TECHNOLOGY ENTERPRISE BUSINESS MODELS:
A HANDBOOK FOR THE POST PANDEMIC ERA

Key Activities

Value Propositions

Relation

Segments

Channels

Key Resources

Revenue Streams

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Technology Enterprise Business Models: A Handbook For The Post Pandemic Era

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Technology Enterprise Business Models: A Handbook For The Post Pandemic Era

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PREFACE

To offer a new service in business, technologies are often used to increase efficiency and service quality. Over the past few years, the service industry has transformed itself to adapt to the fast-changing business environment and consumer demand. Global industrial and educational activities are fast changing to adjust to the new paradigms caused by the COVID-19 pandemic. New business models that incorporate innovative technologies and deliver online-offline hybrid services are necessary to continue generating economic value. Technology servitization strategies are important in order to create valuable innovations for both conventional and new industries. This short book equips students and entrepreneurs with the following capabilities:

1.Value creation methods based on the holistic value chain of manufacturing and service convergence

2.Service management basics from new service design including customer journey map analysis to designing effective online-offline blended business models.

3.Insights into new business plan making along with a variety of latest innovative cases through the pandemic era.

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CHAPTER 1

Introduction to Technology-Service Management: Servitization, Frameworks, and Servitization Trends

Abstract: How to turn a traditional product into a service? How to equip the existing physical medium with differentiating features? Why do we need complementary services to an already seemingly efficient product? These and many more are the questions that concern the area of Technology-Service Management - the field, that primarily deals with the idea of developing and implementing technology for the sake of creating a service-shaped value out of it.

In this chapter, we will become familiar with the ever-evolving definition of servitization and understand why innovative firms are interested in pursuing this strategy. Subsequently, the chapter will introduce two necessary frameworks for identifying the need for servitization - namely, the Gap Model of Service Quality and ServQual. Finally, we will explore three types of Product-Service Systems (PSS) through the case studies of the recent servitization trends.

Keywords: Gap model, Product-service systems, Product-as-a-service, Service quality, servitization.

INTRODUCTION: THE CONCEPT OF SERVITIZATION

In such a large field covering numerous aspects related to services, the concept of *servitization* stands especially strong, continuing to develop both in academic and industrial realms in the current highly digitised business landscape. As entrepreneurial organisations all over the world began releasing the value of intangible offerings, *servitization*, has established its roots in even the most traditional markets long before academic interest in it. One of the examples of the first industrial servitization initiative belongs to Rolls Royce and their "power-by-the-hour" trademark, which was developed in 1962 (Rolls-Royce, 2012). Then-radical approach to simply leasing out an aerospace engine on an hourly basis with complementary mechanic services instead of selling it to airlines became the new business-deal standard in the industry making it easier for airlines to sustain the existing and acquire the newest additions to their aeroparks. Servitization, then, in its purest form can be generally identified as *an innovative strategy of*

adding services to the already offered physical goods in order to gain market competitiveness and customer turnover.

However, the notion of servitization has continued to evolve and has gained many shapes. Transforming from the simplest combined form of physical products and intangible services, servitization now represents *a complex strategy of highly customised solutions pursued in hopes of achieving higher customer satisfaction*. Still, the core of servitization, based on the pursuit of the combination of *goods, services and support*, remains the same. For instance, the solutions, which many of us cannot imagine modern life without, such as Netflix, Uber and Spotify all come together under the umbrella term of servitization initiatives. As such, the firms deploy personalised services and products, which ensure connected, long-term relationships with customers, hence, foster business profitability.

