

# PROCESS MANAGEMENT OF A MODEL COMPANY CRISIS CAUSED BY A PANDEMIC

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Research article

**Abstract:** This article focuses on the crisis management of a selected company in a pandemic. The first part focuses on the specification of the threat of a pandemic in the conditions of the company, and the definition of possible types of crises that a pandemic can cause. What effects can a pandemic cause a company and model crisis management to manage a crisis in a company caused by a pandemic. The article focuses on a specific company. The measures put in place by the company to avoid forced closures. At the end of the work, I suggest appropriate steps for more effective preventive measures in the company.

**Keywords:** Crisis Management, Security, Risk Analysis, Pandemic, Covid-19.

## Introduction

The Covid-19 pandemic was first identified in December 2019. Measures have been taken to protect the lives and health of the general population to reduce the spread of the disease (Mallapaty, 2020). This has had an adverse effect on private companies. It can also be considered a source of absence for many employees due to quarantine. Other companies had the same problems, leading to an unreliable supply chain. The resulting problems have had a variable impact on different companies with regard to their field of expertise and dependence on other economic entities (Kenzhin, 2022). It is appropriate for management to be informed about the coming crisis and possible disruption of processes in the company. Assessing countermeasures and ways to remedy such situations would greatly help the management of each company. Currently, the situation is improving and the economic conditions of European countries are returning to normal. This study was created under restrictive measures due to the strong wave of the Covid-19 pandemic. The crisis preparedness of society for a pandemic is very important.

## Impacts of the crisis

*„The coronavirus pandemic has affected businesses in a variety of industries and sectors. Employers had to reconsider their current operations. Those who have so far rejected contactless transactions, online operations, Home-Office, new*

*technologies, etc., had to quickly reconsider their position. Shops, establishments, administrative services companies as well as restaurants have moved their business to the online environment.“* (Investicniweb, 2020)

The COVID-19 pandemic has hit many businesses negatively and made them vulnerable. This can have a lasting impact on SMEs. Especially today, when a pandemic is taking place, huge economic changes are causing problems for companies in Europe and around the world.

Family businesses and accommodation and catering services faced the worst consequences of the Covid-19 pandemic. On the contrary, the lowest losses are calculated by companies in the energy industry, telecommunications, and IT. This is the result of a current global survey among 500 companies of the Global Risk Landscape consulting company BDO. Six out of ten family businesses said the effects of the pandemic were worse than expected. Entrepreneurs, at least in part, government compensation programs have helped offset their losses. Although these programs failed to cover all the losses of entrepreneurs, they helped them partially overcome the first wave (Zada, 2021).

## Home office

The concept of the Home office means that employee is allowed to work from its home. Many companies decided to adopt this philosophy. It minimalizes human contact between employees thus reducing the risk of COVID-19 infection.

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As this solution is favorable among employees, many companies examine the possibility of allowing home offices even after the end of the pandemic. Unfortunately, this cannot be applied to all companies. For example, manufacturing companies must have employees attending to machines and the overall manufacturing process (Martin et al., 2022).

### ***Employee deficiency***

As a solution to the pandemic infected people are quarantined so as not to further spread the infection. An asymptomatic person can spread the disease to a large number of other people before its detection. In a company environment, this means a simultaneous quarantine of possibly many employees. It may result in the inability of a company to perform its tasks. Missing human resources may disrupt the completion of contracts before the deadline (Alketbi et al., 2022).

### ***On-line adaptation***

As it brings serious advantages many companies decided to adopt online forms of trade, such as e-shops. Pandemic concerned advantages are obvious. This service avoids direct contact between customers and retailers. As it is also less demanding on shopping space and human work, it may lead to a downsizing of some companies. It may lead to a loss of employment for some individuals. On the other hand, this approach saved many companies that would be otherwise unable to practice their business. It is favourable among the general population as well. A large number of people grew accustomed to ordering food online, for example. Due to pandemic restrictions, many stores and establishments started to adopt some form of online services, if they already haven't (Shen et al., 2022).

