, digital technologies used, and the industry

The following information about the company comes from the interview with the CEO of the company, which was later transcribed. This overview can provide an understanding of the company, which can help us to give answers to questions on the importance of existence for such a company.

The company is one of the largest wholesale companies in the B2B HoReCa sector in the city of Kazan, and it was open in 1997. At the time, this type of companies was unique for the city, and the quick growth of the hospitality industry in Kazan required firms to meet the demand. Today, this company is the leading entity in Kazan in the draft beer market (according to valuation by the suppliers), with more than 400 clients in the cities of Kazan and Yoshkar-Ola, plus suburbs of those cities. Company X is also known for providing complimentary services for customers, like giving marketing materials, renting and servicing hardware for beer dispensing and coffee machines, and delivery to customer.

Due to the requirements in the contracts from the suppliers, the Company X is in fact a group of 6 companies, and this group is created for the reason of being able to have products from all of the companies in one portfolio. From the words of the CEO, this does sometimes create a problem of finances and managerial accounting between the firms – even though the enterprise resources planning software is used in the company.

The Company X revenue for 2019 was around 320 million rubles, and because of the COVID pandemic the figure for the 2020 financial year was lower by approximately 35%, at around 210 million rubles. Figures were confirmed by the internal consolidated financial reports, which also showed the decrease in the average sales margin from 36,1% in 2019 to 28,7% in 2020, and by the big amount of inventory (which is a problem for products with a low expiry period). The Company X revenue is being declining for over 4 years, which is a result of a overall decline in sales by money terms, which is a result of the industry decline in the region that the company X works in (interview 1). Even following the decline in revenues, the company manages to increase its margins, and recoup the losses made by the loss of revenue (interview 1)

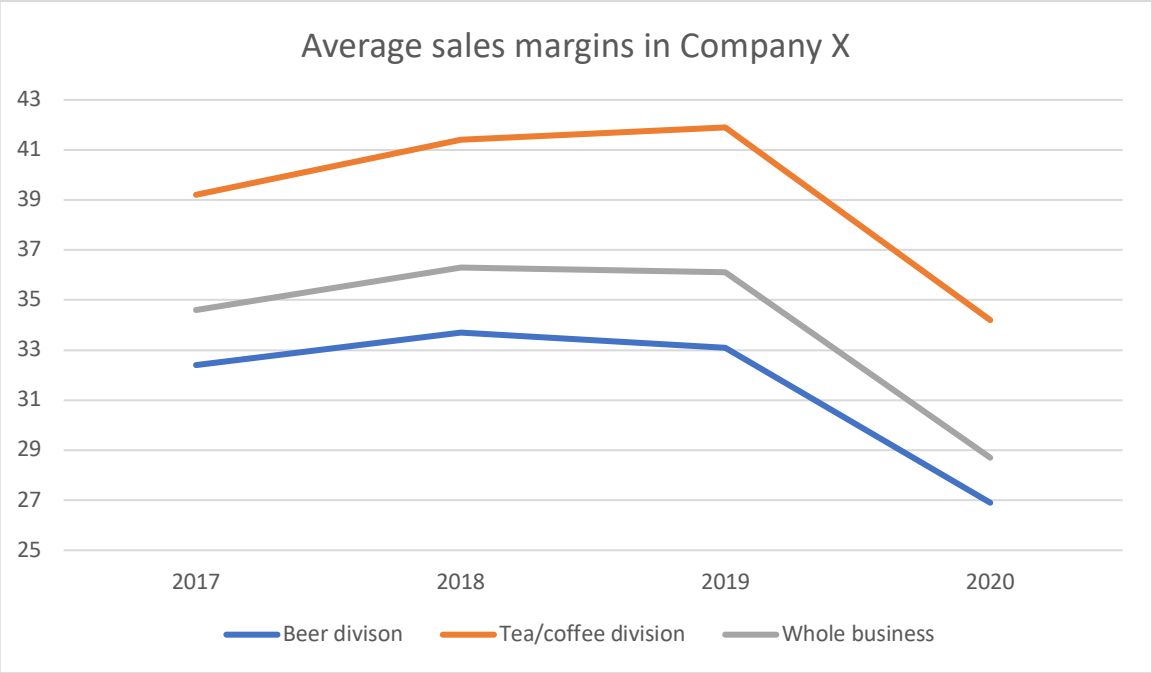


Fig. 3 Average sales margins in Company X in 2016-2019, by divisions (source: Company X internal documents)

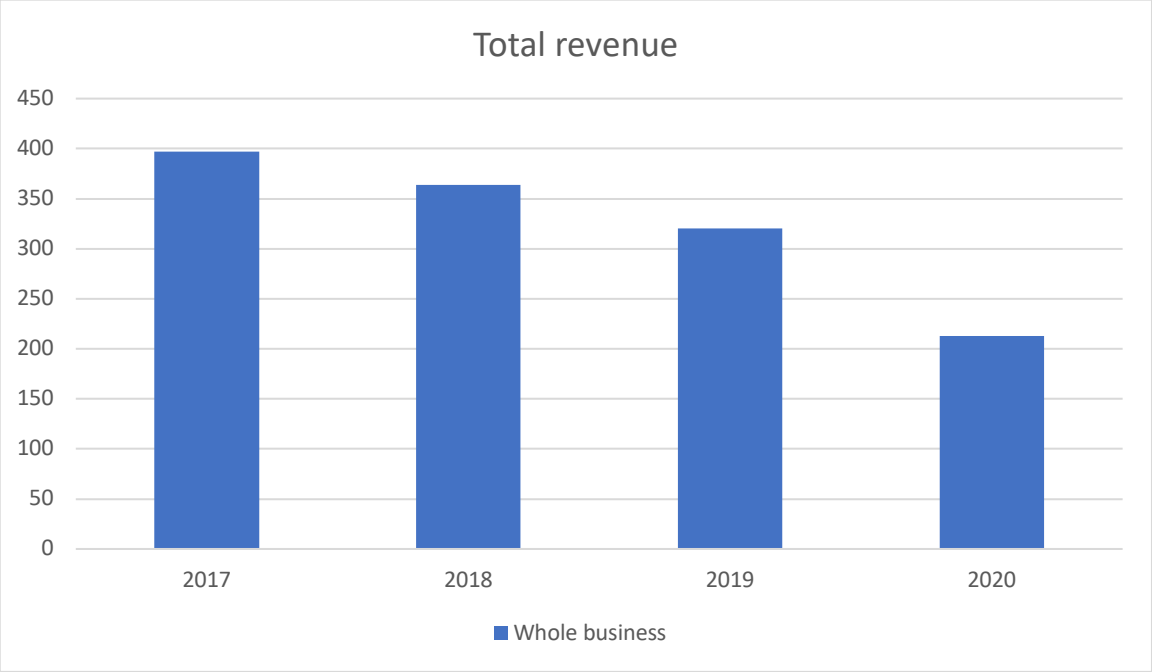


Fig. 4 Total revenue in Company X in 2016-2019 (source: Company X internal documents)

The competitive landscape of the industry in Kazan is quite populated: there are a lot of options for the restaurants and cafes for covering their needs, starting from the traditional companies in the B2B sphere (like Company X), wholesale retailers like Metro Cash and Carry, and the online services for delivery that are taking traction. Based on the company's experience, customers that are looking for beverage products (especially the ones that contain alcohol) are

willing to use the traditional businesses like Company X for the reasons of assortment of products, and a different level of service that other companies will never provide (due to those services never being a part of the business models). Bigger firms like Metro and manufacturers have become closer to the customers than ever before – thanks to the digital technologies that they implement. A great example is selling the products directly online by the manufacturers themselves – this can help the manufacturer to sell products for lower prices (there is no seller margin which is almost always added to the price) and sometimes offer bigger assortment of products.

In the HoReCa industry, clients tend to pick their suppliers that give them the best value of goods for money (according to the company's experience). The "value of goods" in this case is explained by the company's CEO as "the value that the end-user receives from the product". As an example, one customer can buy the cheapest product possible (no-brand), and another one will buy a well-known brand – usually the customer who bought products from a well-known brand gains more customers in return, and is usually thinks that the value they got for the money is higher.

The defining characteristic of the company that sets it apart from the competition in the city of Kazan is the concept of providing services in addition to just selling products for customers, and for this reason the Company X is being chosen against other options. The company X services include renting equipment, delivery to their customers and marketing support – and all of these services are free for customers, or much cheaper than if provided separately by other companies. This level of providing service is a good example of providing a unique value proposition for the customers – for example, a business owner can save time when opening a new cafe by buying products from Company X, and at the same time receive all of the necessary equipment, so that the business owner can start working right away. As discovered in the interview with the CEO of Company X, the price of the equipment can be quite high (one of the key elements of the beer dispensing system, for example, can cost around 80000 roubles), and providing such equipment for free with the signing of a contract for buying products is a nice money-saver for their customers.

The use of digital technologies in the company was ranked by the CEO as "limited": the last major technology upgrade happened 5 years ago when a system for remote order creation was introduced in the company. This system allowed sales representatives to process customers orders using their work smartphone, but the use case of this application is limited, as described by the CEO, the system is only useful for creating orders one-way to the ERP system, it cannot be used for changing orders or cancelling them. Even with these limitations, the workload on the office personnel was decreased significantly: around 30% of the some employees workday was spent on order creation, and after implementing the system it is decreased to around 3-4%. The company's

impact from COVID had urged to develop a plan for improving the operations, and this plan included the use of digital technologies. The plan is discussed further in the thesis.

Summarizing the overview of the company, it can be said that the importance of the company for the industry is high, but at the same time challenging external conditions have impacted the business severely during the COVID lockdown. This raises the questions about how the digital technologies can help to keep the customers from choosing other options

2.2.3 Digital transformation in Company X: plans and achievements

The plans for digital transformation were always proposed to the CEO of the company, but pretty much never found their place in the company: mostly for the reasons of financing and the principle, as stated by the head manager of the beer division, "if it works, it works, let's not touch it" (interview 2, 4). That is why, the only recent major digital innovation up until 2020 was the introduction of the mobile order placement system for sales representatives (interview 1), but it is very limited in its features and it as more an attempt to save on costs by switching responsibilities from the office personnel to sales reps, but it still gave a good advantage in productivity (interview 2).

The Kazan's market for HoReCa is in a steady decline from around Q3 2019 (according to the company's financial reports). This was due to the declining buyer power of the end consumers and the increasing amount of competition, which lowered the prices of the products that are being distributed by Company X (Interview 1, 2). In February 2020, an additional problem has hit the industry with the COVID-19 situation, and the sales of goods continued to decline further (interview 1, 2). In the end of March 2020, the sales plummeted due to the announcement of the lockdown by the Russian Government, and the company took a severe hit on its operations, because all of their clients stopped working, thus the company had almost no sales (interview 1).

In the late summer of 2020, Company X decided to further digitise their operations, and to a greater extent compared to earlier attempts (interview 1). It was decided to introduce a 1-year plan, starting in 2021, to introduce new digital technologies in the company (interview 1). This plan is supposed to improve and optimise the relations with customers, digitizing several of the contact points between the company and the customer. The plan included two projects to be completed in 2021 (interview 1):

1. An online ordering system for customers, which allows them to make orders directly, without reaching the sales representative
2. A Customer Relationship Management system, which will allow to integrate and automate sales, marketing and customer support inside one system.

The company is also using KPIs to assess the situation with the digital transformation initiatives, so that the impact of the transformation can be measured. The KPIs mentioned during interviews are:

1. Percent of customers that interact digitally – this KPI allows to see how many customers are now using digital services in the company. The target for the initiatives is to have 90% of customer interacting digitally;
2. Average invoice increases – it is assumed that the digital transformation initiatives will allow to increase the average invoice of customers, thus this KPI allows to see that. The target set is to increase the invoice by 12-15%;
3. Average number of product categories purchased by clients – digital transformation initiatives allows customers to fully dive in into the comprehensive catalogue of products, thus this KPI allows to see if the customers have started to by new or other product categories. The target is to have customers buy from at least 4 different categories (for example, local beer, import beer, tea, premium water);
4. Overall customer satisfaction – one of the most important aspects of such businesses is the relationships with customers: how good are they, thus this KPI allows to see the impact of digital transformation on the customer relationships, and is based on feedback from customers. The target is to improve the overall satisfaction and to close the pain points of the relationships.

As of the time of making this thesis and the data collection process, the only project accomplished is the online ordering system. The CRM system is planned to be introduced in the company starting in autumn 2021, after the full implementation of the online ordering system. At this time, the CRM system project is not started, and it will not be covered in this case study.

The online ordering system is a continuation of the current remote order system for sales reps. It is a web portal with a companion mobile application for smartphones, in which every customer has their own account in which they can order everything from the Company X's catalogue. The system also allows to check the current balance in the system, download the supplementary documents for accounting and taxation purposes (users also have the ability to switch to electronic document management)

The online ordering system was a pre-made solution for the Company X. In the research by the managers (interview 2), that even though there are many solutions for online order systems, they are often combined as a part of the CRM systems for use in the B2C segments, and not very well adapted for use with existing ERP systems like the 1C system used in the company. A solution was chosen based on its price and features, and also on the basis of how easily it integrates into the existing systems.

The features of the solution include things like a B2B platform with an online catalogue, automation of the order process (for example, if the customer always orders 40 kilos of coffee every week, it can set a automatic order, like a subscription); a mobile application designed with mind for smartphones; the solution is custom adapted for the business needs of HoReCa; includes tutorials for managers and clients. With this system, customers can order products at any time (besides working hours), see their custom-tailored catalogue (with individual pricing, discounts and availability quantity for each customer) and keep track of their payment record.

The cost of the solution is 350000 rubles for embedding the system into the business process, and the cost of maintenance for the services is 80000 rubles per month, which is less than the spending on the personnel who process orders from the clients, plus it allows to free the time for the sales representatives to do other tasks, which are less routine (interview 2, 4)

The development of the system began in mid-January 2021, with the final launch of the system on 1 March 2021 on a selected group of customers as a “beta test”. The selected group of customers included customers that have been with the company for more than 3 years (loyal customers), as well as some of the customers with high quantity orders and good financial record, hand-picked by sales representatives. After receiving positive feedback from customers, the system launched for all customers on 5 April 2021 on a voluntary basis at first. The company plans to switch their customers to the fully digital order placement by the end of 2021 (interview 2, 4).

The project had some problems during its development and implementation. Some of the problems mentioned by the interviewees (interview 2, 4, 6, 7, 8) are the problems with integration with the 1C ERP system (at one point in the development additional people had to be hired to accelerate the integration due to such problems), problems with missing products in the catalogue (which had to be tracked manually), misalignment of prices set for customers in the 1C system (bad structure of the database sometimes showed problems with prices setup for customers), but these problems are being fixed on-time and some of them are addressed already in the final release. The head manager of the beer division stated that “if the beta test period would not have happened, our customers could have had a not satisfactory experience that they expect from us” (interview 5).

The results of the initiative are positive from the KPI side. After the 1 month test period, the whole cohort of selected customers has decided to continue using the system, bringing the percent of customer that interact with the company digitally to 20%, and for the next month after opening the system to everyone, the percentage rose to 35%. The average invoice at the time increased by 10% on average, which as it was stated by the manager of the beer division is still impressive for the recovering industry, but he expects the number to rise during the summer, which is the highest profit season of the year for HoReCa. A good number of customers (around 60%)

had also started to buy more product categories than before, buying products from, on average, about 3-4 categories, usually increasing the number of categories by 1 or 2. All of these results were surprising to see by the managers, who did not expect to see such numbers in a short timeframe.

The response and feedback from the customers during the test period was mostly positive. From the review of the interviews of 3 customers from different groups, it can be said that the experience is completely different and exploratory: customers experienced a simple and easy-to-use system that is "better to use than some of the online marketplaces" (interview 6), required "little assistance to setup" (interview 8), and let customers to know the assortment "a lot better than just using an excel spreadsheet" (interview 7). As an example from a small bar in the city centre, for which the main selling product is bottled beer, they stated that they did not know about such wide assortment of products, and are now considering to buy other products from the company (interview 7). Another customer pointed out the ability to do electronic document management, which is very important for a larger business in the accounting point of view, since the legislation in Russia for alcoholic beverages is very strict (interview 6). One last example is from the coffee shop, which was very pleased to have automatic ordering of coffee, where the coffee is being delivered every week by setting up automatic recurring orders in the ordering system (interview 8). As an additional question, it was asked about the coffee shop owner's age and internet habits: he said that he is 28 years old, and he is very internet savvy person – most of his purchases are made online (interview 8). Overall, it can be said that the customers are very satisfied from these digital technologies.

As a summing up of the case study, it can be said from the interviews that the case of digital transformation of the sales process in Company X was a good start for the whole digital transformation of the firm. The KPIs that the company has set to achieve during the transformation process are near the targets, or are right within the targets. It was noticed that the example is geared more towards improving the customer experience.

CHAPTER 3. INVESTIGATION OF SUCCESSES AND FAILURES DURING A DIGITAL TRANSFORMATION

3.1 Research findings

In this chapter the findings during the data collection process are reviewed and analysed using the instruments and frameworks for answering the thesis research questions. The findings are divided into 2 groups, each with a discussion about the research questions in the thesis. An analysis of the business model will be conducted using the Business model canvas (Osterwalder et al., 2014) and the Value proposition canvas (Osterwalder et al., 2014).

3.1.1 Business evaluation with Business model and Value proposition canvases

To get a structured understanding of the business as a whole for research purposes of the digital transformation of the Company X, the business models of the firm will be evaluated.

Digital transformation is usually combined together with business models and value propositions, since both of them are the most important elements of change during a digital transformation. Therefore, DT is seen as a process where firms in pursuit of success render their old business models obsolete, by implementing innovation for business models, and this has been revolutionizing many industries (Vaska et al., 2021). Also, firms adopting digital business models could consider benefiting from embedding value propositions (Osterwalder et al., 2014).

There are no clear definition on the business model, different authors see business models in their own way, plus different businesses and industries can have vastly different definitions that best suit their situation (Olofsson & Farr, 2006).

Shafer et al. (2005) found that the business model operations can be divided into several categories, like strategic choices, creating and capturing value and the value network, and they propose the definition of a business model as a representation of the firm's core logic and strategic choices for making and capturing value within a value network.

Osterwalder & Pigneur (2002) concluded that there are at least 9 main blocks that can make up a business model, and their definition is slightly broader, they state that a business model is a tool that has a set of elements and their relationships, which allows the expression of business logic of a specific firm. The business model here is a description of the value a company offers to customers, architecture of the firm and its network of partners for creating and delivering this value to generate revenue streams. This concept of a business model was later developed into a business model canvas, which is a strategic management template which can be used for developing new business models and detailing the current ones (De Reuver et al., 2013).

(Richardson, 2008) proposes a business model framework which is based on value proposition, value capturing, delivery and creation.