BENEFITS OF SERVITIZATION
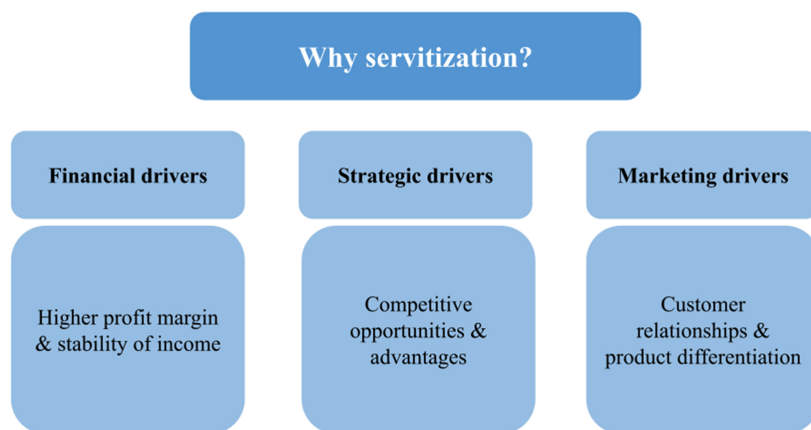
Fig. (1). The Main Reasons for Companies to Implement Servitization.

As can be seen from the examples drawn before, servitization is first and foremost an essentially beneficial strategy for firms, who rely solely on supplying hardware products (Fig. **1**). Adapting the strategies of Product-Service System (PSS) or Product-as-a-Service (PaaS), manufacturers, such as Rolls Royce, are able to not simply differentiate their revenue streams and improve product innovation, but more importantly - suggest thoroughly customised approaches to the consumer (Emerald Publishing, 2022). In this sense, servitization covers every vital aspect of a customer's journey by prolonging trust-based interaction between the firm and the client from the stages of actual purchase up until even the disposal of the product. For example, one of the leading Korean car manufacturers, Hyundai

Motor Company, has undertaken an innovative solution in servitization by initiating proprietary remanufacturing and service stations for "recovering mechanical sub-assemblies". This way, Hyundai is now responsible for satisfying the customer along the whole journey, finishing up with the recycling and reusing run-down parts as new materials for further construction. This servitization ensures Hyundai is able to continue prospering within the new sustainable type of circular economy as the innovative player in the car market.

Servitization, then, enhances both business and social welfare by accentuating the consumption of a business outcome instead of the simple and rather ecologically daunting purchase and disposal of equipment. In this scenario, the new unconventional business models of online businesses that we mentioned earlier, based purely on sharing and consumption of outcomes, are some of the most radical forms of servitization, which ensure zero-waste production.

The gradual transition to a more outcome-based PSS mode has also proven to be an advantageous tactic during the COVID-19 pandemic in specific, when "intangible assets", *services*, maximised corporate resilience for innovative businesses. This and other Technology-Service Business Innovations through the Pandemic Era will be discussed in detail in Chapter 2.

IDENTIFYING THE NEED FOR SERVITIZATION: YANDEX'S PSS

Now that we have underlined the numerous advantages of pursuing servitization strategy, it is important to understand *how* a firm is able to identify the need for it - through what tools and frameworks a business can approach the question of whether to implement it or not.

Although servitization is often highlighted as a desirable and often essential plan of action, this is not to say that it is always the final right answer for all businesses. For example, an innovative company Xerox, although having started pursuing servitization strategy, eventually had to separate its service and product businesses. Such a process is referred to as *deservitization*, when firms step away from service-oriented initiatives due to either failure in handling PSS models or the decision to further broaden and diversify their services, which are no longer as tightly related to their physical goods.

The Gap Model of Service Quality

Then, the question that arises is: how can entrepreneurs recognize the need for better servitization in their specific case? To do this, in 1985 Parasuraman, Zeithaml and Berry developed a framework called the *Gap Model of Service Quality*.

Technology-Service Business Innovations through the Pandemic Era

Abstract: In this Chapter, we will overview the cases of business innovation with a focus on servitization and digitization. The Chapter will introduce innovative initiatives in traditional markets, such as health and medicine-related, as well as manufacturing spheres. Lastly, we will become familiar with more unconventional pandemic-induced innovations within the clothing retail and fitness industries.

Keywords: Digitalization, Remote service, Sustainable servitization, Telemedicine, Virtual health.

