
Conversion of Sars-Cov-2 Threats into Business Opportunities by Polish Outpatient Clinics

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Abstract:

Purposes: The objective of this paper is to study the characteristics of the companies, which improved their performance in the Sars-Cov-2 period.

Design/Methodology/Approach: Given the novelty and complexity of the studied area, this exploratory study uses a case study approach. The research comprised 6 in-depth interviews and an analysis of documents obtained from the company, including financial ones.

Findings: We have identified the studied 13-months period of the pandemic was not homogenous, but comprised 4 phases. The intensity and key challenges of the pandemic differed greatly in each of studied 4 phases. As a result, the priorities, operations and challenges of studied Company has been considerably adjusted in each of identified phases. The studied Company made a good use of low intensity phases, as to prepare to high intensity phases, developing, inter alia, Sars-Cov-2 healthcare activities and telemedicine. Next, we observed the significant decrease of prior pandemic sales segments and fast development of Sars-Cov-2 activities, the share of which increased to 63,7% of total Company's sales in the first quarter of 2021.

Practical Implementations: We postulate the agile healthcare organizations can explore Sars-Cov-2 related businesses opportunities, which, if addressed well, should overweight the threats resulting from the pandemic.

Originality/Value: The novelty of the article is the examination of the problem of maintaining business continuity, the identification and use of business opportunities in the Sars-Cov-2 pandemic for a specific case of a SME Company from the health care sector.

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1. Introduction

The Sars-Cov-2 pandemic has been considered the most significant concurrent public health and economic crises in recent times, resulting in many lives being taken away and sharp declines in the economies of majority of the countries (Klein and Todesco, 2021; Korneta and Rostek, 2021). From a management perspective, it has been already indicated that pandemic caused a major exogenous shock, which has considerably altered the competitive landscape for both small and large companies (Amankwah-Amoah *et al.*, 2021; Wenzel *et al.*, 2020). The paralysing effects of COVID-19 have resulted in debt and bankruptcy of many companies (Dunne and James, 2021).

In the United States, 43% of businesses were temporarily closed and had, on average, reduced their workforce by 40% (Bartik *et al.*, 2020). In Brazil, the revenues of business to business companies reported on average declines of 29.3% and 46% in relation to business to business and business to customer companies respectively (Digital Results, Endeavor and Small Companies Big Business, 2020). In Germany, the scientists, have reported increased difficulties for operations of companies and considerable deterioration of the economic climate for investment in innovation (Kuckertz *et al.*, 2020). Other scholars indicated increased difficulties for the companies in access to capital and the emergence of new behaviour patterns (Sandberg *et al.*, 2020). OECD noted general difficulties for all forms of entrepreneurship across many sectors and countries worldwide (OECD, 2020).

Although, in vast majority of the cases the scientists have reported the negative effects of Sars-Cov-2 on businesses worldwide, there are instances of positive effects of the pandemic on the companies. These instances are significantly less frequent than the numerous negative ones. Sigala discussed why and how the COVID-19 could become an opportunity to transform the companies during the pandemic successfully (Sigala, 2020). Other scholars postulated the introduction of a mix of cutbacks and strategic investments, including cost discipline and financial prudence, with development of opportunities that offer reliable returns in environmental shock periods should enable the companies to perceive the pandemic as an opportunity (Gulati *et al.*, 2010; Linden, 2021).

Based on the literature study of previous crises, the following scholars have proposed ways to overcome economic downturns in finance, strategy and the institutional environment (Eggers, 2020). Many scholars postulate businesses based on advanced technologies despite the pandemic are thriving. This is primarily because the consequence of the lockdowns is the extreme increase in the Internet and social media (Donthu and Gustafsson, 2020). In healthcare industry a significant increase of telemedicine usage follow by its development in the pandemic has also been a subject of numerous studies (Kludacz-Alessandri *et al.*, 2021; Liu *et al.*, 2020; Perrin *et al.*, 2020).