Table 3. Business model framework (Richardson, 2008)

Value proposition:	Value creation and delivery:	Value capture:
• Offering • Target customer • Basic strategy to win customers	• Resources and capabilities • Organisation, value chain • Position in the value network with links to suppliers, partners and customers	• Revenue sources • Economics of business

The value proposition represents what the company can offer to their customers and the reason why the customer will pay for a particular product or service. The value creation and delivery can explain how the company will create and deliver that value to its customers, while the value capture focuses on how the firm is generating profit and revenue.

One of the more popular options for business modelling is a Business Model Canvas, which was developed by Osterwalder and Pigneur in 2010, and it is going to be used for researching business models before and after the digital transformation, which will help to answer one of the research questions.

For many factors, the BMC was selected as one of the instruments to be used in this thesis. It is, first and foremost, one of the most widely used and recognized methods for analyzing a company's business model (Massa et al., 2017; Trimi & Berbegal-Mirabent, 2012). Second, it has the benefit of being defined by a simple model, which makes it simple to demonstrate the many improvements from one business model to the next. Finally, it is a platform that can be used by a variety of firms, including market newcomers and incumbents, conventional and creative businesses, and businesses from various sectors (Osterwalder et al., 2010). As an additional instrument, the Value proposition canvas is used for evaluating the value offered by the company in more detail (Osterwalder et al., 2014)

This is a visual model that can explain how value can be created, delivered and captured by companies. All of the main aspects of the business can be covered in nine blocks of the BMC, which are illustrated in Figure 5 (Osterwalder et al., 2010). The authors describe their business model as a reference upon which a business model can be created and validated.

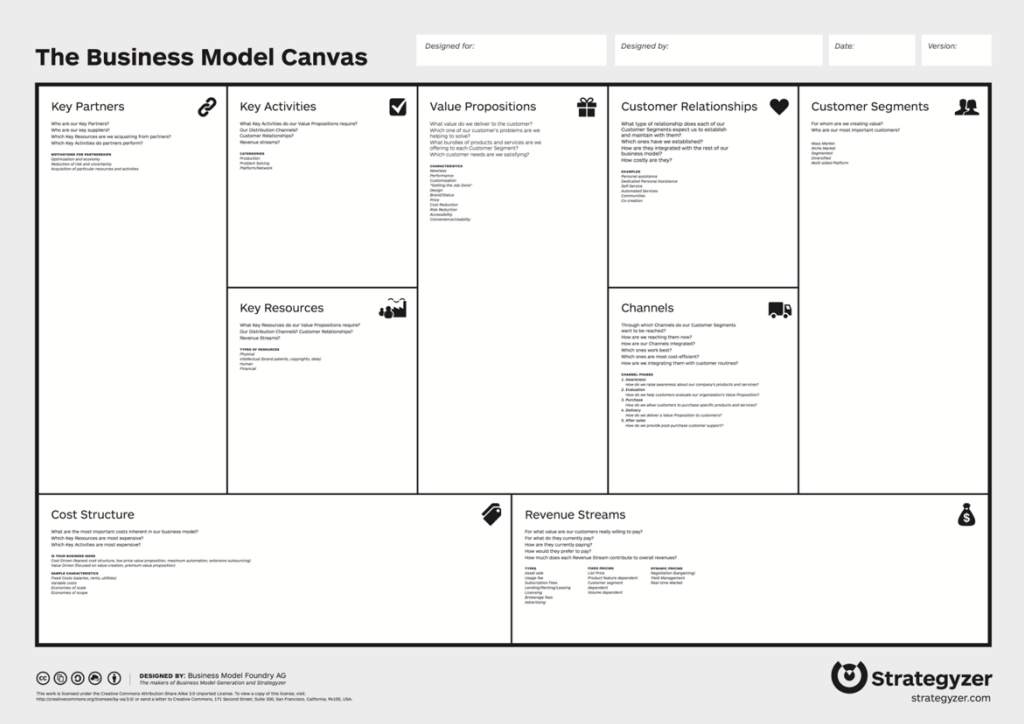


Fig. 5 The business model canvas (Osterwalder et al., 2010)

The nine blocks of the BMC are (Osterwalder et al., 2010):

Key partners

Today, companies should work in some kind of an ecosystem, and for it, a network of suppliers and partners is crucial for many organisations today. (Osterwalder et al., 2010) divide partners into several types: joint ventures, strategic alliances, coopetition and the usual buyer and supplier partnership. Not every company is executing all their business activities by themselves, and thus they rely on their partners for value creation and delivery (Osterwalder et al., 2010).

Key Resources

The assets that the company relies on for value creation and proposition are called “key resources” in the BMC. These resources can be very different depending on the company activities, starting from investment in buildings to intellectual assets (Osterwalder et al., 2010).

Key Activities

Key activities represent all of the most important activities that the company performs for value creation and proposition, and therefore Key resources and Key activities are closely linked together. Key activities depend on the business model of the firm and its type. (Osterwalder et al., 2010)

Cost Structure

Cost structure in the BMC can show what are the most important costs in the company’s business model, while showing activities and resources that cost the most to the company. For a company it is important to manage the cost structure to stay profitable (Osterwalder et al., 2010).

Value Proposition

The value proposition is the answer to the customers' needs by the company, whether it is a product, a service or a mix of them (Osterwalder et al., 2010).

Customer relationships

Customer relationships are the kind of a contact that the customer will have with the company. Objectives of such a relationship can be either acquisition, retention or upselling, with many different types of relationships. For example, it could be personal assistance in a shop, a sales representative appointed for the relationship, self-service with no direct relationship etc. A more recent type of a relationship is co-creation, where customers create value together with the company, for example when sharing a product review (Osterwalder et al., 2010).

Customer Channels

Channels allow to reach the customers for selling a product or services, and they permit customers to discover the company's offerings. Channels can be direct or indirect, and the choice of the channel is important because it can affect the customer experience (Osterwalder et al., 2010).

Customer Segments

Customer segments can indicate which people the company is going to focus on, and without customers the business will not exist (Osterwalder et al., 2010). Companies have to make decisions about the target segments of customers so that the business model can be constructed around their needs (Osterwalder et al., 2010).

Revenue Streams

Revenue streams characterise how a company will earn money from the sales. Revenue streams can be vastly different from company to company, for example assets sale, service fees, licensing, advertising etc. The company should have a good revenue stream in order to cover their costs and to be a profitable company (Osterwalder et al., 2010).

The business model canvas is considered to be one of the most popular tools used today for evaluating, creating, and testing business models, which has been downloaded over 5 million times from the creator's website (Amarsy, 2015), and thus is selected for the research.

The value proposition canvas is an additional tool invented by Osterwalder for evaluating the value propositions for customers. It comes as a subset of the business model canvas, using the Value proposition and Customer segments elements of the business model canvas, and additionally opening them up for evaluation. The value proposition canvas together with the business model canvas can help businesses to have a complete view of all value propositions – business ones and for the customer (Osterwalder et al., 2014). The Value Proposition Canvas is based on two components: the Customer profile (or segment) and the Value map (Osterwalder et al., 2014). Customer profiles are filed with customer jobs – tasks that a customer wants to achieve, the gains

a particular customer or customer group intends to have while , and pains, in which the information about the problems that the customers can face with (Osterwalder et al., 2014). Value map consists of products and services - what products/services the company offers to close the customer jobs; gain creators – which show what the company offers as a gain to the customer, and pain relievers, which show what the company offers to cover the problems a customer has (Osterwalder et al., 2014).

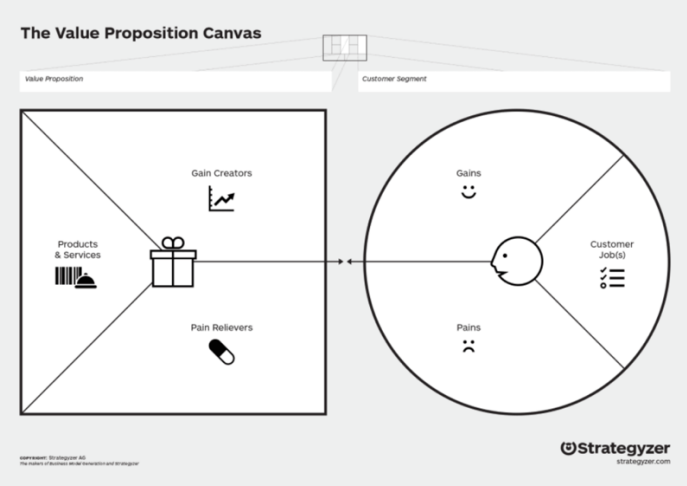


Fig. 6 The value proposition canvas (Osterwalder et al., 2014)

As an end-user tool for creating these business model canvases and value proposition canvases, Osterwalder had created the Strategyzer web application, which is used today by more than 22,000 users worldwide, and it is in use by such companies like Microsoft, IBM, Intel, Deloitte and others. (Strategyzer AG, 2021). This application allows users to easily create business model canvases, value maps, customer segment maps, value proposition canvases, keep track of the results, do financial estimations, as well as to do testing on the experiments or hypotheses. This tool will be used in this research to create business model canvases and value proposition canvases, as well as to make financial estimations for the business models of Company X.

3.1.2 Company X business models and value propositions today

The business model canvases for the Company X were co-created with the CEO and head managers of the beer division and tea/coffee division for a better understanding of the business for research purposes. Information was received through interviews.

In total, 3 business models of the company were prepared and checked by the company. The reason for having 3 separate business models was explained by the CEO as “to better serve the specific needs of the customers purchasing different types of products” (Interview 1). The 3 business models are: the beer division business model, the tea/coffee division business model and the business model for the hardware division, which was one of the business models developed recently (in the last 2 years) by dividing it from the beer division.

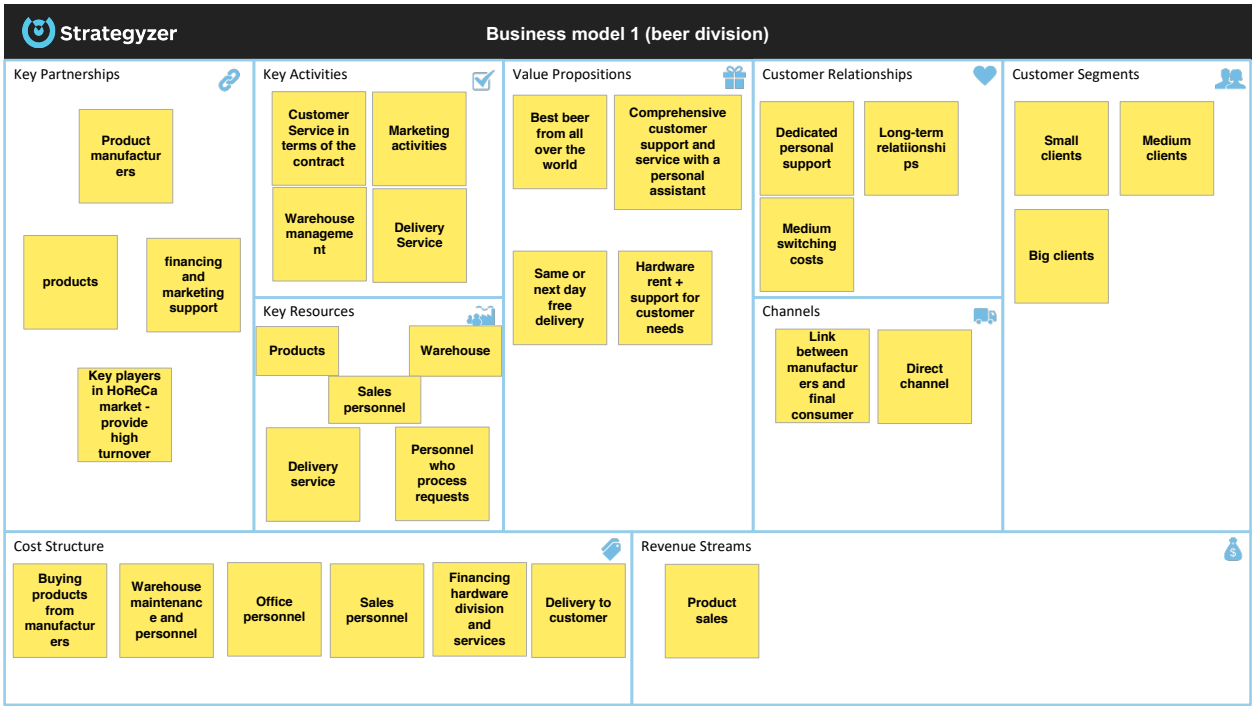


Fig. 7 Company X's beer division business model (source: own research, larger version in Appendix 1)

The discussion of the business models structured into the BMC (Osterwalder et al., 2010) will begin with the business model for the beer division. This division is the main source of revenue creation in the company, and it is the oldest and most conservative to changes in it (Interview 1, 2). In the business model canvas, different colours were used to differentiate different elements of the canvas that are connected to the customer segments. The yellow colour was used for boxes that are universal for all customer segments, while other colours were used to show the differentiation between the needs in customer segments. In case with the 1st business model of the beer division, there is no differentiation between customer segments and value propositions – all value propositions serve all customers.

The Key partnerships section contain the following partnerships – partnerships between product manufacturers which provide the products for sale, financing support and marketing support. This partnership is essential for the firm to exist in the first place, and for the opposite side it is also a very important partnership, as commented by the CEO. Without firms like Company X, the manufacturers lose their channels for selling in a specific industry and/or region, which can affect their manufacturing and supply chains (Interview 3). The other important partnership is with the key players in the local industry – those players provide a stable cash and inventory flow, which is important for the stable firm operations and to establish economies of scale.

Key activities in the beer division are: customer service duties in the terms of the contract, marketing activities, warehouse management and running the delivery service. The last two activities are a part of the business model, but are not run by the beer division directly, but rather by the hardware division (Interview 2). This sometimes can cause miscommunication between the warehouse/delivery and the office since they are located in different locations. Marketing activities are usually run in tight cooperation with the suppliers, since they are the ones who provides the budget for such activities (Interview 2, 3)

Key resources of the Company X for the business model to work are the products to sell, the warehouse, sales personnel who do the communication with the clients, the delivery service and the office personnel who processes requests. It was pointed out by the head manager that the weakest link in the sales chain is between customers -> sales personnel -> office personnel (Interview 2). During the information exchange, there could be misunderstanding and lost information between the customer order interpretation and the interpretation by the office, and by the responses from the customers (gathered by the sales representatives in the Company X and analysed by the head manager in Company X)

The cost structure in this business model is comprised of the price of buying the product from the manufacturer, warehouse and delivery costs, office and sales personnel costs, financing investments into the assets for hardware, and the costs of delivery to customers (Interview 2). There are talks between the customers and the Company X to optimise the cost structure to try to improve the total price for the customers. This will be useful for customers that have no need in some of the services that the customer pays in any case (Interview 2). The detailed breakdown of the costs can be seen in Table 4.

Table 4. Cost structure in Business model 1.

Buying products from manufacturers	The big part of spendings is buying the products form the manufacturers. This block is about the mass-market product segment. Costs based on average invoice of the items sold
Delivery to customer	Cost of the delivery is added to the price that the customer pays, comprised of the average price of delivery for customers added to the prices of products that they buy
Financing hardware division and services	A cut from the sales is transferred to finance the hardware division, which is fully financed only by the sales of the products. This amount is fixed
Office personnel	Personnel responsible for order processing. Finance department personnel is included here. Costs are calculated based on the annual salary of the workers
Sales personnel	Sales personnel responsible for the sales and communication with the clients, as well as the customer support. Costs calculated based on the annual salary
Warehouse maintenance and personnel	The warehouse is under rent in the company, and requires people to operate, as well as maintaining the lifting equipment. Costs are

	calculated based on average annual salary of workers, rent costs and a fixed amount of other costs

The main revenue stream in this business model is product sales, because almost no additional revenue is made by other operations – all of the services that a customer is being offered lays inside of the cost structure, thus all of the additional revenue is inside the product price (Interview 2). This has a potential problem of transparency for customers, which can have different needs, and only want to pay for the things that the need. In the slowly recovering economy in Russia (Cordell, 2021), this could the "saviour" for the companies that count every penny.

Customer segments of this business model are diversified: there big, medium and small clients (based on the sales figure). The definition of customer segments can be seen in Table 5. The company X sells beer products to only to businesses: the main reason is that in the retail sector for B2C the competition is very intense, and there is no point of entering this market (Interview 2, CEO comments on the topic). Also, entering the B2C market puts additional stress on the firm from the legislative perspective, and is generally not supported by manufacturers (Interview 3). Customers of different segments have different needs in mind, for example, smaller clients may not need delivery to save money, while bigger clients may not need hardware rent and service, because they can have their own hardware assets.

Table 5. Company X's customer segments in HoReCa.

Big clients	Clients operating big businesses (usually a chain)
Medium clients	Clients operating medium-size businesses, or clients that buy from the company on a higher scale than the small clients segments, but on a lower scale compared to the big client segment
Small clients	Clients operating small businesses, or clients that buy from the company on a smaller scale

Channels in this business model are for the most part, direct from the side of Company X – serving as a link between the manufacturer and the end customers, and indirect if looked from the perspective of the manufacturer (Interview 2, 3).

Customer relationships of this business model were described by the CEO as "caring", and include a dedicated personal support line (in the form of a sales representative assigned to the client). The relationship is assumed to be long-term, and they are structured in the way that the customer will have medium switching costs (Interview 2). The accent of the company X's goals lies into having very good relationships with customers, ones that are really valued, all for the reason of better marketing of the firm through "word of mouth", which is still one of the most popular ways of getting new clients (Interview 9).

Finally, it is time to examine the value proposition part of the business model. This is one of the most important characteristics of the model, it shows what value the company is delivering to its customers. For the beer division of the company X, it was determined that the value proposition consists of following elements (interview 2):

- Best beer from all over the world – the vast assortment of products can help customers to find exactly what are they looking for, thus helping to gain the customer easier (interview 2)
- Comprehensive customer support and service with a personal assistant – any concern about anything is answered by the assigned sales representative (interview 2), thus the customers' problems are not left behind, plus it provides marketing support for clients: this type of support (that is provided in part by manufacturers) can help their clients to promote products with less budget spending (interview 2, 3); and personnel training: newcomers to the field can be assured that they can get top-notch training for personnel, so that customers can be productive during normal workflows faster (interview 2)
- Same or next day delivery – quick delivery assures customers that their stock will be replenished quickly, thus this can help to always keep Company X's clients happy (interview 2)
- Hardware rent and support for the customer needs – Company X's clients don't have to spend additional money for buying equipment to cover their basic needs to the product (e.g. preparing coffee or pouring draft beer to clients), thus the client saves money, resources and time (interview 2)

The financial model of this business model can be seen in Appendix 2. The data was received during interviews and during the examination of the financial documents. For the estimations, a fixed number of current Company X clients who buy beer products was chosen, divided by 3 customer segments mentioned earlier.