INTRODUCTION

As has been largely implied throughout Chapter I, the gradual transition to a more outcome-based PSS mode has also proven to be an advantageous tactic during the COVID-19 pandemic in specific, when "intangible assets", and *services*, maximised corporate resilience for innovative businesses. Not only business initiatives in the healthcare sector, primarily focused on delivering essential for survival non-face-to-face medicine practices, but, in fact, every single non-physical intangible solution, which could be easily distributed in a suddenly dispersed and distanced world, has gained, as what industries believe, "overnight success".

The pandemic has become the break-open door for new market entry and, in many ways, its disruption by previously considered unconventional and risky players, who had struggled with staying afloat against the existing "traditional" corporations or setting up a legit foundation for the new market offer. While some of the traditional business giants have shown struggles adapting to the new reality of the closed-off world and the "new normal" of creating an online presence, easily accessible even through the harsh limitations, a number of innovative new firms have actively started taking over the decades-long set positions of industry standards.

Such a window of opportunities was majorly contributed to by the pandemic rules, dictating humanity to adopt solutions to retain their old familiar lifestyle, while existing in the brand new unexpected reality. Besides the apparent COVID-19-related health struggles, the pandemic has been proven to be especially harsh on the disabled community and other people with already pre-existing health conditions, such as diabetes. Patients, who had previously been under constant control, management, and physical care of health facilities and caretakers, were suddenly urged to attend to their own needs and learn to self-manage their conditions.

In addition to special struggles, such ordinary activities as meeting other people, having work meetings, attending school, stocking up on groceries and even doing a regular workout became a challenge in the new normal of self-isolation, causing the growth of mental health issues and further complication of already existing physical barriers. As such, not simply each industry, but the whole world was in urgent need of everyday solutions for a previously *normal undisturbed* lifestyle. Servitization trend with a core focus on digitalization and sustainability, then, became the *new standard for the new normal*.

In this Chapter, we will overview the cases of business innovation with the focus on servitization and digitization. The chapter will introduce innovative initiatives in traditional markets, such as health and medicine-related, as well as manufacturing spheres. Lastly, we will become familiar with more unconventional pandemic-induced innovations within the clothing retail and fitness industries.

SERVITIZATION: DIGITALIZATION AND SUSTAINABILITY TAKING OVER THE PANDEMIC

The pandemic has made the question of pursuing integrated digital-based solutions, consisting of not simply a physical offer but also an intangible online-transmitted part of service, more crucial than ever (Fig. **4**). As many firms have already been engaging in distancing themselves from strict productization and approaching the right side of the PSS spectrum, some were still reluctant to pursue even a partial transition to digital online platforms to provide and advertise their services. The pandemic, however, completely ruled out such hesitation and debunked the myth of the online bubble.
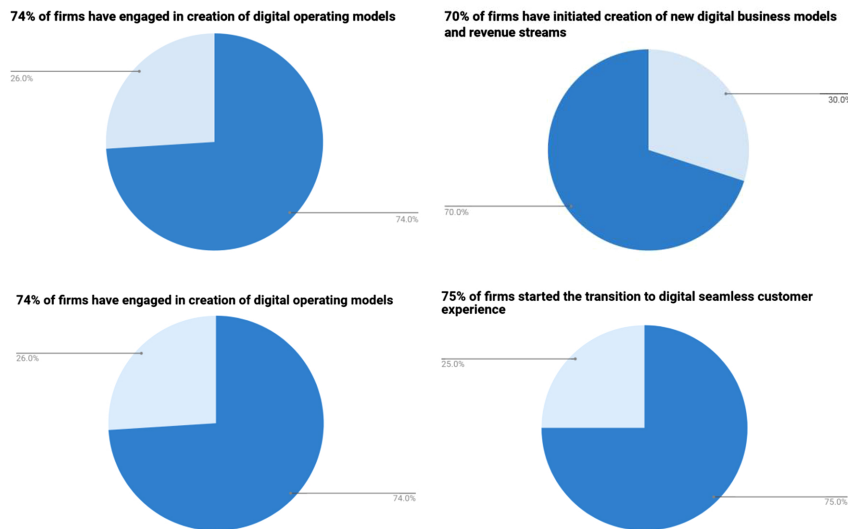
74% of firms have engaged in creation of digital operating models

26.0%

74.0%

70% of firms have initiated creation of new digital business models and revenue streams

30.0%

70.0%

74% of firms have engaged in creation of digital operating models

26.0%

74.0%

75% of firms started the transition to digital seamless customer experience

25.0%

75.0%

Fig. (4). Digital Transformation Accelerated by the Pandemic.

