

Navigating the Covid-19 Pandemic: A Malaysian Case Study

Gomathy Balasubramanian¹ and Kamarulzaman Ab. Aziz^{2(⊠)}

 Faculty of Management, Multimedia University, 63100 Cyberjaya, Selangor, Malaysia
Faculty of Business, Multimedia University, Jalan Ayer Keroh Lama, 75450 Bukit Beruang, Melaka, Malaysia

kamarulzaman.aziz@mmu.edu.my

Abstract. In 2020, the entire world was confronted with a pandemic that would inevitably cause profound changes in all spheres of life, from social to economic. The severe economic crisis that followed the pandemic outbreak has compelled organisations to reconsider the necessary changes and new challenges for ensuring continuity and performance. Researchers have produced a body of knowledge discussing the challenges faced by organisations due to the Pandemic; the trends and innovations emerged to ensure sustainability in this unprecedented situation. However, there are limited studies providing insights into the Malaysian context. Hence, this paper presents a case study of a Malaysian government agency, drawing insights on their approaches for sustaining performance whilst navigating the Covid-19 Pandemic. This agency was chosen because it is one of the government departments mentioned in the frontline category and must continue functioning during the pandemic. Due to limitations and restrictions during the lockdown, the case study was done by collecting information verbally, which was done entirely through tele-conversation. Respondents were chosen based on the hierarchy and ranking, as job duties differ according to rank. According to the study, employees are more motivated to achieve, be recognised, take responsibility, and grow. We found that re-designing the existing jobs into job enrichment and job simplification would help the agency unit to run more smoothly during pandemic. Decisionmaking can be improved by involving more people, as each person brings a distinct perspective to the table. A performance management system should be established to track remote workers' performance.

Keywords: COVID-19 · pandemic · trends · challenges · innovation

1 Introduction

In December 2019, a total of 41 cases of pneumonia of unknown etiology were first detected in Wuhan, the capital of Hubei Province in the People's Republic of China. On 11 February 2020, the World Health Organization (WHO) named the pneumonia outbreak 'coronavirus disease 19' or abbreviated as COVID-19. On 23 January 2020, the Government of China imposed a total lockdown in Wuhan and other neighbouring

cities to quarantine due to the COVID-19 outbreak. WHO declared the outbreak a public health emergency with international concern on 30th January 2020. The COVID-19 virus continued to spread by 11th March 2020, and WHO declared it a pandemic. As the pandemic spread, many states enacted laws requiring the people to "social distance" and to "stay home" [1]. These regulations caused numerous business issues, including decreased demand, supply chain interruptions, and even disruptions [2, 3]. Also, the problems caused by these rules and policies have harmed many industries [4]. Tourism is the first severely impacted sector [5, 6]. These huge implications have influenced spending patterns and consumer mood. Most of the customers' emotional health was negatively impacted [7]. People reacted to restrictions by panic buying and turning to online transactions [8]. Technological advances have helped businesses begin or complete their digital transformation [9]. Technology has always been instrumental in delivering desired performance for the medical, educational, commercial, and administrative sectors [10–12].

The pandemic has resulted in enormous changes worldwide, most notably in management, ranging from formulating new company dynamics and strategies to consumer analysis and marketing [13]. Globalisation and market demands have posed new challenges to micro, small, and medium-sized businesses [14]. As a result, COVID-19 has enabled scholars worldwide to closely monitor and assess the numerous changes affecting businesses and management, resulting in a rapid explosion of literature [11, 15]. Due to the dynamic and unprecedented nature of the Covid-19 Pandemic as well as the impacts. Researchers have been quick to study and analyse the various aspects of the situation and how the world reacts.

A literature review was conducted to find parallels and discrepancies with the current body of knowledge. Using a logical and repeatable approach to the literature review, 49 publications focused on the COVID19 topic in the business sector were identified (the authors studied the literature published from 1 January 2020 to 10th December 2021). Specifically, the search focused on papers discussing "trends, challenges, and innovation during the pandemic."

The goal of this study is not to determine the impact of Covid-19 but rather to discover how organisational management changed during the pandemic, the innovations produced, and the challenges faced. Rather than focusing on a single aspect of COVID-19 management, this study examines the entire management system (in this case, trends, challenges and innovations). The systematic review of the literature provides contemporary perspectives on the topic and the basis for reflection. Next, the case study on the government agency provides a specific example of how a particular organisation in Malaysia tackled the situation. This will allow for discussions and recommendations for practice as well as research.