The only revenue stream that was used is to get revenue from Product sales for beer. Numbers for market share of customer segments, average purchases and the average price of sales during the week were rounded as by request from the Company X for not disclosing the actual sales number due to the commercial secret. On average, bigger clients seem to buy at a lower price due to buying products in bulk and due to the marketing agreements from the manufacturer side. This is an incentive from the manufacturer to help them keep the level of production on a high level to achieve economies of scale (Interview 9). The margins are usually gained on smaller clients, rising on average up to 10% compared to bigger clients (Interview 9).

From the costs calculation, the majority of the costs are comprised of buying the products from manufacturers, accounting for 90% of the cost structure in money terms. The second biggest cost is the Office personnel, which is responsible for processing orders, and is one of the hurdles for company growth – usually young women are involved in these operations, and there are a lot of costs for social benefits like maternity leaves which often occur in the company, thus increasing the costs and lowering productivity (Interview 9). Other costs are essential to the operation of this business model and is optimized as much as possible – further optimizations will lead to the changes of the value proposition in the company. But, the declining availability of funds from the client side will increase the need for more flexible options from the company (Interview 9).

As for the other two business models (tea/coffee division and hardware division), they are quite similar to the main beer division business model, but with several key differences. The business model canvases for tea/coffee division and hardware division, as well as the financial models are presented in appendixes 3, 4, 5 and 6.

The differences from the main business model are mainly in following ways.

In the tea/coffee division, one major contribution to the business model (as a value proposition and a key partnership) from a product perspective is having private label products in the portfolio, mainly specialty coffee, which has become more and more popular type of coffee in Russia in the last few years (Interview 4). The main advantage of selling private label coffee is the cost advantage: there is less spending on marketing, for example, and this cost reduction makes a great product for less money. This made this product very popular among the Company X's customers (Interview 4). At the same time, the company understands that the responsibility for the quality of the product lays in the hands of the seller, and to not let down their customers with a bad product (which can have worse effects for the long-term relationships), company's employees regularly check the quality of the product, and had even changed the manufacturer (Interview 4). The customer segments that buy such private label coffee are the small clients and medium clients, which is highlighted on the business model canvas (Appendix 3) in orange colour. There are also differences in the financial estimations:

- The customer segments client count is smaller to account the lower number of clients that are buying such products (it is important to note that there are intersections with the clients who also buy beer products), the product sales average price of sales per week is lower due to the lower amount of products usually purchased by clients
- A separate calculation of the revenues and spending for private label products is added to highlight the margins that the company gets from selling such products
- The delivery to the customers is more expensive
- Other costs are lower as well to account the smaller business unit and its costs.

The business model for the hardware division is a relatively new model in the company, having grown out of the parts from the other two models (Interview 1). The hardware division existed in the company for a long time, and in late 2018 it was decided to extend the operations of this division into a separate unit inside the company, which is accounted for selling hardware repair and maintenance services for businesses, who already have their own hardware. Looking at the whole picture of the business model, it can be said that it is similar to the other two business models, but with an accent on hardware. One of the key assets of this model are the technicians, and as it was mentioned by the head manager of the beer division (interview 2), there are now engineers in the team who were given the budget for some innovative technology. Their latest example included an Internet of Things board that connects to the sensors inside of the company's hardware for remote maintenance. This can help to diagnose problems even before the client might notice anything wrong, which can happen sometimes, and save clients time, and the company can save some money on hard repairs (interviews 2, 4, 5). Currently this technology is in the development stage (interviews 2, 4, 5). This business model is currently fully financed from other business models (can be seen in the financial models estimations), and as a side effect, is currently the only model that is losing money – but in the overall account of the business, this is covered by profits from the other two business models. The main spending in this business model is the salary of highly qualified technicians and is basically covered by the budget transferring from other business units. In the Table 6, the list of how the costs and revenues are calculated is provided.

Table 6. Explanation of revenue streams and cost structure calculations

Revenue streams	
Product sales	Sales from products offered to customers, based on the average orders from each customer segment
Cost structure	
Buying products from manufacturers	The big part of spendings is buying the products form the manufacturers. This block is about the mass-market product segment. Costs based on average invoice of the items sold
Delivery to customer	Cost of the delivery is added to the price that the customer pays, comprised of the average price of delivery for customers added to the prices of products that they buy
Financing hardware division and services	A cut from the sales is transferred to finance the hardware division, which is fully financed only by the sales of the products. This amount is fixed
Sales personnel	Sales personnel responsible for the sales and communication with the clients, as well as the customer support. Costs calculated based on the annual salary
Office personnel	Personnel responsible for order processing. Finance department personnel is included here. Costs are calculated based on the annual salary of the workers
Warehouse maintenance and personnel	The warehouse is under rent in the company, and requires people to operate, as well as maintaining the lifting equipment. Costs are

	calculated based on average annual salary of workers, rent costs and a fixed amount of other costs

To dive deeper into the value propositions, the value proposition canvas was filled with the data collected from the interviews. The canvas is available in appendix 13. Since the value proposition is quite similar across the business models, one unified value proposition canvas was created for all business divisions.

The typical customer profile of the Company X client was compiled from the discussions with the head managers (interviews 2, 4, 5), and clients have several jobs to do: the customer wants to sell a good experience, and to receive a "complete package" – so that clients won't have to deal with many different companies to reach their goals. While the customer is pursuing its goals, it wants to get the products as fast as possible, receive good service, buy at the cheapest price, receive help with selling products, and they want to order everything from one place. Customers while doing their job encounter several difficulties: they often have little expertise in which products to buy, afraid that the supplier will not be flexible to their plans, unnecessary (in customer opinion) paperwork, don't have the support to sell such products efficiently (with a good profit and turnover), and the need to talk to people bothers customers the most – as explained by the head manager of the beer division (interview 5), it is often the case that sales reps seem to only care about their KPIs, rather than dealing with what the customer actually wants.

Current value proposition in the company X consists of the three main products and services: the collection of "best beer, tea, coffee products from all over the world", hardware rent with service, and delivery services; with gain creators as unique products, best prices for customers, free delivery and personal approach to clients, and pain relivers as help from the sales rep, listening to the customers requests, marketing, and hardware support.

After examining the business models of the Company X, it can be said that they have a diverse portfolio of business models, that want to be connected together, but they are separated and don't work together well, leading to additional costs that have to be had. The plan of the CEO is to optimise these costs by using digital technologies and start to run the business with a more agile philosophy in mind (Interview 1). From the analysis of the value proposition, it can be said that the Company X current value map does not cover all of the customers pain points, and it can be said that in order to gain a competitive advantage, covering the customer pain points fully is essential – and digital technologies would help the company to accomplish this.

3.1.3 Business model and value proposition of Company X after implementing a digital initiative

After implementing one of the digital initiatives in the Company X – the online ordering system for clients, the business model and the value proposition in the firm have changed

accordingly. The complete picture of the business model after changes can be seen in the Appendix 7. The business model is now a unified one – covering both the beer division and the tea/coffee division – this is done for optimizing costs and delivering better communication within the divisions (interview 5).

The main elements that have changed in the business model because of the digital transformation are the key partnerships, key resources, the cost structure, value proposition, and customer relationships. Some of the elements were also changed and are reflected on the business model canvas (namely the revenue stream), but this was not due to the digital transformation, but more as a part of optimizing costs, a switch in responsibilities inside of the company, and adaptation to changing consumer preferences (interview 5), which will help the company to fulfill the changing customer preferences. Highlighted in green is the small clients segment – for them, cheap delivery and private label coffee are some of the targeted value propositions, and for big clients segment highlighted in blue – hardware maintenance and rent is one of the targeted value propositions. To be noted, it does not mean that clients from other segments will not use these value propositions, and this is reflected in the financial estimations for the business model.

In the key resources, the online B2B platform (currently in a form of the online ordering system) is added as a vital component of the business model, which serves as "the next logical step of the company's evolution", as stated by the head manager of the beer division (interview 5). The addition of this system also touches a few of the other elements in the business model. In the key partnerships element, the cloud infrastructure was added as a fundamental element of infrastructure for the company. The use of cloud solutions provides the most up-to-date IT infrastructure and all the necessary services that a business needs for running its operations, and in this case, the ordering system. But the cloud solution is not limited just to the operations of the ordering system – all of the other systems that the Company X currently operates can also be transferred to the cloud with the use of Software as a Service products (*What Is Software as a Service (SaaS)*, n.d.; Interview 5).

Consequently, the cost structure was also adjusted to reflect the needed investments into the IT services, and so the IT costs now contribute to the costs of the products offered. It is noteworthy to notice that the there will be a decrease in spending towards office personnel, since its functions are now handled by the IT systems (interview 5), which is reflected in the financial estimations.

Customer relationships are also adapted to reflect the changes – now they are geared toward online interactions as one of the main methods of working with relationships, but traditional methods are still around at this time, and will be used for promoting and finding new and old customers (interview 5).

In the value proposition element, the proposition of doing regular business operations in the digital format was added to reflect the change of adding the ordering system, and it is considered a selling point for the Company X (interview 5). Also, since there is now a single business model for beer and tea/coffee, elements concerning the private label production are added.

Financial model has changed according to the changes in the business model (Appendix 8). The number of customers in each segment was increased after the combination of two divisions – hence they now represent the whole customer base of the company. Revenue streams are now more diversified: this was done due to changing consumer preferences, and now, with the availability of the online ordering system, every service can be easily chosen by customers at customer request. Revenue streams outside of product sales include delivery, hardware maintenance, and hardware rent, plus sales of private label products is separated to show the margin differences compared to regular products. For the financial estimation, it is assumed that all customers are using the delivery for easier interpretation. From the costs side, the most notable change is the inclusion of IT costs for the IT services, and thus the office personnel costs were lowered to include mostly only financial/accounting department personnel. To be noted is that the other costs are now combined with both divisions, and still, the exclusion of some office personnel drastically decreased the costs structure total. Details can be seen in Appendix 8.

Looking at the value proposition canvas after implementing the changes (Appendix 14), we can say that the compared to the previous value proposition, the company now covers more pain points of customers: now there could be less paperwork if the customer has the desire to switch to electronic document management, and the services are now available 24/7 – meaning that the customer is not confronted by the worktime period (interview 5).

Summing up the results, the digital transformation initiative that has been rolled out in Company X has changed the business model in some ways, by expanding it on existing blocks and improving the value proposition for different customer segments. The digital transformation helped the company to optimize their business models, by combining 2 of the business models into one. In the next section, the discussion of the propositions for improving the business model for the company X will be conducted.

3.2 Proposition for the future changes in Company X

The digital transformation initiatives in Company X have just started to operate, and already the solution has started to pay-off in the ways of customer interaction and relationships. But, following the literature review of the digital transformation and cases of digital

transformation, some improvements to the business model of Company X can be made, which had already proven their effectiveness. In this section, the most relevant cases that can be implemented for Company X in terms of continuing the will be explained. The cases were chosen during the interview with the CEO of the company (interview 9). Two directions that were chosen to explore were the improvement of the hardware division and the expansion of the business to the B2C segment. The improvement of the hardware division was chosen because there are already some initiatives being developed in the company – the remote diagnostics board, for example, is already in testing, but the company doesn't know what to do with it yet (interview 9). The B2C online shopping segment was selected as an ever growing industry, with high potential for growth in certain regions (TAdviser, 2021).

3.2.1 New hardware division business model

The hardware division was always the second-tier division in the company – it operated as the support chain for the main business models for selling products (interview 9). The division had always been financed solely from the sales of the products until recently, when the hardware rent and service was divided from the cost structure, and is now offered as an option for those, who need it (interview 5).

As it was mentioned by the head manager for the beer division, there are engineers in the hardware team that have a remote diagnostics board in development, and they already have a working prototype of the board. This board allows to do remote diagnostics of the company's hardware, whether it is coffee machines or beer dispensers, and send the notification to the technician. The technician can then remotely send the command to do a self-repair operation if the error could be fixed remotely.

The developments of the hardware division's technicians can be put in the category of Internet of Things devices. Internet of Things (IoT) is a set of interconnected devices that store and exchange data, often by using sensors, and is usually described as "an extension of the Internet and other network connections to different sensors and devices— or 'things'—affording even simple objects, such as light- bulbs, locks, and vents, a higher degree of computing and analytical capabilities" (Jones & Graham, 2018). IoT devices usage in small and medium business is proven to give significant benefits to them, and one of the methods is by using sensors that monitor the situation with anything that the sensor can connect to, and automating these tasks (Forbes, 2021). Successful examples of using IoT in business are numerous and they do provide a proper improvement to operations (Advanced Mobile Group, 2016; Smart, 2017; Warrian & Southin, 2017). As was found out by internal research in the company, almost 60% of calls to technicians are usually related with something that a user can fix themselves or may even require no user interaction at all outside of pressing a button on the control panel of the device (interview 9).

That is why it seems viable to separate any hardware related operations into its own business model, which will be separately funded by hardware sales, renting, and services, plus delivery services, which are operated in the same building (interview 2) as the hardware division. The business model proposition for the hardware division is provided in Appendix 9, with the finance estimations in Appendix 10. For the first time, the hardware division is now targeting clients outside of the firm, which allows for further expansion of the model. The main differences between the current business model and the proposed one are in the key partnerships, key activities, key resources, cost structure, revenue streams, and the value proposition. In the key partnerships there is an addition of board manufacturers and cloud solutions providers that will ensure that the boards are being made for the machines, and for the correct operation of the IoT system. The key activity addition is the development of such boards, with a possibility of selling the board as a product for other companies. Resources now include software developers and engineers that are now in charge of the development of the boards. The cost structure remains the same, but it is now not comprised of the cuts from the sales margins, and the revenue stream is now solely consists on the services that the division provides to customers: the hardware rent and maintenance subscriptions. Describing the change in the value proposition, there is now the inclusion of the IoT service for remote diagnostics for hardware, which will allow customers to ease their experience with company's hardware. In financial sense, this business model is now profitable despite the rising costs – this is in due to the customers having lower prices of products that they buy (assuming that the whole client base will be using their service, like today). After the salaries, the biggest cost is the IT solutions, which includes different things from producing boards to integrating software. In the future, the IT solutions costs may decline after the initial investments.

While preparing the value proposition canvas, there is also another type of customer starting to emerge, and is important to consider– millennial owners of businesses. Millennials are a demographic group of people that are born from 1981 to 1996 (Rauch, 2019), and are heavily influenced by the digital technologies (M. Murphy, 2018). From the internal documents of the company X, it can be said that the share of customers (business owners, or customer representatives) that are in the age group from 25 to 35 years old has been steadily growing – and now consists of more than 45% of the share. That means that the main decision makers have a tendency towards digital services and technologies, because it is natural for them to use such services.

To reflect these changes, a new customer profile was created with the help of the head manager for the beer division and by interviewing one of the business owners in the age group from 25 to 35 years old, who is the customer of Company X and runs a very successful bar in the city centre of Kazan (interview 7). The resulting customer profile and the value proposition can be

seen in Appendix 15. The main change in the customer jobs element is now getting "the best value from the relationship", which for this age group is considered more important (interview 7). The gains and pains are very similar to the old customer profile, with the addition of having a quick and easy experience and having the best value for money for gains; not having custom solutions (which is important for businesses that want to do a cool design in their building (interview 7)), and hiccups with order placement for pains. All of this is covered by the gain creators and pain relievers (Appendix 15), plus the products and services that Company X will be providing in the future.

Summing up this proposition, it can be said that the investments into the hardware boards for this division can change the position of it on the market in good ways. This proposition can help the company to leverage its new IT platform in the ways that other companies like this in the region had never used before.

3.2.2 B2C online sales business model

In 2018, Company X had a try of entering the B2C market with their own internet store for tea and coffee products (interview 9). No other products were offered to B2C customers because of the legislation prohibiting the sales of alcoholic beverages with remote services to regular customers. The firm has offered their whole assortment of teas and coffee, which are professional-grade quality, and are not sold in most supermarkets (interview 9). The project had unfortunately failed and the online store had worked for 10 months only, after which it was decided by the CEO to close the project (interview 9). There were three main reasons for the failure of this project, highlighted during the interview of the CEO (interview 9):

- Lack of knowledge of launching an online store. The team at Company X had little to no experience in launching and marketing such web-sites, and for unknown reasons, the choice of ordering to create a website from a third-party company was not considered.
- Lack of funding for marketing and promotion. The tea/coffee team had little incentive to spend their budget on funding this new store. Combined with the lack of knowledge, the incentive was even less pronounced.
- No established logistics processes for outside of Kazan. The company only really works with clients in one city and its suburbs.

However, there are many examples of successful implementations for online selling to B2C customers. For example, in China, the expansion of cross-border e-commerce platforms like Alibaba enabled SMEs to reach customers that they have never been able to reach previously – without massive investments into creating the services, and more importantly, the knowledge (Li

et al., 2018). Another example is in the 3D printing industry, in which commercialization of the services is very hard without the online marketplaces is not economically viable (Walsh et al., 2017). As proven by research from Lederer & Bruns (2019), a lot of the companies in the B2B sphere are now pursuing the B2C segment by multi-channel platforms. That is why, for proposing the business model for the B2C segment in Company X it was decided to focus on using online marketplaces as a platform for communicating the value proposition with regular customers. The resulting business model can be seen in Appendix 11 with the finance estimations in Appendix 12.

Key partnerships block is similar to the main business model, and as an addition has of the online marketplaces as a key partner. They serve a very important purpose of connecting the company to the client.

Key activities block consists of the tasks for publishing products on the marketplace and going marketing activities on social media.

Resources needed for this model are less than for the main business model, and only includes marketing personnel, warehouse management, and access to the online marketplace.

The costs structure is similar to the other business models, with an exception of having to give a cut of revenue to the marketplace.

The relationship is different from the B2B models because the online marketplace assumes to have a self-service transactional relationship, with low costs of switching.

The main revenue stream consists of product sales to customers on online marketplaces. This is considered the only revenue stream at the moment, as there are questions involving the use of other revenue streams, like subscriptions.

Value proposition for customers consists of 3 elements: big variety of unique tea/coffee products by Company X, quick delivery to neighboring regions thanks to the services of online marketplace infrastructure, and Company's own private label coffee.

In financial sense, this business model will be profitable from a certain number of customers. In this estimation, two customer segments were identified: mid-income and high-income clients. Mid-income clients are the clients that are in the "middle-class" by income (around 50000₽). High-income clients are the clients that are in the "upper-class" by income (around 70000₽ and higher). Number of clients is assumed for this estimation and cannot be correctly predicted without additional information. Assuming that the revenue split between mid-income clients and high-income clients is 40/60, with mid-income clients buying on average 8 times per year and high-income clients buying 12 times per year, at 400 mid-income clients and 300 high-income clients the business model will be profitable. This is in help by being a second-tier business for the company, and the majority of the costs covered by other business models.

To get a deeper understanding of the customer and what the company can offer to please them, the value proposition canvas was filled up (Appendix 16). The information about the customer profile was filled during investigation from the company with their colleagues and relatives (Interview 9), who knew about such products, but are not buying them today. Usually, these clients want to have something unique that is hard to find in regular stores. Also, after the mentioning of the failure of the company's own website that served the same purpose, one of the pain points for being afraid to buy on unknown sites was added, and it is covered in the value map. The main customer jobs of getting unique coffee and tea is covered by the value proposition of the business model, at the same time covering customers pain points and gains.