Servitization of the existing business models, in this sense, became the right step towards a more digitalized and sustainable operation. Digitalization has started accelerating "by months or even years" at its normal speed due to the COVID-19 pandemic and is here to stay even after the pandemic is over. This includes not only the digital transformation of operating models but also providing seamless digital customer experience and increasing the workforce through new ways of remote, AI-driven and automation opportunities. Although there are certain challenges to the complete transition to the digital realm of providing products and services, such as lack of knowledge and resources capacity, the majority of the innovative firms are continuing to diligently invest in the development and acquisition of tools, which can help them to "help both customers and workers".

Similarly, self-isolation has highlighted on the sustainability trend or more so the radical need for it in primarily physically present industries. The pandemic not only brought to light the essential front-line position of the lower-class workers, such as waste collectors and cleaners, but also taught all the sectors the harsh lesson of planning, preparing, and mobilising resources in advance. The listed initiatives and key messages are perfectly aligned with the ideas of integrated PSS solutions targeted at reducing the continuous production of new goods and increasing the sharing of the philosophy of already existing products. Moreover, as will be discussed later in detail in the section of the chapter on manufacturing servitization, digital-oriented servitization provides crucial insights into the ways the currently existing products and services are organised and consumed by the

Creating Customer-Oriented Online-Offline Business Models

Abstract: In this chapter, we will clarify the importance of the right service design for offline-online business models under PSS. The chapter will also overview the main principles of service design. Lastly, we will become familiar with specific frameworks for driving the workflow of creating a highly customer-oriented business model through the core ideas of service design.

Keywords: Business model, Customer-oriented service, Customer journey map, Delivery gap, Service design, Service blueprint, User persona.

INTRODUCTION

As can be seen from the previous chapters, it is crucial for an innovative firm to catch upon and satisfy customers' needs, dictated by the ever-growing world changes, through more flexible forms of business models, such as PSS. Now, the essential question to ask is how exactly a firm can ensure it creates a product-service business model, which is customer- and user-oriented. While thinking of the previously discussed cases of virtual workout and telemedicine services, we have to remember that customer-oriented service design is the stepping stone to any business model success, not limited to solely global and online realms of international conglomerates. In fact, with the intense competition rising each day in all the spheres concerning both intangible services and physical products, each firm, especially small and mid-size ones, is at risk of drowning under the weight of their self-acclaimed knowledge of their consumers and their specific needs. As such, a study on a small-sized hotel in Bangkok showed the level of importance of navigating the customer-oriented service requirements in order to successfully challenge the "competition with mid and large-sized hotels" in Thailand, where international hotel chains share the majority of the market share. It was identified that customer satisfaction and loyalty are to be driven by the right strategy for designing the service products.

To put it more intuitively, whereas over 80% of companies are absolutely convinced they deliver the "superior [service] experience" to their customers, only

8% of their actual customers agree with the statement. Such a drastic difference between perception and reality can be largely attributed to and identified via the Service Gap Model, which has been discussed in Chapter 1. This is, in fact, a perfect example of the Delivery Gap, which can be explained through two major reasons: the basic business growth paradox and customer relationship difficulty. The first issue is highly difficult to overcome for any firm aiming at fast and effective growth as in pursuit of a new larger customer group, the firm innately alienates itself from the core *existing* customers, wearing off customer loyalty. For instance, if a small-sized hotel in Bangkok decides to advertise as an all-inclusive type of resort, while not offering this exact service, thus misleading their customers as the latter would expect to receive a service promoted. The second cause of the Delivery Gap is, on the other hand, the one most firms deal with and attempt at solving on a daily basis. It is generally considered that the getting-to-know-the-customer and adjustment-making are parts of a cyclical process of running a customer-oriented business model, where "get[ting] out and look[ing] [at customers' wants]" through continuous runs of user analyses is the ultimate answer to building sustainable PSS customers desire.