2 Literature Review

The underlying message of a silent performance management system is that the top management team and other managers are unaware of what to do or what they want employees to do. Additionally, managers cannot provide sound and relevant feedback to employees to help them develop their performance in the future without performance measures. Besides that, missing performance measures for an extended period puts businesses in a vulnerable legal situation. Many firms face the critical situation of laying off some employees during times of crisis, and performance is a significant factor in determining which individuals will go first. Without tracking evaluation results, choices may be discretionary, and businesses may face litigation from former employees [16]. Employee engagement is another heavily debated topic in all research papers. Higher isolation that occurs during the pandemic does have a negative correlation to employee engagement. And appropriate measurements are needed to identify such behaviour and effectively address it. Many businesses shuttered as workers were urged to work from home, schools closed, and conferences were postponed or relocated online. These industries now rely heavily on wired and wireless communication networks to function. As a result, more people use online learning platforms like Zoom, Microsoft Teams, and Canvas and social media platforms like Facebook, Twitter, and WhatsApp. The use of multimedia services like online gaming, Netflix, YouTube, etc., has also increased to keep people engaged throughout the lockdown period in several countries [17]. The mobility restriction policies in many nations to minimise the spread of the infection have compelled many workers and students to stay at home, shifting regular school, hospital, and industry activities online. The stay-at-home strategy also causes a dramatic change in transportation demand from city centres to residential areas. Existing networks were not built to handle this traffic volume or the unexpected shift in demand patterns they are experiencing. Furthermore, with traffic demand shifting to residential areas, city centres' base stations (BSs) are underutilised, resulting in energy waste. Decreased access by maintenance staff to BS cell locations to restore regular operation in the event of cell or service failure due to movement restrictions [18].

Human resource management is the most challenging area that has changed dramatically due to the epidemic. This segment accomplished a complete 180-degree flip in personnel performance, hiring, recruitment procedure, and training terms of performance. Due to pandemic restrictions and standard operating procedures, the company is obliged to alter its manner of operation away from the office and toward working from home or teleworking. Many organisations have transitioned their business model into emerging digital technology, such as video conferencing, zoom, Google Meet, and cloud computing. Flexible work arrangements are the ideal option for businesses that want to continue operating with the help of digital technologies [16]. Throughout the pandemic, flexible work arrangements have brought some benefits, as several studies have identified positive benefits for both employee and employer in terms of flexibility, performance, and efficiency gains [19].

Another field of human resource management where been tested and made a genuine amateur shift seems to be in training and development. Restriction to work in the office space made the training for the last two years focus on training the personnel to perform as before the pandemic. Training on deciding teams to calibrate, methods to measure employees' productivity while working from home, and elements of redirecting the organisation virtual is some training agendas. Another clear paradigm shift has occurred in performance measurement due to the pandemic's dysconnectivity between employee and employer. Many training sessions were primarily intended to familiarise personnel with the IT system and tools used at the start of the pandemic. Digital tools are widely used

for meetings, presentations, and video conferencing during the time. On the other hand, managers received additional training on motivating their teams, measuring employee performance digitally, and building virtual relationships. To ensure they do not fall behind, they have developed training and more direction around communications, norms, and scheduling to keep the work running smoothly and regularly [20].

Overall, seven trends have been identified by combining all the related articles;

- The role of middle management is decreasing.
- Team members are chosen based on the progress of the project.
- Women are taking on more leadership roles in the workplace, particularly at the top management.
- The importance of subcontracting
- A rise in the number of persons working from home.
- Learning is a never-ending process.
- The most precious item would be information.

Work from home and virtual meetings are likely to continue less frequently than during the pandemic. Many employees today agree with this approach. A 2020 Harvard Business Review study on how workers might become more productive found that workers are more productive during a lockdown. Employees should focus better and own their tasks.