Whereas the performance of the vast majority of companies has considerably deteriorated through the Sars-Cov-2 pandemic, some organizations have successfully transformed and were able to adjust themselves to unexpected crises improving their performance. Yet, the empirical literature lacks an understanding of the characteristics of the companies which through the Sars-Cov-2 pandemic managed to adjust their operations to different environment and improve their performance. Assuming that no two economic sectors are alike and due to the novelty of the studied area this paper is focused on a single industry. Here, a health care sector is being studied because of its critical role for the Sars-Cov-2 pandemic containment. Thus the objective of this paper is to study the characteristics of the companies, which improved their performance in the Sars-Cov-2 period.

Given the novelty and complexity of the studied area, this exploratory study uses a case study approach. In this case study, we employ 6 in-depth interviews and analysis of documents obtained from the company. The studied company is one of small- and medium-sized entities (SME). Such selection has been made deliberately due to several reasons. Firstly, SME account for around 95% of world enterprises and play a critical role in every economy (Appiah *et al.*, 2019). Secondly, SME poses less resources and capabilities than larger organizations. Therefore SME require more attention from scholars (Korneta, 2020). Thirdly, because SME are prone to be severely affected by major economic disruptions (Pal *et al.*, 2014).

Finally, because the small size of SME makes them more flexible when threats or opportunities appear in their environment (Eggers, 2020). Given the above, SME appear to be especially suitable for this study.

The rest of the paper is organized as follows: in the section 2, the research methods and design of the case study are given. In the section 3, we present results obtained from a case study. The section 4 provides discussion and limitations of our study. The paper ends with conclusions and implications.

2. Methods

2.1 Design of the Study

In order to understand how only selected companies were able to adjust appropriately to the Sars-Cov-2 crisis situation, which eventually turned out to become their opportunity, we employed a case study approach. The case study is considered the best suited research method for studying complex, real-life phenomena, especially those for which theoretical knowledge does not exist or is scarce (Yin, 2017).

Therefore, we have selected the company for this study based on the following criteria: (1) considerable history of operations in a healthcare sector; (2) small or medium-sized company; (3) outstanding performance improvement during the Sars-

Cov-2 pandemic period. The research approach in this study comprised 6 in-depth interviews and an analysis of documents obtained from the company, including financial ones. Such a combination of analytical and descriptive research methods allows the researcher to conduct observations and investigation of salient factors in the study unit and to confront the results obtained from 2 different significant data sources.

2.2 Description of the Studied Company

The case study was carried out in CortenMedic (CM or the Company). Before any investigation commenced, we obtained consent for our study from the management and the only owner of the Company. CortenMedic is a polish, medium-sized healthcare services provider, which was established in 1993. CM operates in two districts of Poland and poses 12 multi-clinics. The structure of the Company consists of 3 major divisions: (1) the operations, (2) the strategy and business development and (3) the finance and human resources. CM employed approximately 500 and 700 employees in 2019 and 2020, respectively. A significant portion of the CM mentioned above employees are part-time workers, including medical doctors, the majority of whom works for CM in the afternoons or one or two days a week. Four consecutive years before the pandemic, the Company's sales revenue grew around 20% per year.

2.3 In-Depth Interviews with Selected Representatives of CM

Interviews are one of the most important qualitative data collection methods, which have been widely used in conducting numerous studies (Qu and Dumay, 2011; Serry and Liamputtong, 2001). We chose in-depth interviews because we consider them the most suitable for this study. In-depth interviews involve comprehensive conversations between the researcher and interviewee, have an overall purpose prompted by the research aims and are strongly guided by the interviewee's perceptions and experiences (Dickson-Swift *et al.*, 2007). We have not employed structured interviews for this study, as given the novelty and complexity of the studied area, we could not formulate the right set of questions.

However, before the in-depth interviews commenced, the interviewer had read press releases and publicly available online materials related to the studied company to familiarise himself with basic facts and prepare for the interview. Adequate preparation for the interviews is acknowledged to be vital as it underpins the interview process and influences subsequent research stages (Minichiello *et al.*, 1995).

We have selected, to our in-depth interviews, the following representatives of the Company: (1) the owner and the operations manager, (2) the strategy and business development manager, (3) the chief accountant, (4) the recruiter and (5-6) two local managers responsible for operations. In total, we performed 6 in-depth interviews.