Although a firm utilising the Service Gap Model framework is likely to swiftly uncover and close the gaps, this is not to say that such a service design Delivery Gap cannot be ultimately avoided overall. In this sense, the specifically adjusted and customer-targeted service design becomes the major point for ensuring and improving the most sophisticated consumer experience. Service design, in its essence, should be built upon smooth communication of specific parts of the firm: business initiatives and goals, technology and market, and user analysis and understanding. Only then the firm is able to claim they are able to provide the "superior experience" as most firms do without necessarily meeting their customers' needs and uncovering their pain points.

In this Chapter, we will clarify the importance of the right service design for offline-online business models under PSS. The Chapter will also overview the main principles of service design. Lastly, we will become familiar with specific frameworks for driving the workflow of creating a highly customer-oriented business model through the core ideas of service design.

CUSTOMER EXPERIENCE: UNDERSTANDING THE IMPORTANCE

Generally speaking, customer experience is usually associated with more traditional marketing and sales touchpoints with customers, which can be overviewed under the Customer Journey Map. One of the simple examples of such traditional touchpoints can be a visually appealing physical store decoration, which is meant to catch the eye of passersby. As can be expected, before the PSS

business models started developing rapidly, such purely physical customer experience initiatives have proven to be effective in bringing solid customer retention and acquisition, in turn increasing sales and loyalty. However, as digital platforms and e-commerce have started spreading around, intangible and almost fleeting interactions and impressions of a firm have started leaving a more prolonged effect on the customer experience.

In this sense, falsely, customer retention can be valued as more important than customer acquisition. However, in fact, providing the right necessary customer experience not only improves the existing consumers' loyalty but also raises brand awareness and its favourable image, which in turn generates additional consumer flows. That is due to the fact that while only 15 people tend to tell others about a satisfactory service received, a total of 24 tell about a negative experience of interacting with a firm. Thus, the importance of a positive customer experience, which ensures addressing all the essential customers' pain points, cannot be possibly diminished as it encompasses the end value of the business the customer interacts with directly.

SERVICE DESIGN: THE PRINCIPLES

Service Design, then, is an innate part of building the necessary customer experience internally from the firm and its capacities. Service Design refers to a creative and practical process, which aids the internal team in assessing, improving, and innovating the existing service or enhancing the creation of a new one. The core of Service Design is the consumer and their pain points, where the business intends to implement the changes to best meet the needs of the customers. Service Design enables the firm to deliver customer-oriented services that lead to overall business success, based on an empathetic understanding of all consumer requirements. It is, then, especially important in online-offline hybrid business models, where the right customer experience has to be ensured along both the digital and physical journey of the consumer from the very beginning stage of interactions with the brand to the ending stage of the customer receiving the end product service.

The 5 basic principles of Service Design were outlined by Marc Stickdorn and Jakob Schneider, which, first and foremost, emphasizes the user (customer)-centric approach to the process. This means the Service Design process should take into consideration all the customers' values, beliefs, preferences and even expectations regarding the product service and how they intend to use it. To gather such information on the existing customers, it is possible to conduct an extensive user analysis through rounds of surveys, personal interviews, observations and field research. Moreover, the insights coming from the inner

Technology-Service Convergence for Value Innovation and Social Welfare

Abstract: In this chapter, we will discuss the notion of value innovation and its importance for the PSS business models, while differentiating the areas of red and blue oceans heavily based on the winning idea of the Blue Ocean Strategy proposed by Chan Kim and Renée Mauborgne in 2004. The chapter will also overview the main strategies for getting started with value innovation for firms through differentiation. Finally, the concept is to be put into practice through the review of case studies of firms and organisations that have engaged in value innovation through redefining market boundaries.

Keywords: Blue ocean strategy, Social innovation, Technology-service convergence, Value innovation.