However, issues like team management and connection building are presented. Some were concerned about job advancement - confinement discourages aggressive exploration and personal contemplation. So, the hybrid working paradigm was born, allowing people to work remotely some days and on-site other days. Organisations are trying to build up remote access for employees when countries go into lockdown due to COVID-19. It also highlights the extent of internal technology that firms have implemented. Where technology is readily available, incorporating new habits and management practices for employees to adapt and work in partnership with technology is the biggest obstacle. At the same time, organisations struggle to maximise employee potential while keeping them motivated and [21] In addition to enhancing and complementing work, technology does not replace the human touch required by some sectors and positions. Consider how medical, education and even door-to-door delivery have benefited from technology. Today's technology not only replaces administrative and tedious tasks but also facilitates workplace cooperation. [22].

Since human resource management has had to deal with diverse functions throughout the pandemic, a few publications and journals have emphasised the importance of making changes in HRM. Because of the current state of things, Human Resource Management has addressed the transformation in hiring, placement, and training. As a result, researchers identified specific innovation platforms that might assist organisations in overcoming challenges. The digitally observed score is one of the innovations in measuring employee performance. According to the author, PPS stands for performance promoter score (PPS) (PPS). This scoring system aids in getting employee and manager feedback from other members to obtain a performance rating. Since this Innovation is based on virtual and isolated work activity, it is advised to reduce manual observation and produce summary statistics for individuals, workgroups, and even units. It gathers

information from various internal and external sources, including employees, supervisors, partners, vendors, and customers. This PPS system can also absorb comments and foster conversation about performance [23].

In terms of training, the author suggests that integrated corporate training will virtually improve performance. As a result, this author believes that such a scheme will benefit the unemployed in the post-Covid future. During a pandemic, digitisation in HRM is essential, resulting in different effects for different firms. The majority of hiring recruitment application processes and training are conducted electronically. With the use of technological instruments, the hiring by ZOOM and Google meet came together. Submitting tests and feedback on HRM is considerably simpler and paperless. Extensive data management is one of the most popular courses [24].

3 Methodology

This section discusses the methods and procedures used in the study. The study was designed to investigate and illustrate how an organisation in Malaysia navigated the COVID-19 Pandemic. This was achieved via a case study of a government agency located in the vicinity of the nation's capital.

Specifically, this paper adopts a case study methodology and structured interview questions as the research instrument. The case study methodology used can be traced back to the early 1900s when it was popularly used by the Department of Sociology, University of Chicago. [25] and [26] stated that a case study is done by giving special attention to completeness in observation, reconstruction and analysis of the cases under investigation. A case study is done in a way that incorporates the views of the 'actors' in the case under study. Furthermore, a case study is a research strategy used when attempting to understand complex organisation problems; in essence, allowing one to focus on something which is sufficiently manageable and can be understood in all its complexity. [27] also proposes that the case study method helps describe a phenomenon in its context and explore an issue or a question [28].

The research used several data sources and data collection techniques, namely, interviews as well as observations. The respondents were picked based on their job responsibilities and ability to make changes. Without taking into account the clerical level, this agency's ranking is divided into three groups from which respondents can choose: top, medium, and bottom. Despite this, only two from each hierarchy have volunteered to be interviewed: two for each level and one for the clerical level. As the entire unit communicated via WhatsApp and Google meet during the lockdown, the respondent had to share it verbally during the tele call. As this case study involves a government agency, the agency and respondent names cannot be disclosed due to confidentiality requirements. This is consistent with [29]. The research reached out to employees at different levels to attain a holistic view. The following section provides the case narrative and findings.

4 Findings and Discussions

The findings are presented in the case narrative below.

4.1 A Malaysian Case Study

The chosen government agency performs a significant number of audit tasks State-level middle managers are in charge of analysing audit results to determine the root cause of noncompliance. First-level management audit officers and their subordinates are responsible for conducting investigative audits on entities that have committed fraud and taking appropriate legal action. They must also undertake specific audits or raids to respond to complaints or information. The Intelligence unit usually conducts research before designating organisations to be audited by this agency. The audit procedure is essential to collect all necessary papers and documentation. The headquarters is vital in maintaining all processes and rules are followed consistently across the country and within states. Headquarters' top management monitors and coordinates state audit operations and assess audit procedures' effectiveness. They also analyse and evaluate audit procedures. In addition, they are amending the rules and regulations that govern the Attorney General Division. Completed audit files have been transferred to the highest level of the organisation in preparation for court.