The interviews with the owner, who also acts as the operations manager and the strategy and business development manager, lasted approximately 2 hours, whereas the remaining ones were around 1 hour.

All of the interviews were held in the studied company premises, in a period between June and August 2021. At the beginning of in-depth interviews, we obtained a voluntary consent from each of the interviewees. Next, the interviewer led the discussion to identify and understand the key factors behind the company's successful transformation during the Sars-Cov-2 pandemic period. Many probing questions aimed to obtain more detailed information and follow-up ones aimed to obtain a deeper understanding have been raised. Special attention has been paid to explore each of discussed issues before moving on to the next issue.

2.4 Administrative, Operational and Financial Documents

Once we obtained in the interviews the general understanding of studied company activities before and during the pandemic, we obtained, from the accounting department, monthly trial balances for the period from 1 of January 2019 to 31 of March 2021. Obtained data were in PLN. Since the exchange rates significantly fluctuated during the studied period, we did not retranslate the values into other currencies, like USD or EUR but presented them in PLN so that the financial results stem purely from the performance of the Company. We note for indicative purposes, the European Central Bank average exchange rates for PLN into EUR in 2019 and 2020 were 4.109 and 4.4423, respectively. Additionally, the Company provided us with basic administrative documents, like selected agreements, healthcare industry presentations and its internal laws and procedures.

2.5 Data Analysis

In this case study, we have triangulated results obtained from the three different data sources: (1) in-depth interviews, (2) financial documents, (3) other documents. Based on the results of interviews, we have selected the periods we consider homogenous for the Company and compiled monthly data to arrive at financial information for each identified pandemic period. Next, we have corroborated the indications obtained from the in-depth interviews and non-financial documents with the Company's financial results. We paid particular attention to identify characteristics and enablers of the Company's successful transformation during the pandemic period, which could be next followed up by other researchers and generalizable to other companies or industries.

3. Results

In due course of in-depth interviews with the management of CortenMedic, we have identified the studied pandemic period from 1 March 2020 to 31 March 2021 was not homogenous and comprised four different phases. During these 4 phases, the

Company had to restructure its approach and operations to adjust efficiently to the changes in its environment, resulting from further pandemic development. Below, we provide identified by us 4 phases and their description. Additionally, we provide a brief description of before the pandemic period for comparative purposes.

3.1 Prior Pandemic Period

Before the onset of the Sars-Cov-2 pandemic, CortenMedic operated in four major areas: (1) dentistry, (2) primary healthcare, (3) specialists health care, and (4) mobile dentistry. Dentistry sales account for around half of CM sales revenues. The management indicated the key CM focus was on dentistry development. Although CM had under reasonable control general dentistry, the Company was continuously looking to hire more dentistry surgeons, prosthetics and orthodontists. Despite the general shortage of aforementioned specialists, the latter was especially difficult to find, due to increasingly growing patients' needs in the esthetical medicine area.

The general manager of CM stated: *“although we had 23 orthodontists employed at the end of 2019, we could immediately give employment to the following 23 orthodontists if only we had such a chance”*. The patient queues to the aforementioned specialists were up to even 3 months. In 2018 CM begun mobile dentistry development, mainly dedicated to primary schools children. The second CM priority was IT development, yet without telemedicine. The primary healthcare business was stable in terms of sales, number of patients and required very little attention from the management. The provision of medical specialists had been an auxiliary activity of CM, in which the Company held a weak competitive position.

In Table 1, we summarise CM yearly financial statements for 12 months periods of 2019 and 2020. One can note, sales revenues of 3 (dentistry, specialists and mobile dentistry) out of 4 sales segments declined during the pandemic. The only segment in which the Company's sales increased was the primary healthcare. This was a result of the per capita payment scheme. This increase in revenues is due to the fact that the Polish National Health Fund pays per capita and not per number of services provided, and twice per year increases the fees paid to healthcare services providers.

Table 1. Summary of CortenMedic financial statements for 12 months of 2019 and 2020.