Summing up this proposition, this business model will be a great addition to the portfolio of business models that the Company X currently has. The model has its potential for growth, if it is executed correctly, by utilizing the right resources and developing good relationships with B2C customers.

3.3 Business model portfolio evaluation

After the examination of the business models that are currently in use in Company X, and after the review of potential business models in the previous chapter, it is important to look at the whole picture of the future portfolio of business models in the company. To accomplish this task, the Business portfolio map, created by Pigneur and Osterwalder (2017), will be used for evaluating the current situation of the business models on one easy to understand canvas.

The canvas was created to help to answer the question of measuring and assessing the health of businesses' existing portfolio of business models, as well as is the business is prone to disruptions, and to help businesses to make better investment decisions (Pigneur & Osterwalder, 2017).

On this map, there are two graphs for business models: on the lower left corner, potential business models are placed, and on the higher right corner, current business models are placed. Graphs have two axis: on the x-axis, the innovation risks or disruption risks are evaluated, and on the y-axis, the expected returns or real returns are evaluated. The risks evaluation helps to answer the question on how sustainable the business model is to disruptions or to innovation risks. The returns evaluation helps to answer the question on how profitable the business model is – how high or low the profit margins and the profit itself.

Also, on the graphs there are diagonal lines for "invent" and "improve", that are the signs of in which directions should business models move on the map.

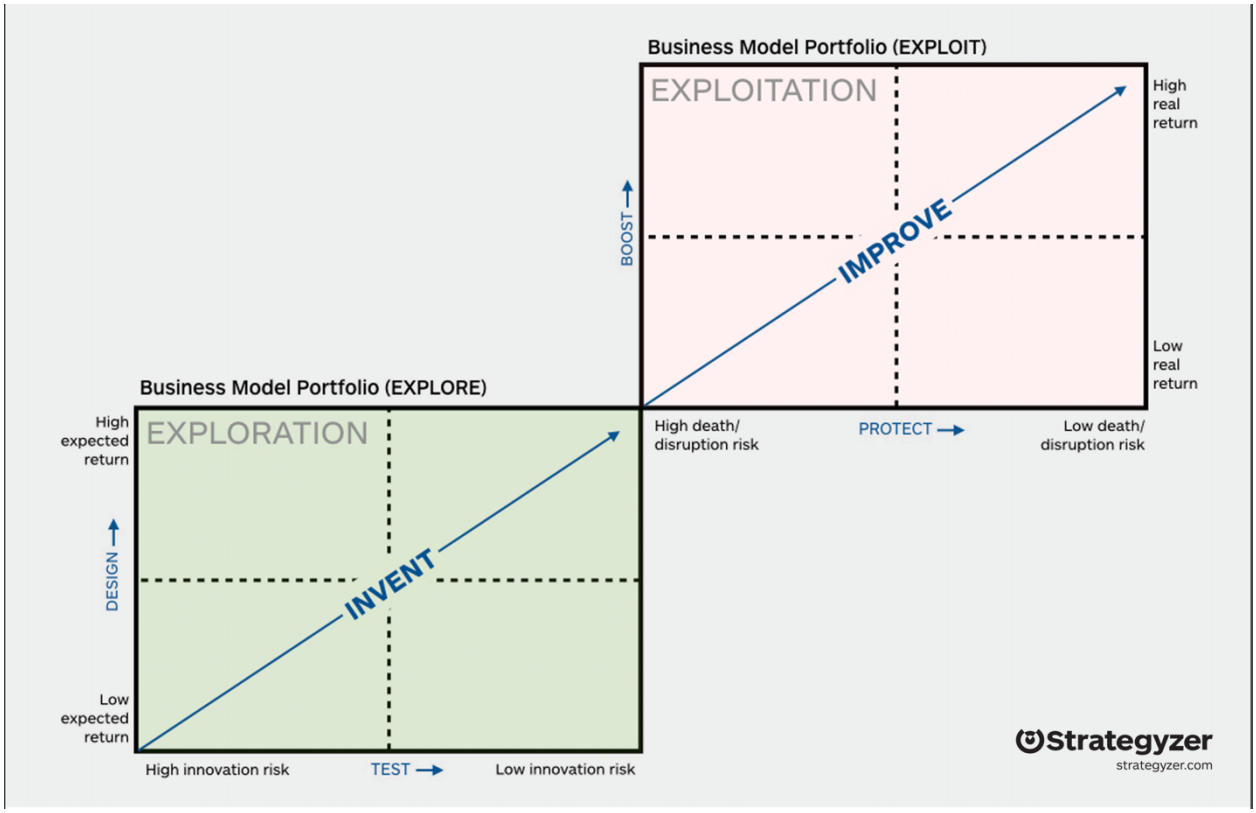


Fig. 8 Business portfolio map (Pigneur & Osterwalder, 2017)

As an example, the business model that is in the "explore" section of the map, located in the "high innovation risk" and "low expected return" areas on the graph is probably not yet ready to launch, and should be developed more to go diagonally up the "invent" line to move into the "exploit" section of the map.

In the case of Company X's business models, the business model portfolio map can be seen in Appendix 17. There are a total of 4 business models on the map:

1. B2B HoReCa business model after the digital transformation (DT);
2. Hardware rent and maintenance business model;
3. B2C online marketplaces business model;
4. IoT hardware business model.

The 1st and 2nd business models from the list are in the "Exploit" part of the map, since they are the current business models in operation. The business model of B2B HoReCa currently shows the most return on profits, and it has medium risks of disruption, since it is a newly modified business model that has covered the weak points of previous business models, but there are still uncertainties with the overall situation on the HoReCa market in the region. The hardware division business model has higher risks of disruption and lower profits – this model is the only one that is fully financed by the B2B HoReCa business model and as seen from the financial projections, is losing money. The high risk is associated with the loss of profits and the general decline in such services.

The 3rd and 4th business models from the list are in the "Explore" part of the map, since they are the future (proposed) business models. The business model of B2C in online marketplaces currently is in a better position on the map, having lower innovation risks (due to the company having experience in launching into the B2C market) and above average profit projections (since the costs for promoting to B2C is lower compared to the previous attempts). For the business model to succeed, the company should invest into the attraction of customers. The IoT hardware business model is currently having a higher risk of innovation (since the company is currently in prototype stage of developing the technology) and medium profit projections (the model is more profitable than the old one, but there is still room for improvement). This business model is designed to replace the current hardware business model, but at the moment it should be additionally developed taking into account all of the things that could raise during the development of the technology.

Summarising the portfolio map, the situation with the business models that are currently in use and the models in proposition has the potential to improve the business as a whole, but additional research and job tasks should be done before the proposed business models can be launched.

CONCLUSION

Summary of the results

The examination of the case study data analysis results, which were set on a in-depth analysis of a Russian regional B2B retailer in HoReCa, many different conclusions can be drawn. For the analysis of the data retrieved from the interviews and observations, business model canvas tool by Osterwalder (2010) proved to be a good research tool for analysing all different sides of the business in one package, providing the opportunity to find weaknesses and strong points of the studied company.

The investigation of the business models before the digital transformation showed the diversity of all business units, that are working on the same customer segments, but are done separately, which definitely puts stress on the costs and is not a good foundation for integrating digital technologies with ease from the technical side as well as the business side. Implementation of the digital transformation plan in the Company X required consolidation of business units and models, as well as dropping unnecessary costs that are not required after the introduction of the digital initiatives.

The first digital initiative introduced in the company, the online ordering system for customers, enabled to reach a new way of communicating with basic customer needs, which drastically reduced the workload on sales personnel, who were responsible for the order receiving procedures (taking almost 40% of their work time everyday), and the office personnel who were processing orders – tasks of reviewing, preparing documents, and sending them to the warehouse – are not required in the same amount as before. Combining with the factor that the rise of orders puts additional stress on the workers, sometimes requiring to connect other people to do these tasks, the IT solution is very flexible and highly scalable. This scalability also allows for other possibilities and use cases.

As it was discovered during interviews, other technical innovations existed in the company as prototype projects, one of them is the IoT hardware board, enabling new possibilities for client service for all of their customer segments. The evaluation of the business model for hardware in the Company X showed that this model has some unique characteristics, but it would not exist without other business models. Adding to this problem, the financial estimations show that the business model is not profitable, and thus the loss is covered by other business units. So, for the purposes of this research, a proposition for a new business model was created, taking into account the usage of the IoT board for the company's hardware stock. The business model shows the possible value that it can give to the customers, especially considering the changing consumer preferences and the adoption of smart devices by people in general – people want to see such

innovations in other spheres. This unique value proposition will allow to charge a premium for the services, and change the financing of the unit to be self-sufficient.

In the Company X's case, there were attempts of using online channels for selling products to ordinary customers (B2C segment), namely the launch of a website were customers can purchase tea and coffee from the company's catalogue. Discovered during the interviews, the project was a failure, citing such reasons as the lack of reach to people, and the lower trust to random online shops that are not big name ones, like Ozon or Wildberries. The second proposition for using the digital technologies as a part of transformation into the digital sphere is the use of online marketplaces like Ozon or Aliexpress, which has been proven to be a better alternative than creating your own website by academics and practitioners. This is due to the better reach of the customer segments and easier logistics for both the seller and the customer. The business model proposed shows good potential, which is backed by the financial estimations.

Returning to the research questions, several things can be said in regard to answering these questions after the research done. The research questions set during the research were:

1. How business model's elements are changed after a digital transformation in retail?
2. Which new opportunities can be opened in business model's elements after a digital transformation in a B2B SME retail firm?

With the regard to the research question 1, the research on how digital transformation changed the business model was done, with the case study of the Company X used in the research. During the research, the business models of the company was made, with the creation of several business models that reflect the company operations in 3 different divisions – the first business model was the of the beer division, the second was about the tea and co. After these steps, the analysis of the changes in the business model after the digital transformation and how the financially viable is the model was conducted and the results were analysed. In the final business model, several adjustments were done to the business model that are the effect of the introduction of the digital transformation initiatives in the company. After examining the business models of the Company X before the digital transformation, it can be said that the company's business models are suited more toward customer relationship management, with a high cost of acquisition (Osterwalder et al., 2010), and as a result, limited resources for growth – so every costly step that a company takes should be carefully examined, especially when it is a SME. Financially, the business models have some room for improvement – for example with the costs for office personnel. Also, the hardware business model must have a rethink of the revenue streams – right now, this is the only business model that has negative profits.

From the analysis of the digital transformation initiative that has been rolled out in Company X, it can be said that it has changed the business model in some ways, by expanding it

on existing blocks and improving the value proposition for current customers. By combining the analysis of the business model and the results of the initiative from the company, it can be said that the initiative gave a good start for the company. From the financial point of view, the increase in profits are noticeable, but there are a lot more that a company can do to expand on its digital technologies.

Answering the research question 1, it can be said that there are changes in all major business model elements, including the value proposition changes, key resources, revenue streams and costs structures. Also, from the customer segments point of view, there are changes in how value propositions target customer groups, allowing the company to suit the customer needs better.

With the regard to the research question 2, two proposals were developed for the studied company that have a chance to be successfully implemented and be profitable for the studied company The proposals are based on the situation inside the company (data received during interviews) and also based on the literature review of similar cases that are in line with the situation in the company. The resulting proposals show how developments in the company can be utilised in the business sense, with preliminary financial evaluations showing interesting results. The first proposal was developed with the potential use of prototype hardware and the re-development of the hardware division business model, and utilising digital technologies like Internet of Things. It can be said that the investments into the IoT for the hardware division can greatly improve the company's position on the market, by providing a unique solution to customers seeking for an integrated solution that is easy to use and understand. From the financial perspective, this division will be fully financed on its own, without the need for financing from other divisions. The second proposition was developed on the failed attempt on the creation of an online store for B2C customers. This business model will be a great addition to the portfolio of business models that the Company X currently has. This model opens up a new customer segment in which there is a lot of potential for growth, if done correctly, by using online marketplaces like Ozon or Wildberries.

Summarising the portfolio map that was created to evaluate the overall picture of the current and future business models, the situation with the business models that are currently in use and the models that are proposed during the research have potentials to improve business growth as a whole in terms of digital transformation, but additional research and tasks should be considered before the proposed business models can be launched. Right now the question of knowledge to implement these business models should be a high priority in the company to reach these goals.

Answering the second research question, it can be said that digital transformation can be used by the SME companies to leverage their assets in a different perspective, which can open new

possibilities for growth and to better position them on the market, due to the quick response characteristics that SMEs tend to have.

Overall, during the research of the company's digital transformation case, several points can be summed up. First, customers are ready for digital technologies and digital interactions, so for SMEs there is a good viability of using digital technologies in their operations. Second, the digital technologies should affect all of the key elements in the business model, otherwise the switch to digital can lead to failures, instead of successes. Third, many untapped potentials for company's may exist inside, and this requires the change in the leaders point of view on the situation and projects in companies. And last, the cost of integrating such solutions may seem high at first, but the return on investments can be even higher, if done right.

Theoretical contribution

The study contributes to the academic research in the context of the evaluating the use of digital transformation in SMEs, especially in the context of Russian firms, and also in the context of B2B firms, which can be applied to research outside of Russia. Also, the study contributes to the usage of business model canvas framework for evaluating business performance and the changing of the elements during transformations.

This study's direct contribution is the study of digital transformation of Russian firms on a concrete example. As was discovered during the literature review, very few papers exist on the topic of digital transformation in Russian firms, most of the materials focus on cases from outside of Russia (Faridi & Malik, 2020; Li et al., 2018; Matarazzo et al., 2021; Pascucci et al., 2019). Other materials that were found for the case of Russia are not directly connected to the digital transformation examples on firms, but rather the theoretical perspective of this question (Versockiy, 2019). This study will provide a practical example on a case of a real company that had undergone a digital transformation for further research purposes, since there are many more industries in which digital transformation in SMEs can happen.

The research also contributes to the usage of the business model canvas framework, which can be used for understanding out of which elements the business is made up of, and later to evaluate these elements and to innovate on them. Innovation in business models has been thoroughly examined previously by academics (Depaoli et al., 2020; Trimi & Berbegal-Mirabent, 2012; Vaska et al., 2021), but the research on the Russian SMEs in particular is poor and this study may help to contribute to this topic and provide a base for further research.

Managerial implications

Small and medium enterprises usage of digital technologies is rising every year, especially after the effects of pandemic lockdowns of COVID-19 virus. Technologies that have been proven helpful and business-changing are already in use by larger companies and enterprises, so it just a matter of time when these technologies will reach the hands of smaller entrepreneurs. The creators of the solutions for SMEs almost always take inspiration from bigger firms, and this means that SMEs can have a high chance of using a technology that is proven as viable to use and quite reliable, and the costs of deploying such solutions is lower. The question of integrating these solutions as a part of digitally transforming small and medium sized companies is still an open question, since this requires a broader understanding of topic, unlike regular business processes of yesterday.

This research can prove itself to be useful to decision-makers in various Russian SMEs as a concrete and unbiased example of digital transformation that is already in progress in the company. During the research, several business model canvases were prepared, covering the whole picture of the situation in the company before the digital transformation, and the situation after the first steps of digital transformation were showed on the canvases. In addition, financial estimations are provided in the research that are connected to the business model elements, which will be a useful addition for decision-makers that want to look at the situation from the financial standpoint. At last, the value proposition canvases were created that show the situation from the viewpoint of company's customers, in this case, what customers wants to do, what are their gains and pains; and from the company's side, what the company offers, gain creators and pain relievers.

As well as creating business model canvases for current business models, two business models were proposed to serve as an example of how the company can use their assets in terms of becoming a digitally transformed company, with the financial estimations supplementing the reasoning behind the propositions.

For decision-makers in SMEs, this research can also be useful to serve as an example of how business model canvases can be used for evaluating the business as a whole. This can help decision-makers to make decision with less bias and have better control over the whole process if they want to do a digital transformation in their companies.

Limitations and future research opportunities

The research that has been conducted has some limitations that can be addressed in further research. This will help to understand the problem form different perspectives and address the shortcomings.

First, the research was conducted with a single case study in mind. Even though the case study was comprehensive and in-depth, the research only covers one industry – the B2B retail

industry. There are a lot of companies in this sphere, but SMEs have a very broad range of industries in which this research can be conducted. It would seem reasonable to include different spheres of B2B retail (for example, in construction) that can have different needs of customers and the business itself can be built on other principles, to which the example explained in the research may not be viable.

Second, the research had a limited time period for evaluating the effects of digital transformation, and it would be more viable to research this example again in a few years to understand the long-term effects that a digital transformation can bring to the small and medium companies.

Third, the research focuses only on one region of Russia, and does not consider the situation in regions that are more economically prosper, like Moscow and Saint Petersburg; and in the regions that are less economically prosper. Since the differences in economic power in regions of Russia is quite different, especially comparing bigger cities, the effects of the digital transformation can differ up to the point that they may not be economically viable.

REFERENCES

1. Advanced Mobile Group. (2016, July 26). *10 Companies, 10 Cost Effective RFID Solutions*. https://www.advancedmobilegroup.com/blog/10-companies-10-rfid-solutions

2. ADW. (2018, April 30). Hasbro – How to take advantage of strong IP in the digital age? *Digital Innovation and Transformation*. https://digital.hbs.edu/platform-digit/submission/hasbro-how-to-take-advantage-of-strong-ip-in-the-digital-age/

3. Amarsy, N. (2015, February 9). *Why and How Organizations Around the World Apply the Business Model Canvas*. https://www.strategyzer.com/blog/posts/2015/2/9/why-and-how-organizations-around-the-world-apply-the-business-model-canvas

4. Apedo-Amah, M. C., Avdiu, B., Cirera, X., Cruz, M., Davies, E., Grover, A., Iacovone, L., Kilinc, U., Medvedev, D., Maduko, F. O., Poupakis, S., Torres, J., & Tran, T. T. (2020). *Unmasking the Impact of COVID-19 on Businesses: Firm Level Evidence from across the World*. World Bank, Washington, DC. https://doi.org/10.1596/1813-9450-9434

5. Baker, S. (2020, March 24). *Microsoft became the only US company worth more than $1 trillion after the coronavirus sent the US economy into a nosedive*. Business Insider. https://www.businessinsider.com/coronavirus-microsoft-only-1-trillion-us-company-after-stocks-crash-2020-3

6. Banerjee, P. K., & Ma, L. C. (2012). Routinisation of B2B E-commerce by small firms: A process perspective. *Information Systems Frontiers*, *14*(5), 1033–1046. https://doi.org/10.1007/s10796-011-9329-6

7. Bejinariu, A. C., Jitarel, A., Sarca, I., & Mocan, A. (2017). *ORGANIZATIONAL CHANGE MANAGEMENT – CONCEPTS DEFINITIONS AND APPROACHES INVENTORY*. 10.