INTRODUCTION

In a fast-paced technology and data-driven society and industry, there is an immense potential for growth, disruption and creation of more flexible and, hence, high-risk markets and new business models. With such an advantage of continuous improvement and creation comes increasingly fierce competition, which further enhances the vulnerability of both existing firms and new entrants in the market, where the value of differentiation from competitors cannot be diminished. In a traditional sense, differentiation is driven either by increasing the value of the firm's specific offer or by simply pursuing a cost-saving or low-price strategy, which enforces a head-to-head competition based majorly on incremental improvements in cost, quality, or both. As such, the majority of the organizations opt between either value or pricing, while completely alienating themselves from the concept of breaking the value-cost trade-off, where value innovation becomes the stepping stone to the company's success (Porumboiu, 2021).

While most companies focus on matching or even getting ahead of their rivals, such pursuit often leads to similar actions undertaken and strategies alike, which essentially cancel out the differentiation goal. Instead, Chan Kim and Renée Mau-

borgne in their book on the Blue Ocean Strategy shed light on innovative firms' tactics, which isolate themselves from the rest of the market by building out fundamentally new competition-free market space by creating flexible forms of product services. Such a path to value innovation requires a competitive mindset and a systematic way of not simply identifying market opportunities in customers' needs, but also driving them. Instead of searching within the conventional boundaries of the current industry competition, innovation-oriented firms are able to look methodically beyond those invisible limitations to find deserted areas of the market that represent real value innovation.

Kim and Mauborgne identified that the major reason why specific firms grow in a sustainable manner at a fast pace unlike their competitors is due to their contrasting approaches to framing strategies. The difference in approaches was not caused by a detailed choice of a specific tool or model, but rather by the firm's fundamental and implicit assumptions about strategy and why exactly they were pursuing it. While less successful companies' strategies were dominated by the idea of staying ahead of the game, the top businesses paid little to no attention to their rivals and sought to emphasise their value proposition through value innovation. This is due to the fact that innovations are considered to be the major drivers of sustainable, steady and long-term growth for a business, especially in such a vulnerable environment as product-service systems.

In this Chapter, we will discuss the notion of value innovation and its importance for the PSS business models, while differentiating the areas of red and blue oceans heavily based on the winning idea of the Blue Ocean Strategy proposed by Chan Kim and Renée Mauborgne in 2004 (Fig. **10**). The chapter will also overview the main strategies for getting started with value innovation for firms through differentiation. Finally, the concept is to be put in practice through the review of case studies of firms and organisations, that have engaged in value innovation through redefining market boundaries.

VALUE INNOVATION: UNDERSTANDING THE CONCEPT AND BACKGROUND

Value innovation is an all-around, solid foundation of the Blue Ocean Strategy theory and framework developed by Kim and Mauborgne in their book, which proposes a methodology for innovation-oriented firms to break free from standard industry competition and explore the possibilities beyond it. The ascending questions that should be asked are then: what exactly is the Blue Ocean and are there any other Oceans the framework takes into consideration?
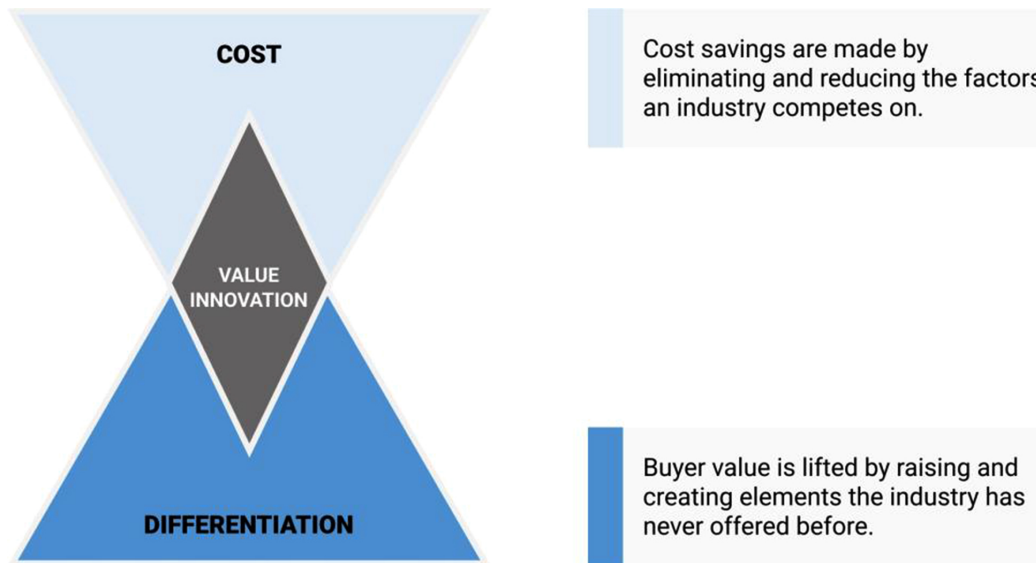
Fig. (10). Value Innovation Strategy by Cost Saving and Differentiation.