	12M 2019		12M 2020	
	Period	%	Period	%
DENTISTRY	10 290	50%	8 912	31%
PRIMARY HEALTHCARE	4 481	22%	5 104	18%
SPECIALISTS	4 168	20%	2 214	8%
MOBILE DENTISTRY	1 525	7%	1 061	4%
SARS-COV-2 TESTING		0%	8 267	29%
SARS-COV-2		0%	2 836	10%

DENTISTRY				
VACCINATIONS		0%		0%
SALES REVENUES	20 464	100%	28 394	100%
MEDICAL DOCTORS SALARIES	-8 720	-43%	-7 996	-28%
MEDICAL PERSONNEL SALARIES	-2 541	-12%	-4 614	-16%
MEDICAL SERVICES	-1 327	-6%	-2 959	-10%
MATERIALS	-787	-4%	-1 582	-6%
MEDICAL MARGIN	7 087	35%	11 243	40%
REMAINING RUNNING COSTS	-5 984	-29%	-7 857	-28%
PROFIT BEFORE TAX	1 103	5%	3 386	12%

Source: Own elaboration based on documents obtained from the Company.

As disclosed in Table 1, despite the considerable decrease in statutory sales in 2020, CM increased its sales revenue and profitability due to new pandemic related sales development. Sales revenues of Sars-Cov-2 testing and dentistry accounted for as much as 39 % of CM total sales revenues in 2020. Management indicated that without new Sars-Cov-2 related sales CM would have recognized losses and would have to reduce its employment to adjust to the environment and ensure business continuity.

3.2 First Phase of the Pandemic (Mar-Apr 2020)

In March 2020, the first official Sars-Cov-2 cases were reported, triggering panic in Poland. CM suddenly faced the following critical problems: (1) reluctance of personnel to provide any services to the patients; (2) significant decrease of the number of patients and (3) considerable shortages of medical supplies, especially antiseptic ones. According to the management, problem number one was the medical personnel, who was, on the one hand well aware of infection risk resulting from physical contact with patients and, on the other one, wealthy enough not to work for a certain period. Tremendous reluctance to provide medical services was evident among the dentists.

The management board of CM was directly calling doctor by doctor and kindly asking if the doctors could appear in the clinic for at least several hours per week. The majority of doctors refused to provide any services in the first two months of the pandemic. Due to the considerable effort of the management, CM ensured continuity of the services and, through the first period of the pandemic, provided the services to all pain patients. Parallel to ensuring the presence of the employees, CM had to ensure the supplies of antiseptic materials and restructure its safety procedures to protect its employees and patients from the infection risk. In April, the management of CM decided to launch 2 new Sars-Cov-2 activities, i.e., Sars-Cov-2 testing and Sars-Cov-2 dentistry for infected patients and patients on quarantine.

In Table 2, we provide the financial results of CM for each of the 4 identified pandemic phases. All data is either in PLN thousand, or if indicated so, as a percentage. As presented in Table 2 due to the decrease of statutory sales and yet insignificant and inefficiently organized sales of Sars-Cov-2 related services, CM recognized a loss in the first phase of the pandemic.

Table 2. Summary of CortenMedic financial statements for each of identified four pandemic phases. All figures are in PLN thousand.

	Phase 1		Phase 2		Phase 3		Phase 4	
	3-4M 2020		5-9M 2020		10-12M 2020		1-3M 2021	
Dentistry	1 095	44,4%	4 482	38,3%	3 224	26,0%	3 869	18,4%
Primary healthcare	832	33,7%	2 139	18,3%	1 337	10,8%	1 353	6,4%
Specialists	209	8,5%	911	7,8%	611	4,9%	600	2,9%
Mobile dentistry	144	5,8%	249	2,1%	264	2,1%	612	2,9%
Sars-Cov-2 testing	18	0,7%	1 801	15,4%	6 427	51,8%	13 382	63,7%
Sars-Cov-2 dentistry	170	6,9%	2 118	18,1%	548	4,4%	520	2,5%
Vaccinations		0,0%		0,0%		0,0%	673	3,2%
Sales revenues	2 468	100, %	11 701	100, %	12 412	100, %	21 009	100, %
Medical doctors salaries	-928	-37,6%	-3 490	-29,8%	-2 444	-19,7%	-2 934	-14,0%
Medical personnel salaries	-430	-17,4%	-1 482	-12,7%	-2 281	-18,4%	-2 710	-12,9%
Medical services	-127	-5,1%	-1 092	-9,3%	-1 637	-13,2%	-1 542	-7,3%
Materials	-107	-4,4%	-619	-5,3%	-854	-6,9%	-885	-4,2%
Medical margin	876	35,5%	5 018	42,9%	5 195	41,9%	12 939	61,6%
Remaining running costs	-981	-39,7%	-3 660	-31,3%	-2 740	-22,1%	-5 480	-26,1%
Profit before tax	-105	-4,3%	1 358	11,6%	2 455	19,8%	7 459	35,5%