8. Berman, S., & Marshall, A. (2014). The next digital transformation: From an individual-centered to an everyone-to-everyone economy. *Strategy & Leadership*, *42*(5), 9–17. https://doi.org/10.1108/SL-07-2014-0048

9. Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. (2013). Digital business strategy: Toward a next generation of insights. *MIS Quarterly: Management Information Systems*, *37*(2), 471–482. https://doi.org/10.25300/MISQ/2013/37:2.3

10. Blomkvist, P., & Hallin, A. (2015). *Method for engineering students: Degree projects using the 4-phase Model* (1st ed.). Studentlitteratur AB; DiVA. http://urn.kb.se/resolve?urn=urn:nbn:se:kth:diva-162039

11. Boersma, K., & Kingma, S. (2005). From means to ends: The transformation of ERP in a manufacturing company. *The Journal of Strategic Information Systems*, *14*(2), 197–219. https://doi.org/10.1016/j.jsis.2005.04.003

12. Böringer, J., Grehan, B., Kiewell, D., Lehmitz, S., & Moser, P. (2019). *Four pathways to digital growth that work for B2B companies*. 10.

13. Boulton, C. (2020, April 22). *Digital KPIs: Your keys to measuring digital transformation success*. CIO. https://www.cio.com/article/3236446/digital-kpis-your-keys-to-measuring-digital-transformation-success.html

14. Casto, P. (2019). *Five Key Performance Indicators Critical to Your Digital Transformation | GE Digital*. https://www.ge.com/digital/blog/five-key-performance-indicators-critical-your-digital-transformation

15. Cordell, J. (2021, January 7). *Russia in 2021: Will the Economy Recover?* The Moscow Times. https://www.themoscowtimes.com/2021/01/07/russia-in-2021-will-the-economy-recover-a72455

16. De Reuver, M., Bouwman, H., & Haaker, T. (2013). Business model roadmapping: A practical approach to come from an existing to a desired business model. *International Journal of Innovation Management*, *17*(01), 1340006. https://doi.org/10.1142/S1363919613400069

17. Depaoli, P., Za, S., & Scornavacca, E. (2020). A model for digital development of SMEs: An interaction-based approach. *Journal of Small Business and Enterprise Development*, *27*(7), 1049–1068. https://doi.org/10.1108/JSBED-06-2020-0219

18. European Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs. (2020). *COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS - An SME Strategy for a sustainable and digital Europe* (COM/2020/103 final). https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2020%3A103%3AFIN

19. Faridi, M. R., & Malik, A. (2020). Digital transformation in supply chain, challenges and opportunities in SMEs: A case study of Al-Rumman Pharma. *Emerald Emerging Markets Case Studies*, *10*(1), 1–16. https://doi.org/10.1108/EEMCS-05-2019-0122

20. Ferreira, M. J., Moreira, F., Pereira, C. S., & Durão, N. (2020). The Digital Transformation at Organizations – The Case of Retail Sector. In Á. Rocha, H. Adeli, L. P. Reis, S. Costanzo, I. Orovic, & F. Moreira (Eds.), *Trends and Innovations in Information Systems and Technologies* (Vol. 1159, pp. 560–567). Springer International Publishing. https://doi.org/10.1007/978-3-030-45688-7_56

21. Forbes. (2021, February 1). *IoT: How It's Making Small Businesses More Efficient*. Forbes. https://www.forbes.com/sites/tmobile/2021/02/01/iot-how-its-making-small-businesses-more-efficient/?sh=1d746100225c

22. Forrester Consulting. (2015). *Digital Transformation In The Age Of The Customer:*

A Spotlight On B2C.

23. Geyer, F. (2020, April 24). Nine Digital Shifts to Sustain B2B Companies During Trying Times. *Growth Transformation Consultants | Prophet*. https://www.prophet.com/2020/04/digital-transformation-shifts-for-b2b-companies/

24. Ghauri, P. (2004). Designing and Conducting Case Studies in International Business Research. In *Designing and conducting case studies in international business* (pp. 109–124). https://doi.org/10.4337/9781781954331.00019

25. Gong, C., & Ribiere, V. (2020). Developing a unified definition of digital transformation. *Technovation*, 102217. https://doi.org/10.1016/j.technovation.2020.102217

26. González-Varona, J., López-Paredes, A., Poza, D., & Acebes, F. (2021). Building and development of an organizational competence for digital transformation in SMEs. *Journal of Industrial Engineering and Management*, *14*(1), 15. https://doi.org/10.3926/jiem.3279

27. Gray, D. (2014). *Doing Research in the Real World, 3rd edition*.

28. Hanelt, A., Bohnsack, R., Marz, D., & Antunes Marante, C. (2020). A Systematic Review of the Literature on Digital Transformation: Insights and Implications for Strategy and Organizational Change. *Journal of Management Studies*, *n/a*(n/a). https://doi.org/10.1111/joms.12639

29. Harridge-March, S. (2004). Electronic marketing, the new kid on the block. *Marketing Intelligence & Planning*. https://doi.org/10.1108/02634500410536885

30. IDC. (2019, October 28). *Worldwide Spending on Digital Transformation Will Reach $2.3 Trillion in 2023, More Than Half of All ICT Spending, According to a New IDC Spending Guide*. IDC: The Premier Global Market Intelligence Company. https://www.idc.com/getdoc.jsp?containerId=prUS45612419

31. Impact Networking, LLC. (2021, March 5). 5 Change Management Strategies for Digital Transformation. *Impact Networking*. https://www.impactmybiz.com/blog/blog-5-change-management-strategies-for-digital-transformation/

32. Johnson, M. (2010). Barriers to innovation adoption: A study of e-markets. *Industrial Management & Data Systems*. https://doi.org/10.1108/02635571011020287

33. Joly, H. (2020, June 25). *Transformation, purpose, and resilience: Best Buy's transformation | McKinsey* (B. Coggins, Interviewer) [Interview]. https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/transformation-and-resilience-an-interview-with-best-buys-executive-chairman-hubert-joly

34. Jones, N. B., & Graham, C. M. (2018). Can the IoT Help Small Businesses? *Bulletin of Science, Technology & Society*, *38*(1–2), 3–12. https://doi.org/10.1177/0270467620902365

35. Kim, H. D., Lee, I., & Lee, C. K. (2011). Building Web 2.0 enterprises: A study of small and medium enterprises in the United States: *International Small Business Journal*. https://doi.org/10.1177/0266242611409785

36. Kopalle, P. K., Kumar, V., & Subramaniam, M. (2020). How legacy firms can embrace the digital ecosystem via digital customer orientation. *Journal of the Academy of Marketing Science*, *48*(1), 114. Gale General OneFile. https://doi.org/10.1007/s11747-019-00694-2

37. Kreutzer, R. T., Neugebauer, T., & Pattloch, A. (2018). *Digital Business Leadership*. Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-662-56548-3

38. Kutnjak, A., Pihiri, I., & Furjan, M. T. (2019). Digital Transformation Case Studies Across Industries – Literature Review. *2019 42nd International Convention on Information and Communication Technology, Electronics and Microelectronics (MIPRO)*, 1293–1298. https://doi.org/10.23919/MIPRO.2019.8756911

39. Landeta Echeberria, A. (2020). A Digital Framework for Industry 4.0. In *A Digital Framework for Industry 4.0*. https://doi.org/10.1007/978-3-030-60049-5

40. Lederer, M., & Bruns, J.-G. (2019). SUCCESS PATTERNS FOR THE DIGITAL TRANSFORMATION OF B2B COMMERCE. *International Conference on Information Systems Post-Implementation & Change Management*, 241–244. Academic Search Ultimate.

41. LeHong, H. (2016). *Digital Business KPIs: Defining and Measuring Success* (p. 11). Gartner.

42. Li, L., Su, F., Zhang, W., & Mao, J. Y. (2018). Digital transformation by SME entrepreneurs: A capability perspective. *Information Systems Journal*, *28*(6), 1129–1157. https://doi.org/10.1111/isj.12153

43. Mail.ru Group. (2020, September 11). *Цифровая трансформация малого и среднего бизнеса в России—Mail.ru для бизнеса | Блог для бизнеса от Mail.ru*. https://biz.mail.ru/blog/digital-transformation-in-russian-region/

44. *Make no mistake: It's digital's big moment*. (2021, March 10). KPMG. https://home.kpmg/xx/en/blogs/home/posts/2021/01/its-digitals-big-moment.html

45. Martin, J.-F. (2018). *Unlocking success in digital transformations* (p. 14). McKinsey & Company.

46. Massa, L., Tucci, C., & Afuah, A. (2017). A Critical Assessment of Business Model Research. *Academy of Management Annals*, *11*, 73–104. https://doi.org/10.5465/annals.2014.0072

47. Matarazzo, M., Penco, L., Profumo, G., & Quaglia, R. (2021). Digital transformation and customer value creation in Made in Italy SMEs: A dynamic capabilities perspective. *Journal of Business Research*, *123*, 642–656.

https://doi.org/10.1016/j.jbusres.2020.10.033

48. McKinsey. (2020). *How COVID-19 has pushed companies over the technology tipping point—And transformed business forever* (p. 9). McKinsey & Company.

49. Microsoft. (2019). *Your Roadmap for a Digital-First Business*. Microsoft.

50. Morakanyane, R., Grace, A., & O'Reilly, P. (2017). Conceptualizing Digital Transformation in Business Organizations: A Systematic Review of Literature. *Digital Transformation – From Connecting Things to Transforming Our Lives*, 427–443. https://doi.org/10.18690/978-961-286-043-1.30

51. Morgan, B. (2019, July 21). *7 Examples Of How Digital Transformation Impacted Business Performance*. Forbes. https://www.forbes.com/sites/blakemorgan/2019/07/21/7-examples-of-how-digital-transformation-impacted-business-performance/

52. Murphy, K. (2021, March 15). *Digital Transformation Change Management: How to Build On Initial Success*. PLANERGY Software. https://planergy.com/blog/digital-transformation-change-management/

53. Murphy, M. (2018, October 19). *NowUKnow: Millennials Lead the Way in the Digital Future*. https://www.bentley.edu/news/nowuknow-millennials-lead-way-digital-future

54. Nandico, O. F. (2016). A framework to support digital transformation. *Intelligent Systems Reference Library*, *111*, 113–138. https://doi.org/10.1007/978-3-319-40564-3_7

55. OECD. (2021). *The Digital Transformation of SMEs*. OECD. https://doi.org/10.1787/bdb9256a-en

56. Olofsson, L., & Farr, R. (2006). *Business Model Tools and Definition—A Literature Review*.

57. Osterwalder, A., & Pigneur, Y. (2002). An eBusiness Model Ontology for Modeling eBusiness. *BLED 2002 Proceedings*.

58. Osterwalder, A., Pigneur, Y., Bernarda, G., Smith, A., Papadakos, T., & Smith, A. (2014). *Value Proposition Design: How to Create Products and Services Customers Want*. John Wiley & Sons, Incorporated. http://ebookcentral.proquest.com/lib/stpeterst/detail.action?docID=1887760

59. Osterwalder, A., Pigneur, Y., & Clark, T. (2010). *Business model generation: A handbook for visionaries, game changers, and challengers*. Wiley.

60. Pascucci, F., Temperini, V., Marinelli, L., & Marcone, M. R. (2019). Digital Transformation in B2B SMEs. In *The First Outstanding 50 Years of "Università Politecnica delle Marche"*. Springer International Publishing. https://doi.org/10.1007/978-3-030-33879-4

61. Pierenkemper, C. (2020). *Developing Strategies for Digital Transformation in SMEs with Maturity Models*. 21.

62. Pigneur, Y., & Osterwalder, A. (2017, August 23). *Business Model Portfolio Part 1: Manage The Existing Business*. https://www.strategyzer.com/blog/business-model-portfolio-part-1-manage-the-existing-business

63. Rauch, J. (2019, March 13). *Generation next—The Economist Readership*. https://web.archive.org/web/20190313195431/http://te.tbr.fun/generation-next/

64. Research and Markets. (2020, April). *Digital Transformation Market by Technology (IoT, Cloud, Big Data, AI), Process Transformation (Customer, Operation, Product, Workforce), End-use Industry (Retail, Healthcare, Manufacturing, Insurance), Industry Size—Global Forecast to 2025*. https://www.researchandmarkets.com/reports/5018614/digital-transformation-market-by-technology-iot

65. Richardson, J. (2008). The business model: An integrative framework for strategy execution. *Strategic Change*, *17*(5), 133–144. Inspec. https://doi.org/10.1002/jsc.821

66. Robinson, W. (2019, June 20). *8 Reasons for Undergoing a Digital Transformation*. Salesforce UK Blog. https://www.salesforce.com/uk/blog/2019/06/8-reasons-for-undergoing-a-digital-transformation.html

67. Rogers, D. L. (2016). *The digital transformation playbook: Rethink your business for the digital age*. Columbia Business School Pub.

68. Rueckel, D., Mühlburger, M., & Koch, S. (2020). An Updated Framework of Factors Enabling Digital Transformation. *Pacific Asia Journal of the Association for Information Systems*, *12*(4). https://doi.org/10.17705/1pais.12401

69. Salesforce. (2020). *What is Software as a Service (SaaS): A Beginner's Guide*. Salesforce.Com. https://www.salesforce.com/in/saas/

70. Saunders, M. N. K., Lewis, P., & Thornhill, A. (2015). *Research Methods for Business Students* (7th edition). Pearson.

71. Shafer, S. M., Smith, H. J., & Linder, J. C. (2005). The power of business models. *Business Horizons*, *48*(3), 199–207. https://doi.org/10.1016/j.bushor.2004.10.014

72. Siggelkow, N. (2007). Persuasion With Case Studies. *Academy of Management Journal*, *50*(1), 20–24. https://doi.org/10.5465/amj.2007.24160882

73. Smart, A. M. (2017). *Implications of the Internet of Things for the Small and Medium Sized Business*. 91.

74. Sousa, M. J., & Rocha, Á. (2019). Digital learning: Developing skills for digital transformation of organizations. *Future Generation Computer Systems*, *91*, 327–334. https://doi.org/10.1016/j.future.2018.08.048

75. Stackpole, B. (2018). *State of the CIO*. CIO from IDG.

76. Stark, J. (2020). Digital Transformation of a Retail Store. In J. Stark, *Digital*

Transformation of Industry (pp. 73–77). Springer International Publishing. https://doi.org/10.1007/978-3-030-41001-8_12

77. Stobierski, T. (2020, January 21). *What Is Organizational Change Management? | HBS Online*. Business Insights - Blog. https://online.hbs.edu/blog/post/organizational-change-management

78. Strategyzer AG. (2021). *Innovation Software from Creators of Business Model Canvas*. https://www.strategyzer.com/app

79. TAdviser. (2021). *Интернет-торговля (рынок России)*. TAdviser.ru. /index.php/Статья:Интернет-торговля_(рынок_России)

80. Taiminen, H. M., & Karjaluoto, H. (2015). The usage of digital marketing channels in SMEs. *Journal of Small Business and Enterprise Development*. https://doi.org/10.1108/JSBED-05-2013-0073

81. Teece, D. J. (2010). Business Models, Business Strategy and Innovation. *Business Models*, *43*(2), 172–194. https://doi.org/10.1016/j.lrp.2009.07.003

82. Trimi, S., & Berbegal-Mirabent, J. (2012). Business model innovation in entrepreneurship. *International Entrepreneurship and Management Journal*, *8*(4), 449–465. https://doi.org/10.1007/s11365-012-0234-3

83. Ulas, D. (2019). Digital Transformation Process and SMEs. *Procedia Computer Science*, *158*, 662–671. https://doi.org/10.1016/j.procs.2019.09.101

84. Vaska, S., Massaro, M., Bagarotto, E. M., & Dal Mas, F. (2021). The Digital Transformation of Business Model Innovation: A Structured Literature Review. *Frontiers in Psychology*, *11*. https://doi.org/10.3389/fpsyg.2020.539363

85. Velthuijsen, J. W., Yıldırım, B., Kramer, G., & Schmidl, R. (2018). *Innovation and Digital Transformation: How do European SMEs perform?* PwC.

86. Versockiy, R. (2019). Small and Medium-sized Business and Its Role in the Russian Market Economy. *Administrative Consulting*, 92–99. https://doi.org/10.22394/1726-1139-2019-10-92-99

87. Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *The Journal of Strategic Information Systems*, *28*(2), 118–144. https://doi.org/10.1016/j.jsis.2019.01.003

88. Walsh, G. S., Przychodzen, J., & Przychodzen, W. (2017). Supporting the SME commercialization process: The case of 3D printing platforms. *Small Enterprise Research*, *24*(3), 257–273. https://doi.org/10.1080/13215906.2017.1396490

89. Wanner, M. F. (2013, October 29). *Integrated change management*. PMI® Global Congress 2013—North America, New Orleans, LA. Newtown Square.

https://www.pmi.org/learning/library/integrated-change-management-5954

90. Warrian, P., & Southin, T. (2017). *The Internet of Things and Printed Electronics: Case Studies of Innovation by SME Manufacturers*. 11.

91. World Bank. (2020). *World Bank SME Finance* [Text/HTML]. World Bank. https://proxy.library.spbu.ru:3795/en/topic/smefinance

92. World Economic Forum. (2018). *Digital Transformation Initiative: Unlocking $100 Trillion for Business and Society from Digital Transformation*.