Blue Oceans, according to the authors, refer to all the unexplored or unknown markets, where competition is non-existent. Thus, the Blue Ocean is full of opportunities for profitable, sustainable growth. In sharp contrast, the Red Oceans, the existing markets, are filled with the stoic and harsh competition that eliminates the opportunities for harvesting profit for new entrants and less grand players, which cannot overthrow the current top players. As such, the Blue Ocean Strategy is based on the concept of creating new demand by developing uncontested market space by disrupting or expanding the existing market instead of competing in the congested Red Ocean. This is where the notion of value innovation comes in as the major turning point of the firm's strategy.

Value Innovation is, then, the simultaneous pursuit of differentiation and low cost, where the combination of both and the creation of a new uncontested market space is essential for further success. Such a combination ensures that innovation is not internally driven by the firm's existing resources or aspirations, but provides a highly customer-oriented product-service design. Technical enhancement is the major element to review, evaluate and improve under the value innovation as an infinite number of businesses offer products and services with a variety of functions and values irrelevant to the consumer. Value Innovation, in this sense, can be considered to be administered and deployed successfully only if the firm aligns the proposed innovative product, service, or process with utility, price and cost. As a result, Value Innovation benefits both the customers and the company as it eliminates competition, ensures cost savings, and

Exemplary Cases of Servitization for Overcoming Crisis

Abstract: As demonstrated in Chapters 1-4, the notions of servitization and PSS are currently becoming the new normal for businesses all over the world, especially in the unfolded circumstances of the pandemic and the gradual transition to online digital space. To further aggregate the theoretical frameworks discussed, this chapter will introduce a number of relevant winning cases of the implementation of servitization and PSS models among the platform giants in travel and stay booking, e-commerce, car sharing, content, as well as health appliance and telemedicine industries.

Keywords: Crisis-induced servitization, E-commerce service, Manufacturing servitization, Virtual travelling.

INTRODUCTION

Coupang: E-Commerce Services Pandemic Boom

When it comes to COVID-19, it is an undeniable truth that the restrictions and the following crisis have halted or at least restrained the majority of global economic activities and, thereby, significantly damaged industries and created economic shock as a large international ripple effect. According to the OECD (2020), a month of quarantine reduces the annual rate of GDP by as much as 2%. As such, since the Korean economy is highly dependent on international trade being "one of the world's most export-dependent industrialised nations", Korea could not avoid severe damages from the abrupt termination of the global commerce flux. In response, Korea has been able to push forward those domestic industries that managed to turn the limitations into an opportunity for rapid growth. The top four South Korean companies that have successfully expanded during COVID-19, as pointed out in the previous Chapters, are online shopping and delivery services, which further demonstrates the general trend of seeking remote purchasing options in the post-pandemic society. Among the four winners, Coupang stands out as a firm that made the most exponential progress due to its innovative tactics and strategic moves in servitization. The case successfully highlights the methods

of how the business can recognize necessary components to attract investment and utilise the existing assets to face unsystematic risks, such as the pandemic.