Source: own elaboration based on documents obtained from the Company.

3.3 Second Phase of the Pandemic (May-Sep 2020)

In May 2020, the number of Sars-Cov-2 infections considerably decreased, while CM had several months to prepare for the second wave of the pandemic. CM focused its IT and medical department on telemedicine development at that time, which was assumed to be a key for providing safety services through further pandemic development. The studied Company quickly recognized telemedicine as the safe way to provide the majority of the services, minimizing the risk of personnel and patients contamination. Developed telemedicine services related mostly to primary healthcare and specialists services other than dentistry.

Secondly, the Company continued opening new Sars-Cov-2 testing points and improving their performance. The competition in Sars-Cov-2 testing was feeble. The management had many doubts about the further development of the pandemic, as the number of infections in the first wave of the pandemic was significantly lower than widely expected. The question was if there was a point in opening new testing points as there were so few infections. CM concluded two agreements with laboratories for Sars-Cov-2 polymerase chain reaction (PCR) testing. The Company has also

improved the performance of Sars-Cov-2 dentistry and increased the number of clinics with such services up to four.

As presented in Table 2, CM recognized profits in the second phase of the pandemic. The most profitable activity for CM in the studied period was Sars-Cov-2 dentistry, as the National Health Fund paid per hour of availability to provide services to infected patients and not per treated patients. There were almost no infected patients in that period, so sales revenue from Sars-Cov-2 dentistry mainly converted into profits.

3.4 Third Phase of the Pandemic (Oct-Dec 2020)

Conversely to the initial two phases of the pandemic, in the last quarter of 2020, the true and severe pandemic emerged in Poland. The number of infections and Sars-Cov-2 deaths reaches its maximum. The extent of the pandemic was a shock for Poland and CM management. Although CM had 38 Sars-Cov-2 testing points, the key problem which emerged was the laboratory. PCR testing at laboratories became a bottleneck of Sars-Cov-2 testing in Poland. There was a vast shortage of laboratories on the market. Waiting times for laboratories to run the test increased up to almost a week, which was unacceptable. These shortages led to a sharp increase in PCR testing prices.

In the second phase of the pandemic, CM concluded two agreements with laboratories with fixed PCR testing prices. Although the laboratory production costs per 1 PCR were around 60% lower than the agreed sales laboratory price to CM, all laboratories in Poland increased their Sars-Cov-2 testing prices at the beginning of October, including the 2 ones with whom CM concluded agreements. The laboratories cooperating with CM proposed its new prices 50% higher than the agreed ones, and broke the former agreements.

As a result, CM had to immediately find new laboratories, as without them, collecting of material from patients was pointless. Supply problems increased waiting times for patients. In October 2020 and first week of November, CM received significant criticism from patients for delays in reporting results. The key middle-level manager, responsible for Sars-Cov-2 testing, decided to quit working for CM, as the pressure was too high and there was a serious risk CM will not deliver the results to the patients.

At the end of October, CM signed new agreements with laboratories with favourable prices for larger volumes and penalties if the laboratories do not report results within 48 hours or do not accept up to 4 thousand tests per day from CM. Since the second half of November, the Testing process became very profitable, waiting times for the results reduced up to 48 hours. In December 2020, CM employed around 200 new employees responsible for Sars-Cov-2 testing.

Due to the development of telemedicine in the summer period, around 20% of the medical doctors' services were through telemedicine. Due to that, the problems with medical staff reluctance to provide treatment face to face to patients were considerably reduced. Hence despite the number of infections was higher in the second wave of the pandemic than in the first wave, to Company experienced considerably less difficulties with business continuity.