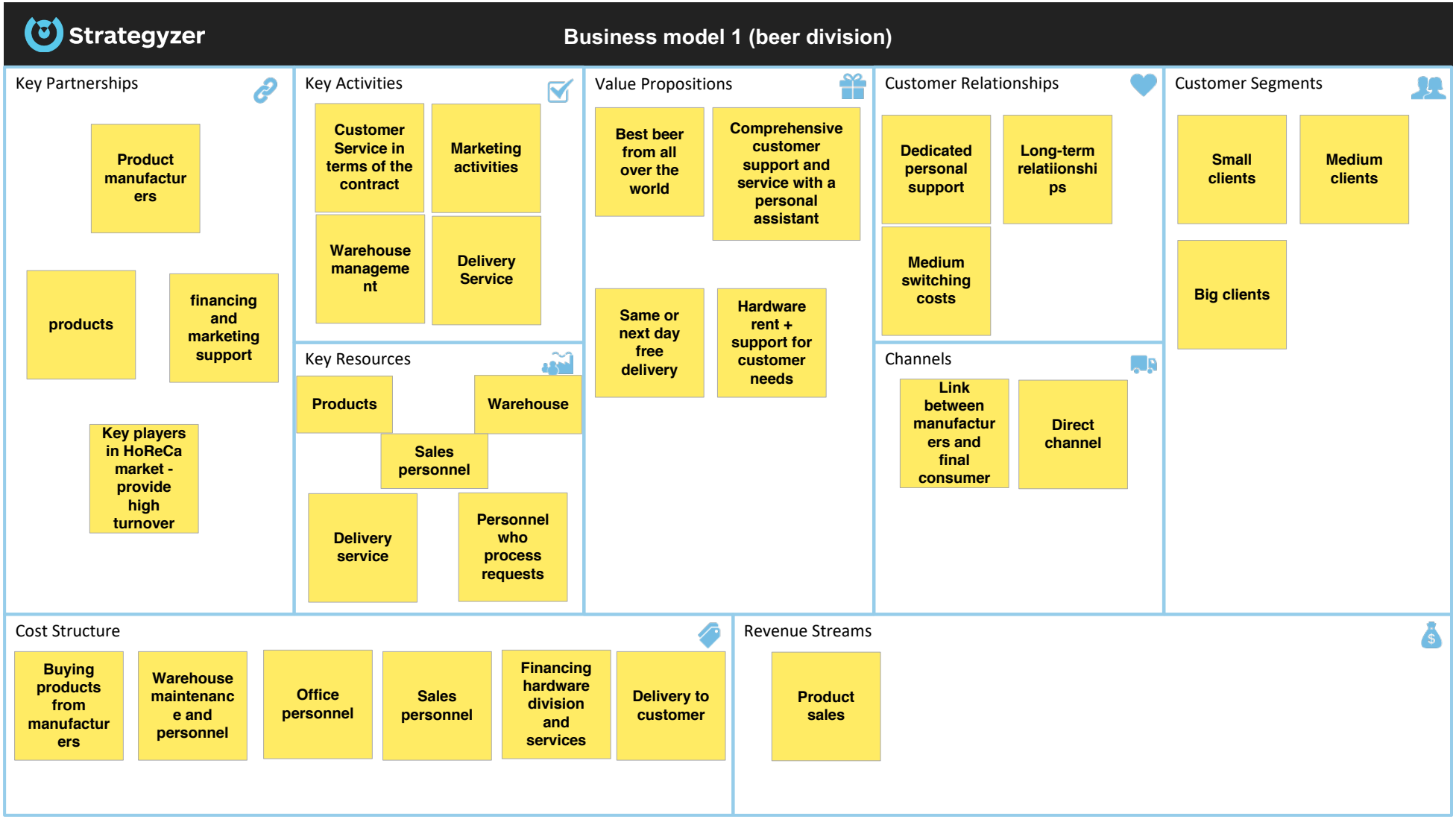
93. Yahoo Finance. (2021). *Best Buy Co., Inc. (BBY) Stock Historical Prices & Data—Yahoo Finance*. https://finance.yahoo.com/quote/BBY/history/

94. Yin, R. K. (1994). *Case Study Research: Design and Methods* (1st edition). SAGE Publications, Inc.

95. Zaoui, F., & Souissi, N. (2020). Roadmap for digital transformation: A literature review. *Procedia Computer Science*, *175*, 621–628. https://doi.org/10.1016/j.procs.2020.07.090

96. Zott Christoph & Amit Raphael. (2013). The business model: A theoretically anchored robust construct for strategic analysis. *Strategic Organization*, *11*(4), 403–411. JSTOR Journals.

APPENDIX 1. BUSINESS MODEL OF THE BEER DIVISION



APPENDIX 2. FINANCIAL MODEL OF THE BUSINESS MODEL OF THE BEER DIVISION

Customer Segments

Customer Segment	Market Size
Big clients	50
Medium clients	100
Small clients	300

Revenue Streams

Name **Product sales**

Type Sale

Value Proposition Best beer from all over the world

Customer Segment	Market Size	Market Share	Average # Purchases	Average Price	Time Period	Sub Total Sales
Small clients	300	40,0%	1	27 000,00	52	168 480 000,00
Medium clients	100	20,0%	2	26 000,00	52	54 080 000,00
Big clients	50	40,0%	3	24 000,00	52	74 880 000,00
						297 440 000,00

Cost structure

Name	**Buying products from manufacturers**
Type	Variable
Unit Cost	20000

Customer Segment	Market Size	Market Share	Average # Purchases	Time Period	Sub Total Costs
Medium clients	100	20,0%	2	52	-41 600 000,00
Big clients	50	40,0%	3	52	-62 400 000,00
Small clients	300	40,0%	1	52	-124 800 000,00
					-228 800 000,00

Name	**Delivery to customer**
Type	Variable
Unit Cost	250

Customer Segment	Market Size	Market Share	Average # Purchases	Time Period	Sub Total Costs
Small clients	300	40,0%	1	52	-1 560 000,00
Medium clients	100	20,0%	2	52	-520 000,00
Big clients	50	40,0%	3	52	-780 000,00
					-2 860 000,00

Name **Financing and hardware division services**

Type Fixed

Total
-3 000 000,00

Name **Office personnel**

Type Fixed

Total
-6 300 000,00

Name **Sales personnel**

Type Fixed

Total
-4 200 000,00

Name **Warehouse maintenance and personnel**

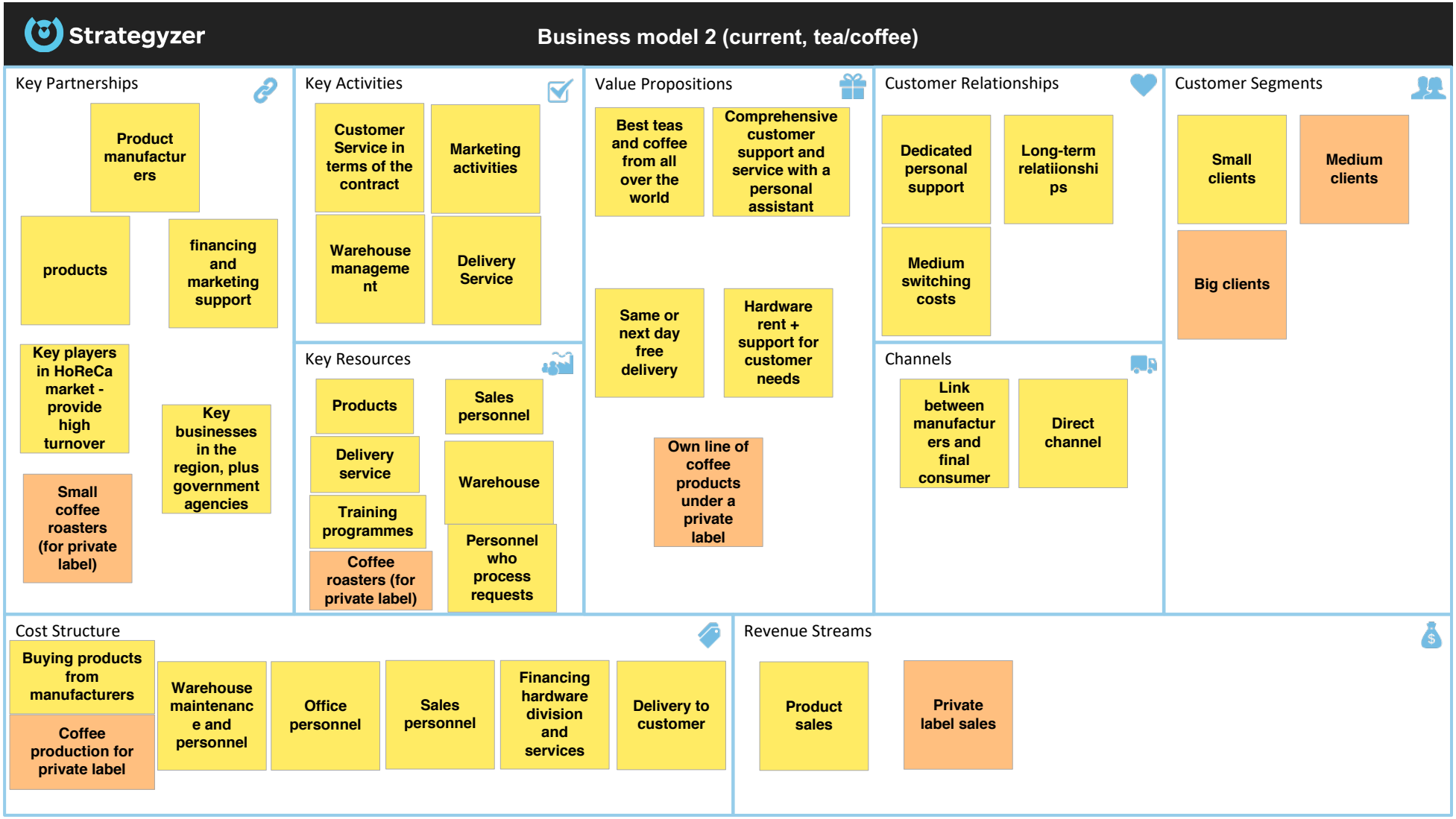
Type Fixed

Total
-4 920 000,00

Totals

TOTAL REVENUES	TOTAL COSTS	PROFIT/LOSS
297 440 000,00	**250 080 000,00**	**47 360 000,00**

APPENDIX 3. BUSINESS MODEL OF THE TEA/COFFEE DIVISION



APPENDIX 4. FINANCIAL MODEL OF THE BUSINESS MODEL OF THE TEA/COFFEE DIVISION

Customer Segments

Customer Segment	Market Size
Big clients	28
Medium clients	45
Small clients	120

Revenue Streams

Name **Private label sales**

Type Sale

Value Proposition Own line of coffee products under a private label

Customer Segment	Market Size	Market Share	Average # Purchases	Average Price	Time Period	Sub Total Sales
Small clients	120	75,0%	2	2 000,00	52	18 720 000,00
Medium clients	45	25,0%	1	2 500,00	52	1 462 500,00
						20 182 500,00

Name **Product sales**

Type Sale

Value Proposition Best teas and coffee from all over the world

Customer Segment	Market Size	Market Share	Average # Purchases	Average Price	Time Period	Sub Total Sales
Big clients	28	30,0%	3	5 200,00	52	5 678 400,00
Medium clients	45	25,0%	2	5 600,00	52	4 914 000,00
Small clients	120	45,0%	1	5 800,00	52	16 286 400,00
						26 878 800,00

Cost structure

Name **Buying products from manufacturers**

Type Variable

Unit Cost 4000

Customer Segment	Market Size	Market Share	Average # Purchases	Time Period	Sub Total Costs
Small clients	120	45,0%	1	52	-11 232 000,00
Big clients	28	30,0%	3	52	-4 368 000,00
Medium clients	45	25,0%	2	52	-3 510 000,00
					-19 110 000,00

Name **Coffee production for private label**

Type Variable

Unit Cost 257

Customer Segment	Market Size	Market Share	Average # Purchases	Time Period	Sub Total Costs

Medium clients	45	25,0%	5	52	-751 725,00
Small clients	120	75,0%	8	52	-9 622 080,00
					-10 373 805,00

Name **Delivery to customer**

Type Variable

Unit Cost 300

Customer Segment	Market Size	Market Share	Average # Purchases	Time Period	Sub Total Costs
Big clients	28	30,0%	3	52	-327 600,00
Medium clients	45	25,0%	2	52	-263 250,00
Small clients	120	45,0%	1	52	-842 400,00
					-1 433 250,00

Name **Financing hardware division and services**

Type Fixed

Total
-1 000 000,00

Name **Office personnel**

Type Fixed

	Total
	-2 500 000,00

Name **Sales personnel**

Type Fixed

	Total
	-3 500 000,00

Name **Warehouse maintenance and personnel**

Type Fixed

	Total
	-1 440 000,00

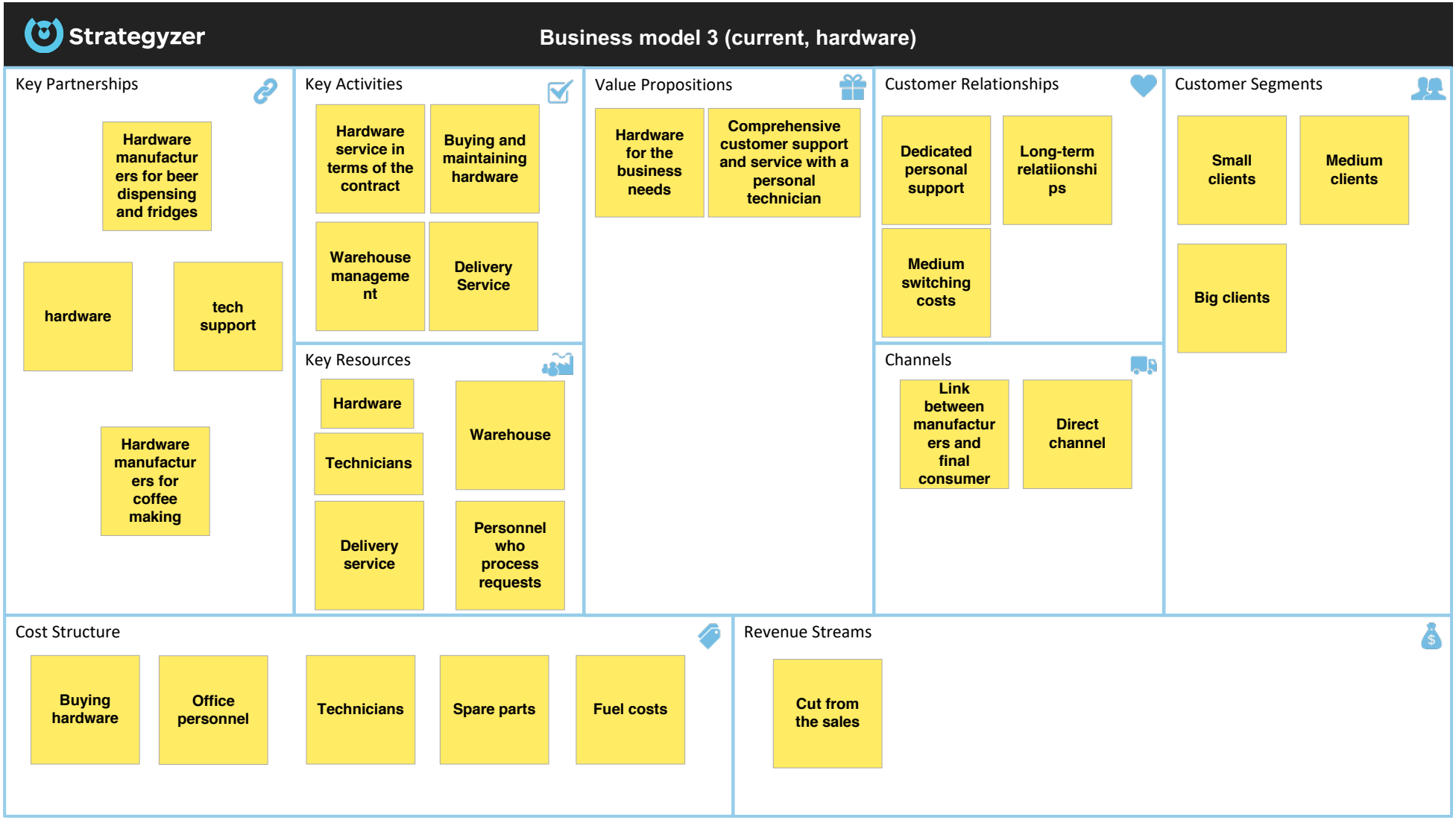
Totals

TOTAL REVENUES	TOTAL COSTS	PROFIT/LOSS
47 061 300,00	39 357 055,00	7 704 245,00

Explanation of revenue streams and cost structure calculations

Revenue streams	
Product sales	Sales from products offered to customers, based on the average orders from each customer segment
Private label sales	Sales from private label coffee offered to customers, based on the average orders from each customer segment
Cost structure	
Buying products from manufacturers	The big part of spendings is buying the products form the manufacturers. This block is about the mass-market product segment. Costs based on average invoice of the items sold
Coffee production for private label	Costs for buying, roasting the coffee. Calculated as by average orders of the product (depends on the segment)
Delivery to customer	Cost of the delivery is added to the price that the customer pays, comprised of the average price of delivery for customers added to the prices of products that they buy
Financing hardware division and services	A cut from the sales is transferred to finance the hardware division, which is fully financed only by the sales of the products. This amount is fixed
Sales personnel	Sales personnel responsible for the sales and communication with the clients, as well as the customer support. Costs calculated based on the annual salary
Office personnel	Personnel responsible for order processing. Finance department personnel is included here. Costs are calculated based on the annual salary of the workers
Warehouse maintenance and personnel	The warehouse is under rent in the company, and requires people to operate, as well as maintaining the lifting equipment. Costs are calculated based on average annual salary of workers, rent costs and a fixed amount of other costs

APPENDIX 5. BUSINESS MODEL OF THE HARDWARE DIVISION



APPENDIX 6. FINANCIAL MODEL OF THE BUSINESS MODEL OF HARDWARE DIVISION

Customer Segments

Customer Segment	Market Size
Big clients	50
Medium clients	100
Small clients	300

Revenue Streams

Name **Cut from the sales**

Type Other Revenue

Value Proposition Hardware for the business needs

Customer Segment	Market Size	Revenue	Time Period	Sub Total Sales
Big clients	50	40 000,00	52	2 080 000,00
Medium clients	100	20 000,00	52	1 040 000,00
Small clients	300	17 000,00	52	884 000,00
				4 004 000,00

Cost structure

Name **Buying hardware**

Type Fixed

Total
-400 000,00

Name **Fuel costs**

Type Variable

Unit Cost 300

Customer Segment	Market Size	Market Share	Average # Purchases	Time Period	Sub Total Costs
Small clients	300	40,0%	1	12	-432 000,00
Medium clients	100	20,0%	2	12	-144 000,00
Big clients	50	40,0%	3	12	-216 000,00
					-792 000,00