Overall, there are multiple factors Coupang considered to efficiently structure its value chain to maximise profits in the unexpected events of the COVID-19 crisis. Firstly, as for the personalised approach to customers, Coupang realised that its users' main complaint is a long period of delivery. Having identified such a pain point among its major shortcomings, Coupang developed new delivery services, such as Rocket Delivery, Rocket WOW and Rocket Fresh all aimed at not simply reducing but majorly cutting down on the waiting time for its most valued customers. While the Rocket Delivery program is intended to bring the customers' products based on zero additional delivery fee based on the minimum required purchase sum, the Rocket WOW subscription allows the users to order unlimited purchase amounts. Rocket Fresh, on the other hand, provides a service of overnight delivery of fresh groceries that is essential for the majority of South Korean households. The fast delivery services, however, only became possible due to the company's initiative of launching fulfillment services and contracting the logistics providers as it allowed a large amount and variety of products to be instantly prepared and shipped.

Furthermore, to provide a broader range of products and reach out to a wider user range, Coupang implemented Rocket Earth, an initiative to ensure the provision of unavailable Korean items from all over the world, which effectively covered the pain point of the customers, who are unable to travel and shop abroad or initiate purchases on foreign e-commerce platforms due to the language barrier. As a result of such strategic moves amid the pandemic, Coupang gained a solid layer of new customers, leading to a dramatic increase in product sales - the main component of the firm's revenue stream. All in all, by effectively analysing its weaknesses, listening to the customers' pain points, and launching newer and more efficient services, Coupang has managed to innovate the outdated delivery system through servitization and personalised customer approach by reflecting both the market trends, as well as the circumstances of the current world, which led to the rise of the company's revenue to the rate of over $11 billion in 2020, a 45% increase from the revenue level of 2019.

MY REAL TRIP: SHIFTING TRAVEL PLATFORMS FOCUS TO VIRTUAL & DOMESTIC ROUTES

While greatly promoting the industries related to the online space, such as e-commerce, the pandemic has, on the other hand, critically affected various other businesses, including the tourism industry highly dependent on the physical presence of customers and their ability to commute internationally. According to

the report of the United Nations World Tourism Organization, the number of international tourists in the world decreased by roughly 75% in 2020 compared to 2019. For South Korea especially, the damage to the travel industry reached a critical point of approximately 86% drop in the number of incoming foreign travelers. Statistically, according to the Korea Association of Travel Agents, more than 4,000 travel-related companies were virtually closed due to the imposed restrictions with the majority of the survivors struggling to find methods to stay afloat and break even.

One such company My Real Trip, a travel-oriented booking platform, has suffered significant financial losses and has had to define and initiate innovative strategies to revive its business from crisis. In general, My Real Trip pursued two servitization initiatives amid the pandemic: 1) transforming "the paradigm of travel" and 2) pivoting the focus of their travel services. As for the first strategy, the company decided to turn its customers' pain point of inability to travel into a demand stream by developing a live tour service, which allowed the users to embark upon a guided virtual trip via a YouTube live stream, where "tourists" were able to actively engage in communication with the tour guides through the functions of commenting, liking and reacting to the stream, which significantly elevated the notion of the customised approach of the company. As for the second initiative, My Real Trip proactively shifted the focus from international travelling to domestic tours among its customers after thorough research and data analysis findings that hinted at the people's willingness to switch to the exploration of domestic routes. Based on such demand, My Real Trip launched various home travel packages in South Korea, including over 3,000 tours to Jeju Island, which it successfully advertised on social media platforms to reach more than 5% more of its target clientele of MZ Generation. As a result of servitization methods and recognising customers' needs, My Real Trip managed to overcome the physical travel-related barriers imposed by the pandemic and subdue financial and business challenges.

RIDI BOOKS: FORMING LONG-TERM CUSTOMER RELATIONSHIPS BASED ON PSS

RIDI Books, a connected content company, turned into a surplus with the highest performance amid the pandemic, recording a 35% year-on-year growth with a total of 155.6 billion Korean won in 2020 and an operating profit of 2.6 billion Korean won. As such, RIDI became one of the Korean unicorns that hold a value of more than one trillion won despite the pandemic circumstances. Although the book market is highly regressive due to its outdated strategies, RIDI has been growing rapidly in the past 10 consecutive years by targeting ebook markets and

SUBJECT INDEX

A

B