At the very beginning of December, the focus of CM changed once again into the implementation of the vaccination process. Accordingly, the Company commence preparations of its premises and personnel for vaccinations.

In Table 2 we provide the financial results of CM for the last quarter of 2020. Sales revenues from Sars-Cov-2 testing accounted for more than half of the Company's sales revenues. Due to the conclusion of the right agreements with laboratories and improvement of performance management sales of testing become very profitable, leading to gains, which the Company had never recognized. The Sars-Cov-2 PCR business carried high margins. The competition had remained weak during the third phase but has begun to grow.

3.5 Fourth phase of the Pandemic (Jan-Mar 2021)

The focus of CM in the first quarter of 2021 was on 2 significant issues: (1) Sars-Cov-2 testing and (2) Sars-Cov-2 vaccinations. At that time, the Company operated 38 testing points, in which the Company performed up to almost 4 thousand tests per day. This activity required little attention from the management, as the process ran already well and was under good control. However, the competition at Sars-Cov-2 testing became noticeable. The management focused on vaccinations development.

The management did not reach expected vaccination sales levels. This was because of two significant reasons. Firstly, conversely to Sars-Cov-2 testing, there were many competitors on the market willing to participate in that process. Secondly, there were significant shortages with supplies of vaccinations, which did not allow for fast sales development. As provided in Table 2, due to the Sars-Cov-2 testing process performed on a large scale, CM recognized very high profits. In the first quarter of the pandemic (or in the 4 phase), sales revenue from Sars-Cov-2 testing accounted for 63.7% of the total sales revenue of the Company. The remaining two Sars-Cov-2 activities, i.e. Sars-Cov-2 dentistry and vaccinations were considerably less significant to the Company.

4. Discussion

The sudden onset of the pandemic has caused a considerable shock to the vast majority of companies, resulting in deterioration of their profitability and revenues (Digital Results, Endeavor and Small Companies Big Business, 2020), massive lay-offs (Bartik *et al.*, 2020) and some companies going bankrupt (Dunne and James,

2021). The vast majority of entities have no management to adjust themselves to an unfavourable change in the environment. The scholars have already indicated that 3 significant sources are underlining the deterioration of business climate.

The first one results from different forms of isolation imposed by the governments, such as shutdowns of events and corporate offices, quarantines, and lockdowns. The second one results from the uncertainty about the situation and its further development, which leads eventually to a considerable decrease in consumers spending (Korneta and Rostek, 2021; Ozili and Arun, 2020). The latter reason relates to a change of consumer behaviours and needs (Yuan *et al.*, 2021). The performance of selected to this study Company was considerably affected by each of 3 aforementioned sources.

Due to imposed limitations imposed by the Polish government and the uncertainty and fear of patients, the number provided by the Company services has significantly reduced in the pandemic period. In this case study, we have identified the statutory sales revenue of the studied Company has also deteriorated. Before the Sars-Cov-2 pandemic, i.e., in 2019, studied Company's sales revenue from dentistry amounted to PLN 10,290 thousand, the sales revenue from medical services specialists totalled PLN 4,168 thousand, while the sales revenue of mobile dentistry totalled PLN 1,525 thousand.

In the pandemic period, i.e., in 2020, the Company's sales revenue from dentistry, specialists and mobile dentistry declined to PLN 8,912 thousand (by 13.3%) to PLN 2,214 thousand (46.8%) and PLN 1,061 thousand (30.4%), respectively. The only statutory, i.e. prior to the pandemic, sales revenues segment, which grew were primary health care revenues, which grew from PLN 4,481 thousand in 2019 to PLN 5,104 thousand in 2020. This was not a result of performance improvement of the Company but rather a side effect of a per capita payment system within which operate Polish healthcare services providers.