Name **Office personnel**

Type Fixed

Total
-720 000,00

Name **Spare parts**

Type Fixed

Total
-500 000,00

Name **Technicians**

Type Fixed

Total
-4 200 000,00

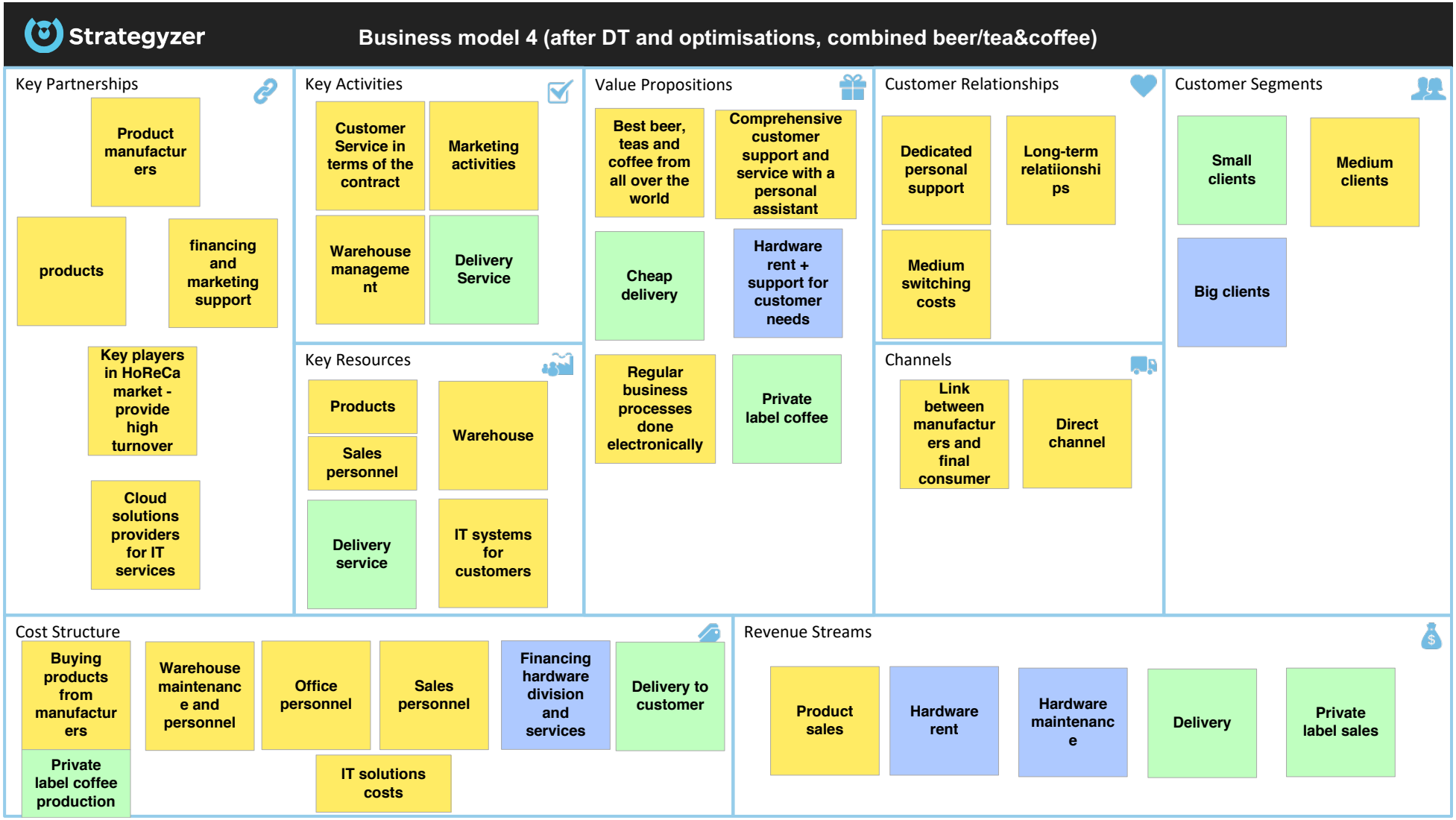
Totals

TOTAL REVENUES	TOTAL COSTS	PROFIT/LOSS
4 004 000,00	**6 612 000,00**	**-2 608 000,00**

Explanation of revenue streams and cost structure calculations

Revenue streams	
Cut from the sales	Fixed budget received from sales cuts
Cost structure	
Buying hardware	Fixed annual budget for buying new hardware (except spare parts)
Office personnel	Personnel responsible for order processing. Costs are calculated based on the annual salary of the workers
Technicians	Technicians that are responsible for the main hardware maintenance, repair and installation procedures, based on average annual salaries
Spare parts	Costs for buying the spare parts, fixed annual budget
Fuel costs	Fuel costs for technicians transport, varied on the customer segment and how frequently they travel to them

APPENDIX 7. BUSINESS MODEL AFTER DIGITAL TRANSFORMATION



APPENDIX 8. FINANCIAL MODEL OF THE BUSINESS MODEL AFTER DIGITAL TRANSFORMATION

Customer Segments

Customer Segment	Market Size
Big clients	70
Medium clients	150
Small clients	400

Revenue Streams

Name **Delivery**

Type Sale

Value Proposition Cheap delivery

Customer Segment	Market Size	Market Share	Average # Purchases	Average Price	Time Period	Sub Total Sales
Medium clients	150	40,0%	2	500,00	52	3 120 000,00
Small clients	400	40,0%	1	500,00	52	4 160 000,00
Big clients	70	20,0%	3	500,00	52	1 092 000,00
						8 372 000,00

Name **Hardware maintenance**

Type Subscription

Value Proposition Hardware rent + support for customer needs

Customer Segment	Market Size	Market Share	Subscription Price	Subscription Period	Sub Total Sales
Small clients	100	20,0%	500,00	12	120 000,00
Medium clients	40	20,0%	1 000,00	12	96 000,00
Big clients	70	60,0%	2 000,00	12	1 008 000,00
					1 224 000,00

Name **Hardware rent**

Type Pay Per Use

Value Proposition Hardware rent + support for customer needs

Customer Segment	Market Size	Market Share	Avg Units Consumed	Avg Price/Unit	Time Period	Sub Total Sales
Small clients	100	20,0%	2	600,00	12	288 000,00
Medium clients	40	20,0%	4	850,00	12	326 400,00
Big clients	70	40,0%	6	1 000,00	12	1 848 000,00
						2 462 400,00

Name **Private label sales**

Type Sale

Value Proposition Private label coffee

Customer Segment	Market Size	Market Share	Average # Purchases	Average Price	Time Period	Sub Total Sales
Small clients	400	75,0%	2	2 000,00	52	62 400 000,00

Medium clients	150	25,0%	1	2 500,00	52	4 875 000,00
						67 275 000,00

Name **Product sales**

Type Sale

Value Proposition Best beer, teas and coffee from all over the world

Customer Segment	Market Size	Market Share	Average # Purchases	Average Price	Time Period	Sub Total Sales
Big clients	70	40,0%	3	29 000,00	52	126 672 000,00
Medium clients	150	20,0%	2	30 000,00	52	93 600 000,00
Small clients	400	40,0%	1	31 000,00	52	257 920 000,00
						478 192 000,00

Cost structure

Name **Buying products from manufacturers**

Type Variable

Unit Cost 25000

Customer Segment	Market Size	Market Share	Average # Purchases	Time Period	Sub Total Costs
Small clients	400	40,0%	1	52	-208 000 000,00

Big clients	70	40,0%	3	52	-109 200 000,00
Medium clients	150	20,0%	2	52	-78 000 000,00
					-395 200 000,00

Name **Delivery to customer**

Type Variable

Unit Cost 250

Customer Segment	Market Size	Market Share	Average # Purchases	Time Period	Sub Total Costs
Big clients	70	40,0%	3	52	-1 092 000,00
Medium clients	150	20,0%	2	52	-780 000,00
Small clients	400	40,0%	1	52	-2 080 000,00
					-3 952 000,00

Name **Financing hardware division and services**

Type Fixed

Total
-4 000 000,00

Name **IT solutions costs**

Type Fixed

Total
-1 800 000,00

Name **Office personnel**

Type Fixed

Total
-3 940 000,00

Name **Private label coffee production**

Type Variable

Unit Cost 250

Customer Segment	Market Size	Market Share	Average # Purchases	Time Period	Sub Total Costs
Small clients	400	75,0%	8	52	-31 200 000,00
Medium clients	150	25,0%	5	52	-2 437 500,00

	-33 637 500,00

	Sales personnel
Name	
Type	Fixed

Total
-5 400 000,00

Name	**Warehouse maintenance and personnel**
Type	Fixed

Total
-6 360 000,00

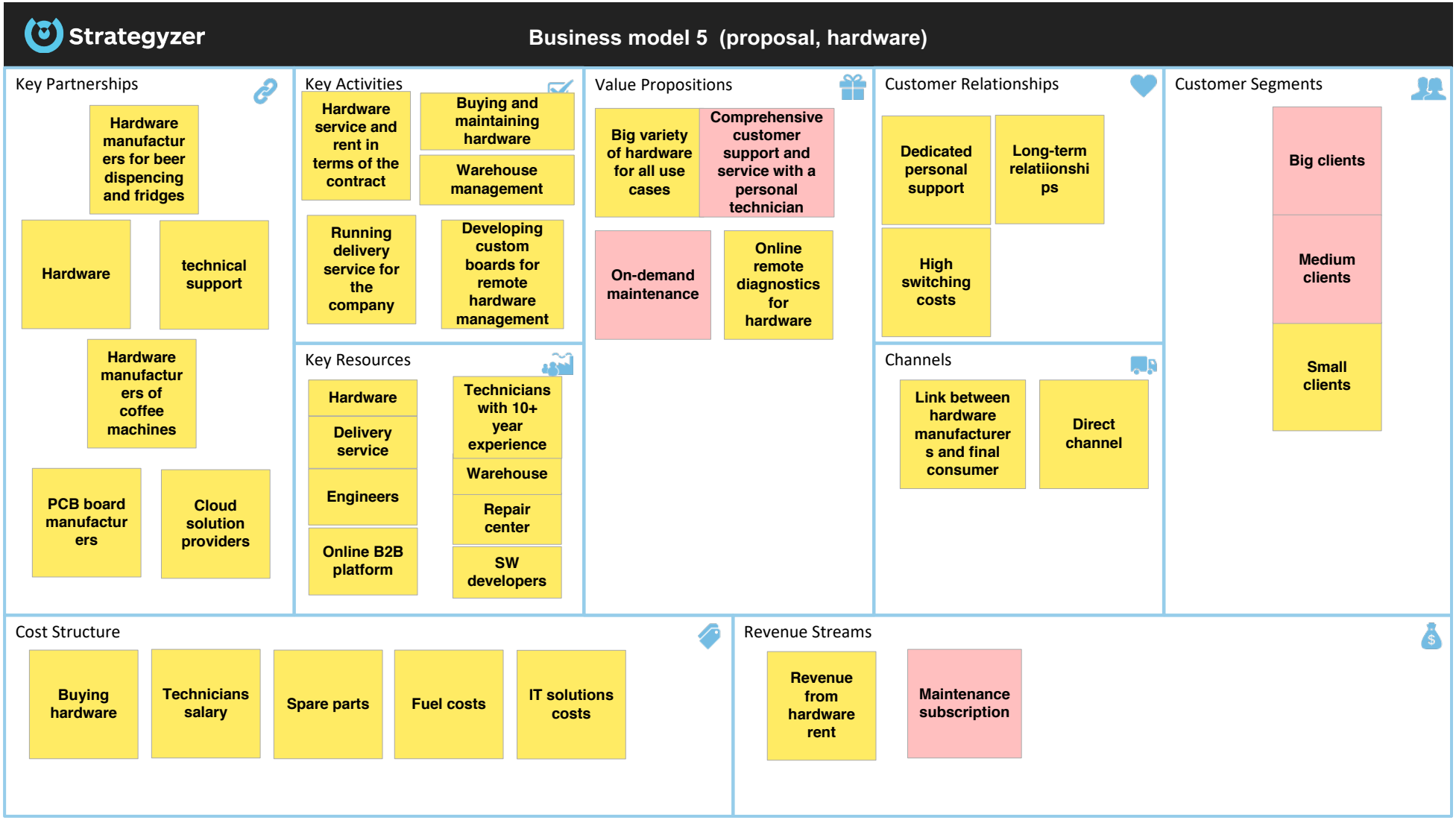
Totals

TOTAL REVENUES	TOTAL COSTS	PROFIT/LOSS
557 525 400,00	454 289 500,00	103 235 900,00

Explanation of revenue streams and cost structure calculations

Revenue streams	
Product sales	Sales from products offered to customers, based on the average orders from each customer segment
Hardware rent	Revenue from the rent of hardware, based on average number of items usually rented by each customer segment
Hardware maintenance	Revenue from hardware maintenance subscription, based on the average amount of items on maintenance plan
Delivery	Revenue from delivery services, assumed that all customers have delivery
Private label sales	Sales of private label coffee products, based on average amount that each customer segment typically buys coffee
Cost structure	
Buying products from manufacturers	The big part of spendings is buying the products form the manufacturers. This block is about the mass-market product segment. Costs based on average invoice of the items sold
Delivery to customer	Cost of the delivery if the customer selects to have it, comprised of the average price of delivery for customers added to the prices of products that they buy. Assumed that all customers want delivery
Financing hardware division and services	A cut from the sales is transferred to finance the hardware division, which is fully financed only by the sales of the products. This amount is fixed
Sales personnel	Sales personnel responsible for the sales and communication with the clients, as well as the customer support. Costs calculated based on the annual salary
Office personnel	Finance department personnel salaries. Costs are calculated based on the annual salary of the workers
IT solutions costs	Costs associated with running new IT solutions, comprised of the annual IT infrastructure costs paid to service providers plus IT admin annual salary
Warehouse maintenance and personnel	The warehouse is under rent in the company, and requires people to operate, as well as maintaining the lifting equipment. Costs are calculated based on average annual salary of workers, rent costs and a fixed amount of other costs
Private label coffee production	Costs for buying, roasting the coffee. Calculated as by average orders of the product (depends on the segment)

APPENDIX 9. FUTURE BUSINESS MODEL AFTER DIGITAL TRANSFORMATION FOR THE HARDWARE DIVISION



APPENDIX 10. FINANCIAL MODEL OF THE FUTURE BUSINESS MODEL AFTER DIGITAL TRANSFORMATION FOR THE HARDWARE DIVISION

Customer Segments

Customer Segment	Market Size
Big clients	50
Medium clients	100
Small clients	250

Revenue Streams

Name **Revenue from hardware rent**

Type Rental

Value Proposition Big variety of hardware for all use cases

Customer Segment	Market Size	Market Share	Avg Units Rented	Av. Rental Fee/Unit	Time Period	Sub Total Sales
Small clients	250	40,0%	2	1 850,00	12	4 440 000,00
Medium clients	100	20,0%	3	1 700,00	12	1 224 000,00
Big clients	50	40,0%	5	1 600,00	12	1 920 000,00
						7 584 000,00

Name **maintenance subscription**

Type Subscription

Value Proposition: Comprehensive customer support and service with a personal technician

Customer Segment	Market Size	Market Share	Subscription Price	Subscription Period	Sub Total Sales
Small clients	100	20,0%	1 000,00	12	240 000,00
Medium clients	100	40,0%	2 000,00	12	960 000,00
Big clients	50	40,0%	2 000,00	12	480 000,00
					1 680 000,00

Cost structure

Name: **Buying hardware**
Type: Fixed

Total
-600 000,00

Name: **Fuel costs**
Type: Variable
Unit Cost: 300

Customer Segment	Market Size	Market Share	Average # Purchases	Time Period	Sub Total Costs
Small clients	250	40,0%	1	12	-360 000,00
Medium clients	100	20,0%	2	12	-144 000,00

Big clients	50	40,0%	3	12	-216 000,00
					-720 000,00

Name **IT solutions costs**
Type Fixed

	Total
	-1 400 000,00

Name **Spare parts**
Type Fixed

	Total
	-500 000,00

Name **Technicians salary**
Type Fixed

	Total
	-4 200 000,00

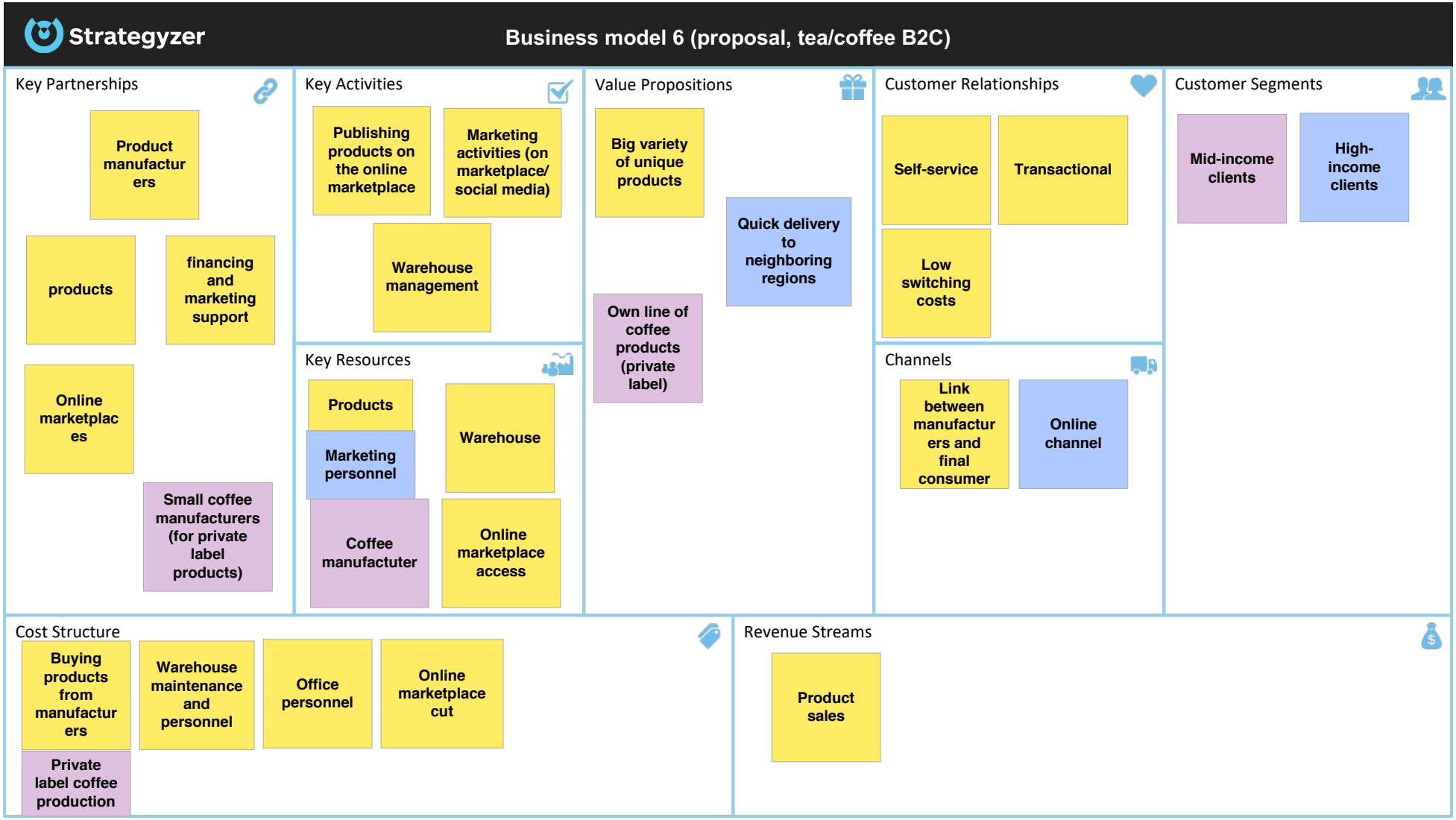
Totals

TOTAL REVENUES	TOTAL COSTS	PROFIT/LOSS
9 264 000,00	7 420 000,00	1 844 000,00

Explanation of revenue streams and cost structure calculations

Revenue streams	
Revenue from hardware rent	Revenue from hardware rent, based on average hardware rented to customers by segments. Assumed that all customers rent hardware
Maintenance subscription	Revenue from hardware maintenance, based on average maintenance costs by customers segments
Cost structure	
Buying hardware	Fixed annual budget for buying new hardware (except spare parts)
Fuel costs	Fuel costs for technicians transport, varied on the customer segment and how frequently they travel to them
Technicians	Technicians that are responsible for the main hardware maintenance, repair and installation procedures, based on average annual salaries
Spare parts	Costs for buying the spare parts, fixed annual budget
IT solutions costs	Costs associated with spendings on IT solutions: producing boards, additional salary spendings for technicians for integrating the boards to the hardware and setup + integration with the IT systems. Costs lowered after the 1st year to IT systems support and board support. All costs approximate