Two systems for processing audit and refunds, which was this agency's heart, are only accessible via the office server. Auditors and middle managers must use this system to report file progress and movement to headquarters. Middle managers usually report to clerical staff. The manager noticed an increase in employee stress symptoms. Among the symptoms employees have reported are agitation and missing team or Google meetings. Their productivity has plummeted, and they are all developing sleep disorders. Despite their long tenure, the department's first-level managers' commitment and communication with the rest of the staff had declined by mid-June.

The division's overall function was reduced by 10% during the first lockdown. A first-level manager with four subordinates says the pandemic slowed the organisation down due to a lack of technical support and teleworking tools. Because the audit system is dependent on two central systems which allow the personnel to share files. During a brainstorming session, middle managers noticed that many auditors lack focus due to general household distractions. Management tried to deflect attention from the crisis. Since there was no babysitter and schools were closed, the situation has deteriorated. Aside from that, three staff members had been infected with covid 19 and could not contribute. Beneath pressure from both the internal and external environments, changes were made as soon as possible.

While most employees were concerned about the significant changes made by top management, the entire country was undergoing radical change. Telework was initially a problem in this division due to a lack of standard operating procedures (SOP) and digital innovation. The division used minimal digital tools or software to improve audit efficiency and effectiveness. The decision to work remotely disrupted the auditor's previous day of flipping through all hardcopy reports, sitting in the discussion room with colleagues, and manually going over each document. Officers were required to enter the

office to retrieve missing information due to a severe document loss during file movement. Usage of mail and electronic media is also restricted due to legal restrictions on document copying and preservation.

The first lockdown caught everyone off guard due to the short notice. For the first two months, top management at headquarters has given the unit-level top managers the authority to stop/pause the operation and observe. This division has stayed constant during the pandemic, opting for a wait-and-see approach. They reassured their subordinates that the temporary slowdown would not impact their performance or any of the key performance indicators (KPI). However, no acceptable performance monitoring mechanism was used, and they were evaluated equally, which made a few employees upset. Tensions mount when the lockdown is extended, and a cure for the Covid19 virus is yet to be discovered. That the mark beginning of the top-down-approved transfer of authority from top managers in headquarters to the top and intermediate managers at unit levels. State-level units can create and implement their strategic plans to ensure the target moves in the right direction.

According to the unit's head, three existing performance measures are no longer applicable or feasible to meet once epidemics have been eradicated. Managers emphasised each employee's enormous responsibilities, such as collecting \$5 million and closing four files every month, which were out of reach owing to the pandemic's restrictions. The number of files to be evaluated by internal audit and the number of training sessions offered by the first-level manager were excluded. Rather than reporting daily duties through the agency system and submitting reports manually to Headquarters, the division head has minimised paperwork by sending weekly reports through email to one officer who reports to Headquarters on a rotational basis. The relevant officer can access the system during their cycle to work from the office so the entire department can report. To minimise the backlog of reports and correspondence with the company and others, the supporting staff has also been directed to work from the office on a rotational basis. The assistant head of the unit, on the other hand, has conducted an evaluation of the existing officers' abilities as well as the available resources. In addition to allocating the tools in an appropriate manner, she has requested additional resources such as hard copies of the acts involved and laptop computers. In an attempt for this planning to be successful, she obtains feedback on the subordinates' progress from first-level managers. Since the department's involvement in the core task was previously limited to technology, the challenges in embracing technology in terms of coordinating online audits have been costly and hard to overcome. Conversation via mobile with a middle manager responsible for at least teams during the pandemic, she shared her insight and understanding into dealing with the shifts in team members' attitudes and behaviours. She discovered that the majority of her team members found it frustrating and mentally exhausting to stick to the schedule and complete progress reports on a weekly basis. As a result, she decided to give up some of her. Autonomy, shifting her role from monitoring to facilitation. The manager understands that the team members require a leader who can adapt to changing circumstances. They also recognise the importance of remaining as adaptable as possible as long as the primary goal is met. The transition from a formal, conservative leader to a leader capable of negotiating and beginning to educate team members was difficult initially. Still, the connection has grown significantly and has established more room

for discussion and problem-solving sessions. This approach was beneficial in reducing miscommunications and gaining some level of dedication from teammates.

Since the pandemic and virus impacted the staff's mental and attention spans, senior managers convened brainstorming meetings with first-level managers to collect actual departmental performance data. Since the pandemic and the virus have affected the mental and attention of the staff, top managers have done a few brainstorming sessions with the first-level managers to collect the entire department's actual performance to measure the achievement scale.