The National Health System in Poland pays for each patient affiliated to the company and increases its fee 2 or 3 times per year. Hence all primary healthcare services providers in Poland, even if they provide the same number of services as in the prior year, have higher sales revenues due to stated fee increase. These characteristics of Polish healthcare per capita primary health care system has already been reported by scholars (Kludacz-Alessandri *et al.*, 2021). As indicated above, the total statutory sales revenue of studied the Company has declined in 2020 compared to 2019. This observation is aligned to already indicated by numerous other scholars decline in revenues of companies worldwide (Digital Results, Endeavor and Small Companies Big Business, 2020; Korneta and Rostek, 2021). Hence, if not the considerable change of sales structure of studied Company its financial results would not improve but likewise the majority of companies would decline.

Several scholars have already indicated that selected companies could explore business opportunities arising from the Sars-Cov-2 pandemic. These companies have innovative business models, are very flexible and naturally resilient (Breier *et al.*, 2021; Ritter and Pedersen, 2020, Menoni and Schwarze, 2020). Other scholars claim the latter is especially important for small and medium-sized companies and provide recommendations on how their resilience could be promoted (Branicki *et al.*, 2018).

It has also been stated that leadership competencies play a key role in rapid and successful Sars-Cov-2 business transformations. They also added strategies for crisis risk management should be deeply rooted in organizations leadership skills (Alonso *et al.*, 2020; Wardman, 2020). We have identified that successful Sars-Cov-2 strategy transformation was very tightly linked to high CM flexibility supported its leadership skills. This was especially visible in the initial phases of the pandemic when the studied company business continuity was at risk. The management board of the studied Company got personally involved in discussions with its medical doctors, despite their unwillingness to work during the pandemic, as to ensure the services keep being provided.

Next, the management did not hesitate to enter entirely new activities and shift the focus of the company from its core (statutory) activities into the Sars-Cov-2 related ones. The results of this case study support indications of other scholars, confirming the Sars-Cov-2 pandemic provided not only threats to the companies but also considerable opportunities.

Before the Sars-Cov-2 pandemic, the telemedicine services have been limited to serve primarily those patients, who had been unable to visit the clinics physically, primary because of remote distance, including rural areas and underprivileged populations (Mooi *et al.*, 2012; Doolittle *et al.*, 2011). Pursuant to the onset of the Sars-Cov-2 pandemic, global health care systems have attempted to shift as many services and as quickly as possible. Telemedicine has also become a key tool for screening potentially early symptoms of Sars-Cov-2, protecting both the patients and medical personnel from additional contamination exposure (Hollander and Carr, 2020; Perrin *et al.*, 2020). Many scholars have recently reported a revolution of telemedicine in various healthcare areas, including, inter alia, in pulmonology and primary care (Chang *et al.*, 2021); oncology (Hasson *et al.*, 2021), otolaryngology (Ohlstein *et al.*, 2020).

It has also been acknowledged, that telemedicine is a safe and effective treatment provision, which does not compromise medical care or patient – medical doctor relationship (Hasson *et al.*, 2021; Korneta *et al.*, 2021). Selected to this study Company very quickly turned to telemedicine development. Since May 2020, the Company commenced its works aimed to implement telemedicine in the primary healthcare and services provided by the specialists. This management decision followed considerable problems met by the Company in the first identified phase of pandemic, where shortages of medical personnel were a key problem to the

Company. The company acknowledged telemedicine as a way to reduce both: the risk of contamination and the fear of medical personnel and patients. As a result of undertaken actions, CM provided around 20% of services as telemedicine in autumn 2020, concerning primary healthcare and specialists services.

Although the development of telemedicine has not contributed directly to the profitability of the Company it has ensured its going concern and so we consider it as one of the critical factors for the successful pandemic transformation of the Company. Obtained by us results endorse postulates of other scholars (Hollander and Carr, 2020; Kludacz-Alessandri *et al.*, 2021; Hasson *et al.*, 2021; Perrin *et al.*, 2020) on the revolution in telemedicine during the Sars-Cov-2 pandemic. Furthermore, we shall note, adopting the new technologies was also indicated as one of the six critical success factors (CSFs) for developing COVID-19 preventive strategies to control the pandemic with an economy-centric approach (Kashyap and Raghuvanshi, 2020).