### ***Payment method frequency***

For many people, it was still customary to pay in cash. To decrease the rate of COVID-19 spread it was advised to use a payment card for all possible purchases in person. This led to an increase in using a payment card as a primary payment method for many people and it can be observed in raw numbers since the first quarter of the previous year (Alrefai et al., 2021).

### ***Decreased demand***

Some pandemic restrictions and other related phenomena (some of them already discussed) have led to an unemployment increase. It can be observed

also as a decreased purchasing power of the general population, leading to lower demand for more luxurious goods. But there is not a negative influence on all branches of industry. We can observe higher demand for medical supplies. Also, the demand for food-related products has not decreased as well (Adam et al., 2022).

## **Crisis management model for pandemic business crisis management**

Due to the fact that the company's executives did not want the information about their company together with their name to be published, the name of the company in this work is changed to "Company X".

The company's activities began in 1993 when it was founded by two partners and focused on locksmithing and custom manufacturing. In 1997, the company was transformed into a legal entity a limited liability company.

It developed self-sufficiency in technological equipment so that the company would be able to carry out production from primary production to the final product or focus on cooperation and collaborative work with engineering companies in the country and abroad. At present, the company also offers products and services in the field of processing noble materials - aluminium alloy and stainless steel.

The company ensured that it was able to perform a comprehensive production process - material separation, bending, blasting, painting, including road transport. It produces both sub-products for regular customers according to their requirements and final products, which the company itself sells through sales representatives who provide marketing and sales activities. Its production focuses on engineering supply activities in the field of industrial exhaust systems, especially exhaust equipment and filtration equipment.

Currently, the company employs about 150 employees. The company's annual turnover is around CZK 245 million / year -> 9 611 472, 50 Euro. A yearly overturn of this company is presented in Fig. 4.

### ***Company production***

In the field of engineering, the company deals with:

- material division,
- sheet metal bending,
- welding,

- machining,
- surface finishes.

The company strives for comprehensive engineering production - i.e., from design, and assembly, to import to the buyer.

As part of the creation of clean air in the industrial sector, the company produces:

- filtration and suction equipment (Fig. 1, Fig. 2),
- filter towers,
- cyclone separators,
- fans,
- vacuum tables,
- industrial hoods (Fig. 3).



Fig. 1 Filtration and extraction equipment (own processing)



Fig. 2 Filtration and suction equipment (own processing)



Fig. 3 Industrial hood (own processing)

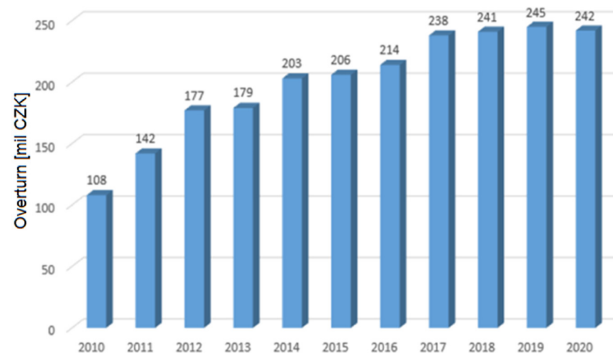


Fig. 4 Graphic representation of the company's turnover (own processing)

### ***SWOT analysis***

This analysis simply describes the internal and external environment of the company and helps to identify the strengths and weaknesses of the company, as well as to identify threats and opportunities.

Tab. 1 SWOT analysis (own processing)

	AUXILIARY (to achieve the goal)	HARMFUL (to achieve the goal)
<b>Internal place setting</b>	<b>Strengths:</b> <ul style="list-style-type: none"> <li>• Financial background</li> <li>• High labor productivity</li> <li>• Satisfied employees</li> <li>• Delivery outside the Czech Republic</li> </ul>	<b>Weaknesses:</b> <ul style="list-style-type: none"> <li>• Decrease in staff due to a pandemic</li> <li>• Decline in demand</li> </ul>
<b>External environment</b>	<b>Opportunities:</b> <ul style="list-style-type: none"> <li>• Subsidies</li> <li>• New technologies</li> <li>• Strengthening the work team</li> </ul>	<b>Threats:</b> <ul style="list-style-type: none"> <li>• Pandemic</li> <li>• Natural disasters</li> <li>• Fire</li> </ul>

Overview of this analysis can be seen in Tab. 1.