- Out of 15 middle-rank officers,6 of them is only able submit five files from January to June.
- ten officers have not reached the 2.5 million targets, which prorates from 5 million targets per year.
- 11 Officers facing difficulty working from home due to the pandemic since they have voiced their condition to take the kids as no day-care or babysitter.
- five officers have no internet facilities or work equipment.
- The three new contract staff who just report duty a week before lockdown has no idea about their job and tools.

Certain officers have fallen significantly behind schedule, and something must be done to bring them back on track. The intention was to involve the auditor in most of the discussion. Certain auditors can investigate precedent cases with the assistance of clerical staff in order to gain a better understanding. Due to documentation being separated among the team members, auditors are unable to match the findings, making teleworking difficult. They agreed that they couldn't do anything during the movement control order, which caused the files to be significantly delayed. As a result, managers could not assist their staff in boosting their levels of commitment. According to the respondent, workplace interactions are more productive and inspiring.

4.2 Discussions

Employees are most motivated by chance to succeed, be recognised, take responsibility, and grow. The simple solution to the auditor's problem is to redesign the job. The best job redesigns for this company are job enrichment and job simplification. Enriching a job means giving it more autonomy in planning, decision-making, and control. Job enrichment entails increasing duties to make a job more rewarding. An enriched job is one that offers excitement, challenge, and creativity [30]. To simplify a job, divide it into smaller parts, usually composed of simple tasks. These sub-jobs are then assigned to employees. This method allows employees to perform these tasks without specialised knowledge. Brainstorming is a popular technique in group decision-making to generate as many solutions or options as possible. Managers' dissatisfaction was discovered during brainstorming. More sessions without the auditor didn't help either. Including more people in decision-making is beneficial because each person brings unique knowledge and perspectives to the group. Having more people involved often leads to more options and intellectual stimulation as the group discusses the options. These factors can help groups make better decisions. Furthermore, involving those affected by a decision allows for a

better understanding of the issues or problems and a more substantial commitment to the solutions [31]. A performance management system should be implemented to monitor remote workers' performance. Managing by objectives (MBO) is one option. Because they helped set the goals rather than having them imposed on them, employees are highly motivated. Their involvement in decision-making helps them achieve higher-level needs for accomplishment, achievement, recognition, and self-worth. As this division has no competitors, it is best to evaluate and motivate them through results [32, 33]. Because training is essential for development, most private sector training during pandemics or even now as they transition to endemics emphasises technology and digital innovation. Working tools like Google Meet, Google Drive, Zoom, and submitting tasks digitally benefit staff in other sectors [34]. The author believes leaders and managers need to be trained in emotional intelligence (EI). Understanding and managing one's own emotions, as well as others, is emotional intelligence. Building relationships, reducing stress and resolving conflicts increase job satisfaction. Finally, high EI can boost team productivity and employee motivation [35, 36].

5 Conclusions

The literature review for this study explores works discussing the COVID-19 Pandemic and its impact on organisational management. Researchers highlighted how it affects or spreads across many different areas of the management field. At the same time, the in-depth study and analysis of the papers make it possible to see how the topics analysed could be linked and how they could be thought of together. The analysis shows how the pandemic makes organisations think outside the box and overcome the resistance they had toward digitalisation.

From the case study, this division has gone through a pandemic with minimal improvement and changes due to unavoidable factors such as complex organisational structure, limited resources, limited decision-making autonomy, and inexperience. However, there appears to be a gap in understanding between the top management, field officers such as the state auditors, and the middle managers. The division managers attempted to make changes within their power. This underlines the importance of being a flexible or agile organization, especially during challenging times due to the Pandemic. Creativity, resourcefulness and agility amongst the team are needed to make the work process more efficient and effective. As the world continues to adapt and COVID- 19 is seen as endemic, the lessons learned thus far are important references for moving forward.

Acknowledgments. Special acknowledgements to the management and officers of the agency for the cooperation and insights given throughout the study. Appreciation also to all reviewers for their constructive feedback.

Authors' Contributions. Balasubramanian, G.: Investigation, Methodology, Literature Review, Writing – Original Draft Preparation, Writing – Review & Editing; Ab Aziz, K.: Conceptualization, Methodology, Supervision, Validation, Writing – Review & Editing.