World Health Organization (WHO) distinguished 5 stages of Sars-Cov-2 pandemic development, one overlapping the following one. In the first stage of the pandemic, an unknown virus emerged and was identified. In the second stage of the pandemic the virus spread outside China. In the third one, the spread of the virus accelerated, affecting many sectors of the global economy. At that stage, many restrictions were implemented by various nations. In the fourth stage, despite yet persistent uncertainties, many global partnerships formed, aimed to improve Sars-Cov-2 diagnostics, treatment, and vaccinations. In the fifth stage, the economic impact on many economies was noticeable, and the mass vaccination process was already running.

Further, WHO notes that there were vast shortages of protection materials and ventilators in the first and second stages of the pandemic development and that the ordinary health care process was significantly reduced (WHO, 2021). The scholars have also already indicated the Sars-Cov-2 pandemic period is not a homogenous but comprises waves with different pandemic intensities. They also noted, the different timing of the pandemic onset is not the only source of differences between the waves. It appears the differences in temperature, humidity or calendar seasons play a crucial role in the pandemic development, resulting in the variances of the intensity of the waves.

It has also been already reported the number of waves and their intensity differs greatly in the case of various continents (Fisayo and Tsukagoshi, 2021; Seong *et al.*, 2021). Findings obtained in this study are aligned to WHO and other scholars' indications. The results of this case study confirm, that from a single company perspective the pandemic period cannot be contemplated as a homogenous one but as four different periods (pandemic phases). The environment of the studied company, its priorities and operations differed significantly in each of identified phases.

Further, we note it was critical to the company to prepare itself during the low-intensity pandemic phase, i.e., phase 2, against phases of higher intensity (3 and 4). The studied company made good use of a low-intensity phase to develop its activities, such as improvement of the Sars-Cov-2 testing process or telemedicine development and due to that the Company enjoyed higher performance and profits in high-intensity pandemic consecutive phases.

This study has several limitations. The main limitation results from the methods used. Although the case study approach does not allow for an empirical generalization in probabilistic or deterministic terms, its results should be considered as ideas that provide reasonable expectations of similar results in other cases. Furthermore, the results obtained in case studies should be validated or falsified by quantitative research (Bengtsson and Hertting, 2014; Lincoln and Guba, 2009). As a following limitation, we shall note, the only studied company is from the Polish healthcare market. Consequently, the results obtained in this study might not be applicable to other markets or other countries.

The aforementioned limitations of the study are an indication for further research. From the scientific point of view, it would be interesting to verify if healthcare organizations also had considerable opportunities in foreign markets or to follow up results of this study through quantitative research based on larger samples.

5. Conclusions

The Sars-Cov-2 pandemic has significantly and negatively affected the vast majority of countries resulting in declines of gross domestic products of many economies. It appears, however, not all industries have been affected equally. Among the industries to which the Sars-Cov-2 pandemic provided both considerable threats and opportunities is the healthcare industry. The objective of this paper is to study the characteristics of the companies, which improved their performance in the Sars-Cov-2 period.

In this study, we have analysed a medium-sized Polish healthcare services provider who managed to take advantage of the Sars-Cov-2 pandemic and improve its overall performance and financial results. First, we have identified the studied period from 1 March 2020 to 31 March 2021 as not a homogenous one but comprised four periods (phases), each lasting only several months, with significant differences among pandemic intensity. We have also identified two interesting characteristics of the studied Company. The first is a significant decrease of the majority of its statutory (i.e. prior Sars-Cov-2 pandemic) sales revenues. The second one is the development of large and profitable Sars-Cov-2 businesses, due to which the overall results of the company improved.

The studied Company introduced significant changes through each of identified 4 pandemic phases, relating to its priorities and operations. The Company made good

use of low-intensity pandemic phases to develop new activities, such as telemedicine and the Sars-Cov-2 testing process, whereas the high-intensity pandemic phases focused primarily on business continuity. The sales revenues of the studied company increased by 38.8%, while its gross profits increased by 206.9% in 2020 compared to 2019. The studied company has never managed to improve its performance and financial results so spectacularly within a year. Based on results obtained in this study, we claim the agile healthcare organisations can explore Sars-Cov-2 related businesses opportunities, which, if addressed well, should outweigh the threats resulting from the pandemic.

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