## Business continuity plan

After identifying the major risks facing the company, I decided to draw up a Business Continuity Plan. It is a business continuity plan that aims to help ensure the company's operations and operations in the event of direct threats or disasters.

BCM is one of the managerial disciplines and focuses on determining the potential impacts that threaten the endangered company in a crisis situation. BCM creates a framework to ensure a degree of resilience and the ability to prepare and respond in advance to unexpected events, thus protecting primarily the company's key processes, but also potential higher interests, such as the market value of the company (Manijak et al., 2012).

Business Continuity Management focuses mainly on:

- safety, health, and lives of workers, the population,
- compliance with contractual obligations,

- internal communication,
- renewal of critical business processes and functions,
- meaningful risk management,
- trust of customers and business partners,
- good name of the company,
- market position.

*„ISO 22313 is generic and applicable to all sizes and types of organizations, including large, medium, and small organizations operating in industrial, commercial, public, and not-for-profit sectors that wish to:*

- *establish, implement, maintain and improve a BCMS;*
- *ensure conformance with the organization's business continuity policy; or*
- *make a self-determination and self-declaration of compliance with this International Standard.“* (ČSN ISO 22313, 2012)

Tab. 2 BCP for the normal operation of the company (own processing)

Business Continuity Plan	
BCP design for activities - normal operation of the company - production and distribution	
<b>Threat Name:</b>	Pandemic
<b>Probability of occurrence:</b>	Ongoing phenomenon
<b>Threat description:</b>	Employee infection, company management
<b>Significance:</b>	Undesirable
<b>Prevention:</b>	Isolation, vaccination, compliance with hygiene rules and procedures
<b>Measures in the event of a threat:</b>	
<ul style="list-style-type: none"> <li>• Disruption of operation (partial Home-Office, alternating shifts),</li> <li>• Isolation of infected employees,</li> <li>• Distribution of containers with disinfection, more frequent cleaning,</li> <li>• In the worst case, temporary shutdown.</li> </ul>	



Tab. 3 Levels of the extraordinary event (own processing)

<b>Degree of emergency - Time - Impact rate</b>			
<b>1<sup>st</sup> degree - 8 hours - no impact</b>	<b>2<sup>nd</sup> degree - 1 day - small impact</b>	<b>3<sup>rd</sup> degree - 5 days - great impact</b>	<b>4<sup>th</sup> degree - over 10 days - critical impact</b>
Small system outages, absence of employees (up to 10 %), limited operation, unforeseen accidents.	System outages, absence of employees (up to 40 %), limited operation, unforeseen accidents.	Major outages of staff absence systems (up to 70 %), limited operation, unexpected serious accidents.	Extensive system failures, absence of employees (over 90 %), unexpected critical accidents - critical impact.

Tab. 4 Crisis team structure (own elaboration)

<b>Crisis team structure</b>				
<b>Role</b>	<b>Function</b>	<b>Name</b>	<b>Contact</b>	<b>Degree</b>
Team leader	Chief Executive Officer	Petr M.	775 xxx xxx	1, 2, 3, 4
Representative	Business Manager	Adam K.	773 xxx xxx	2, 3, 4
Team member	Operations department	Adéla R.	608 xxx xxx	2, 3, 4
Team member	Production Department	Richard J.	773 xxx xxx	2, 3, 4
Team member	Economics Department	Markéta P.	776 xxx xxx	2, 3, 4

Tab. 5 Contacts in case of an emergency (own processing)

<b>Important contacts</b>	
Emergency medical service	155
The Fire brigade	150
Police Czech	158

Tab. 6 Team meeting place (own processing)

<b>Team meeting place</b>	
Meeting place:	In company X, company address. Boardroom.
Alternate meeting place:	Company management office.