APPENDIX 11. FUTURE BUSINESS MODEL – B2C



APPENDIX 12. FINANCIAL MODEL OF THE FUTURE BUSINESS MODEL – B2C

Customer Segments

Customer Segment	Market Size
High-income clients	300
Mid-income clients	400

Revenue Streams

Name **Product sales**

Type Sale

Value Proposition Big variety of unique products

Customer Segment	Market Size	Market Share	Average # Purchases	Average Price	Time Period	Sub Total Sales
Mid-income clients	400	40,0%	2	2 000,00	4	2 560 000,00
High-income clients	300	60,0%	3	2 500,00	4	5 400 000,00
						7 960 000,00

Cost structure

Name	**Buying products from manufacturers**
Type	Variable
Unit Cost	1000

Customer Segment	Market Size	Market Share	Average # Purchases	Time Period	Sub Total Costs
High-income clients	300	60,0%	3	4	-2 160 000,00
Mid-income clients	400	40,0%	2	4	-1 280 000,00
					-3 440 000,00

Name	**Office personnel**
Type	Fixed

Total
-960 000,00

Name	**Online marketplace cut**
Type	Variable

Unit Cost	150

Customer Segment	Market Size	Market Share	Average # Purchases	Time Period	Sub Total Costs
High-income clients	300	60,0%	3	4	-324 000,00
Mid-income clients	400	40,0%	2	4	-192 000,00
					-516 000,00

Name	**Private label coffee production**
Type	Variable
Unit Cost	250

Customer Segment	Market Size	Market Share	Average # Purchases	Time Period	Sub Total Costs
High-income clients	300	60,0%	2	4	-270 000,00
Mid-income clients	400	40,0%	1	4	-160 000,00
					-430 000,00

Name	**Warehouse maintenance and personnel**
Type	Fixed

Total
-700 000,00

Totals

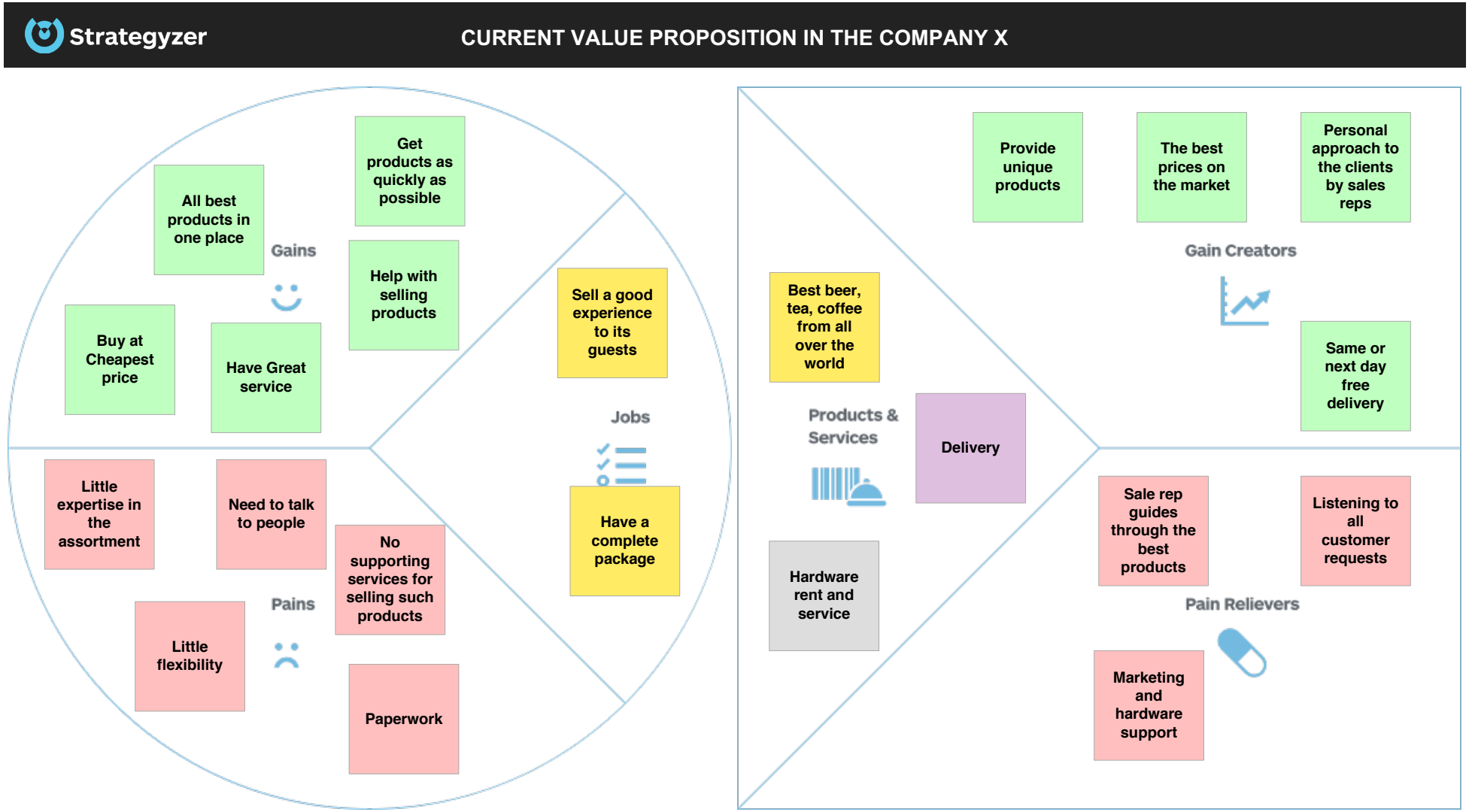
TOTAL REVENUES	TOTAL COSTS	PROFIT/LOSS
7 960 000,00	**6 046 000,00**	**1 914 000,00**

Explanation of revenue streams and cost structure calculations

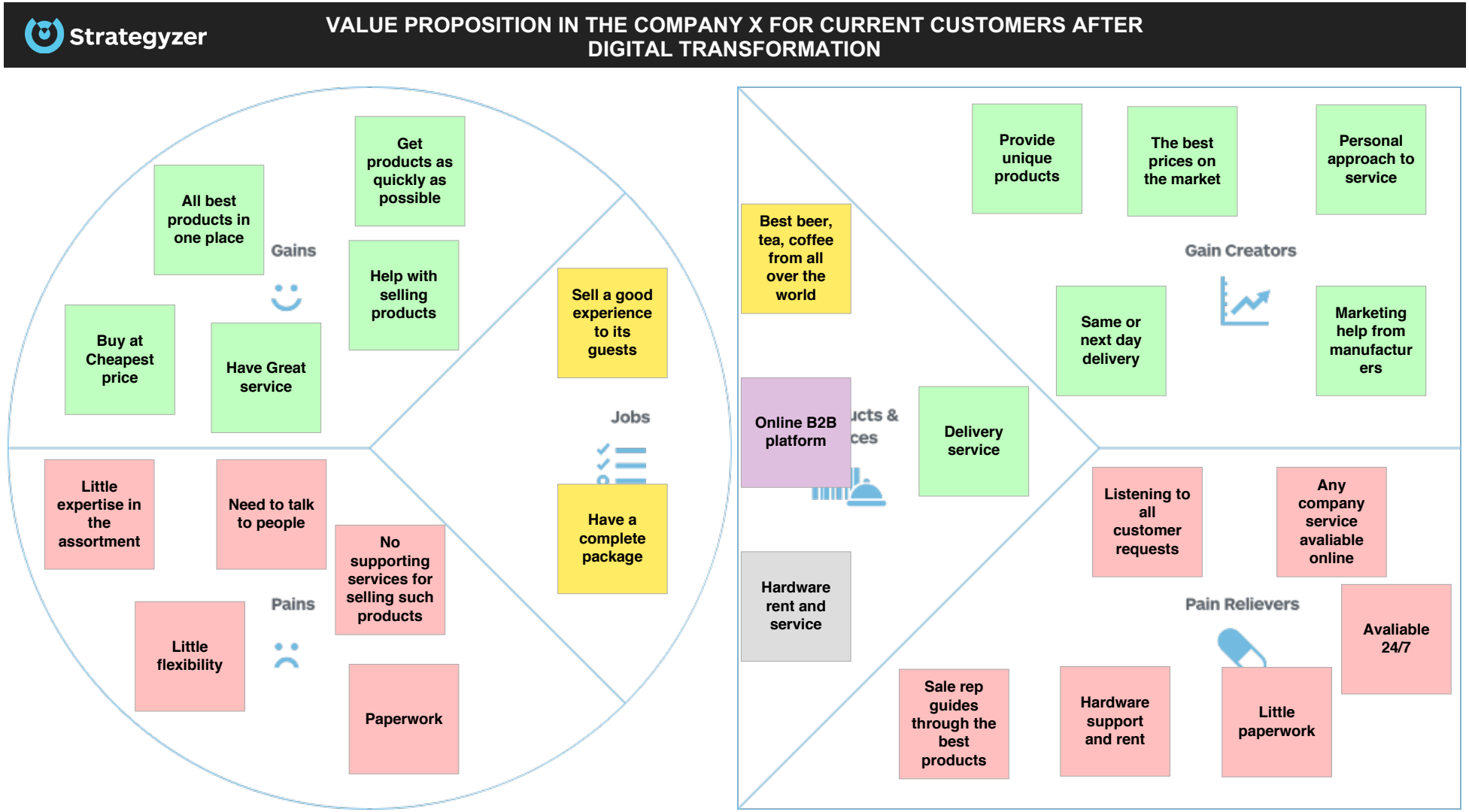
Revenue streams	
Product sales	Sales from products offered to customers, based on the average orders from each customer segment. Revenue is approximate
Cost structure	
Buying products from manufacturers	The big part of spendings is buying the products form the manufacturers. Costs based on average invoice of the items sold (depends on the segment). This cost is approximate
Warehouse maintenance and personnel	The warehouse is under rent in the company, and requires people to operate, as well as maintaining the lifting equipment. Costs are calculated based on average annual salary of workers, rent costs and a fixed amount of other costs

Office personnel	Personnel responsible for marketing and communication with marketplaces, plus salaries for finance department. Costs are approximate
Online marketplace cut	Cut paid to the marketplaces, that includes the marketplace cut and delivery costs to customer. Costs are approximate
Private label coffee production	Costs for buying, roasting the coffee. Calculated as by average orders of the product (depends on the segment)

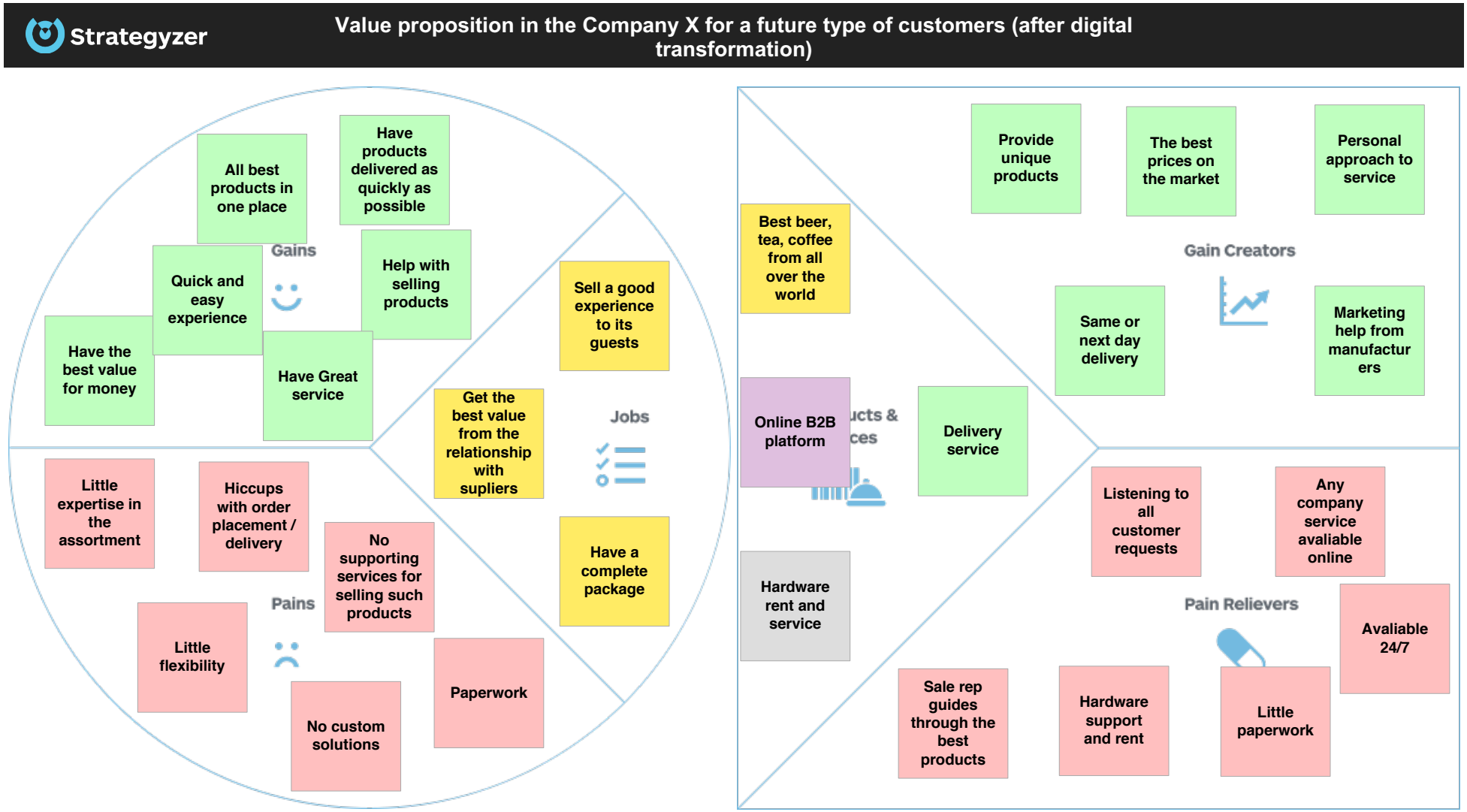
APPENDIX 13. CURRENT VALUE PROPOSITION IN THE COMPANY X



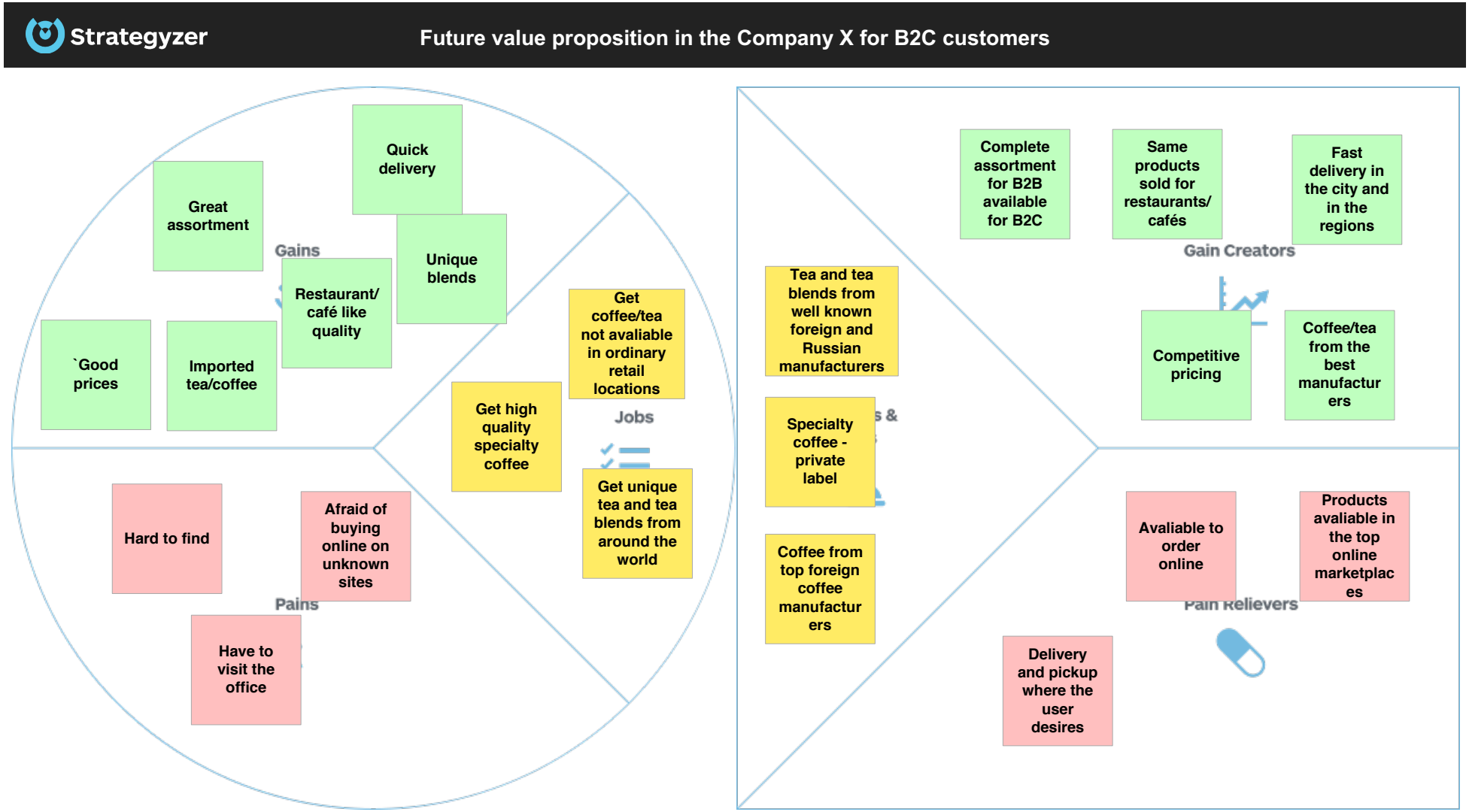
APPENDIX 14. VALUE PROPOSITION IN THE COMPANY X FOR CURRENT CUSTOMERS AFTER DIGITAL TRANSFORMATION



APPENDIX 15. VALUE PROPOSITION IN THE COMPANY X FOR A FUTURE TYPE OF CUSTOMERS (AFTER DIGITAL TRANSFORMATION)



APPENDIX 16. FUTURE VALUE PROPOSITION IN THE COMPANY X FOR B2C CUSTOMERS



APPENDIX 17. BUSINESS MODEL PORTFOLIO MAP FOR COMPANY X