Tab. 7 List of plan holders (own processing)

<b>List of plan holders</b>			
<b>Name</b>	<b>Form</b>	<b>Date</b>	<b>Signature</b>
Petr M.	Printed / electronic		
Adam K.	Printed / electronic		
Adéla R.	Printed / electronic		
Richard J.	Printed / electronic		
Markéta P.	Printed / electronic		

Tab. 8 Incident description form (own processing)

<b>The course of activities in the event of an incident</b>		
<b>The occurrence of the incident</b>		<b>The course of the intervention</b>
Date:		
Time:		
The first person at the place of origin:		
Other stakeholders:		

Once the above form has been completed, a resumption plan should follow, but this issue would greatly expand my publication, so I will not create it.

## Crisis prevention and overcoming strategy and process

The company must have working procedures in place to limit the spread of Covid-19.

Among the fundamental steps to limit the spread of Covid-19 in society, it is advisable to follow these recommended strategic steps (Ministry of Labour and Social Affairs, 2021):

- *„Implement measures that eliminate risks or minimize the number of employees per shift.*
- *Ensure the use of disinfectants by placing disinfectant gel containers on company premises and wearing drapes or respirators in all areas.*
- *If possible, it is advisable to measure the temperature at the entrance to the building with a non-contact thermometer.*
- *Ensuring more frequent and efficient cleaning of the company's premises.*
- *Adjustment of the workplace, places for eating, and rest of employees so that a two-meter spacing between them is observed.*
- *The place of work can be changed in agreement with the employer and the employee. You can go to Home Office. However, an agreement must be reached, not a regulation.*
- *The employer may agree with the employee to take leave. The employer must notify the employee in writing of the time of taking the leave min. 14 days in advance, unless otherwise agreed.*
- *The employer may agree with the employee on temporary leave without compensation of wages or salary if the employee agrees. It cannot be ordered by the employer to the employee.*
- *If the employer provides wage compensation to its employees because they had to close their business or significantly reduce their production activities, the Antivirus program can be used.*
- *It is important that the employer communicates with its employees on an ongoing basis and informs them about the implementation of anti-epidemic measures, as unintentional violations of the measures occur.“*

It is good for the company to have a Business Continuity Plan, which I designed in the previous chapter (Tab. 2 - Tab. 8). Due to the topic of this study, I introduced a pandemic. If it is compiled, it simplifies the speed of action and the choice

of prevention, as well as the determination of countermeasures. Company X meets almost all aspects of prevention, I only recommend that the company's management expand preventive measures and monitor compliance.

## Results

Since the beginning of the pandemic, the population is facing a pandemic situation. Our government, especially at the beginning of the pandemic, tried to order various measures to stop or at least mitigate the development of the pandemic and thus ensure the protection of the lives and health of citizens. The main priority is the life and health of citizens, but the measures set have a negative impact on businesses.

First, it is important to deal with the company itself. The way the company operated before the pandemic broke out and the measures the company put in place after the pandemic broke out.

The company examined in this article is at a very good level - according to a study of their response to the arrival of a pandemic and the implementation of effective measures.

Fig. 1 - Graphic representation of the company's turnover - this figure clearly shows us that the pandemic caused a decrease in the company's turnover. However, the company has put in place adequate, timely, and effective measures to help keep society at a good level.

The compilation of a SWOT analysis simply describes the internal and external environment of the company and helps to define the strengths and weaknesses of the company and also to identify threats and opportunities. Furthermore, a comparison of the company's current security management, with changes in the company's security management during the Covid-19 pandemic.

Finally, a draft of measures to help overcome the crisis is presented. The company was advised to develop a business continuity plan to be prepared for potential threats.

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