References

- 1. N. Donthu and A. Gustafsson, "Effects of COVID-19 on business and research," Journal of Business Research, vol. 117. Elsevier Inc., pp. 284–289, 01-Sep-2020, doi: https://doi.org/10.1016/j.jbusres.2020.06.008.
- M. O. Painter and T. Qiu, "Political Beliefs affect Compliance with Government Mandates," 2021.
- 3. K. Id and R. Pet, "Plos one," pp. 1–14, 2020, doi: https://doi.org/10.1371/journal.pone.023 9113.
- 4. P. Ozili, "Munich Personal RePEc Archive Spillover of COVID-19: Impact on the Global Economy Spillover of COVID-19: impact on the Global Economy."
- S. Gössling, D. Scott, and C. M. Hall, "Pandemics, tourism and global change: a rapid assessment of COVID-19," J. Sustain. Tour., pp. 1–20, 2020, doi: https://doi.org/10.1080/09669582. 2020.1758708.
- R. Gray and G. P. Chair, "Agriculture, Transportation, and the COVID-19 Crisis," doi: https://doi.org/10.1002/cjag.12235.
- 7. K. F. Yuen, X. Wang, F. Ma, and K. X. Li, "The psychological causes of panic buying following a health crisis," International Journal of Environmental Research and Public Health, vol. 17, no. 10. MDPI AG, 02-May-2020, doi: https://doi.org/10.3390/ijerph17103513.
- 8. X. Gao, X. Shi, H. Guo, and Y. Liu, "To buy or not buy food online: The impact of the COVID-19 epidemic on the adoption of e-commerce in China," PLoS One, vol. 15, no. 8 August, Aug. 2020, doi: https://doi.org/10.1371/journal.pone.0237900.
- D. S. W. Ting, L. Carin, V. Dzau, and T. Y. Wong, "Digital technology and COVID-19," Nature Medicine, vol. 26, no. 4. Nature Research, pp. 459–461, 01-Apr-2020, doi: https://doi.org/10.1038/s41591-020-0824-5.
- S. Dhawan, "Online Learning: A Panacea in the Time of COVID-19 Crisis," J. Educ. Technol. Syst., vol. 49, no. 1, pp. 5–22, Sep. 2020, doi: https://doi.org/10.1177/0047239520934018
- 11. S. Verma and A. Gustafsson, "Investigating the emerging COVID-19 research trends in the field of business and management: A bibliometric analysis approach," J. Bus. Res., vol. 118, pp. 253–261, Sep. 2020, doi: https://doi.org/10.1016/j.jbusres.2020.06.057.
- 12. J. O. Woolliscroft, "Innovation in response to the COVID-19 pandemic crisis," Academic Medicine, vol. 95, no. 8. Lippincott Williams and Wilkins, pp. 1140–1142, 01-Aug-2020, doi: https://doi.org/10.1097/ACM.000000000003402.
- 13. P. Seetharaman, "Business models shifts: Impact of Covid-19," Int. J. Inf. Manage., vol. 54, Oct. 2020, doi: https://doi.org/10.1016/j.ijinfomgt.2020.102173.
- 14. M. Shafi, J. Liu, and W. Ren, "Impact of COVID-19 pandemic on micro, small, and medium-sized Enterprises operating in Pakistan," Res. Glob., vol. 2, Dec. 2020, doi: https://doi.org/10.1016/j.resglo.2020.100018.
- C. Vlasschaert, J. M. Topf, and S. Hiremath, "Proliferation of Papers and Preprints During the Coronavirus Disease 2019 Pandemic: Progress or Problems With Peer Review?," Advances in Chronic Kidney Disease, vol. 27, no. 5. W.B. Saunders, pp. 418–426, 01-Sep-2020, doi: https://doi.org/10.1053/j.ackd.2020.08.003.
- M. Saxena, T. Bagga, and S. Gupta, "Hr during covid-19 era: Study on recent HR transformations through technological tools and trends," Proc. Conflu. 2021 11th Int. Conf. Cloud Comput. Data Sci. Eng., pp. 110–113, 2021, doi: https://doi.org/10.1109/Confluence51648. 2021.9377167.
- F. L. Khomo, A. Abayomi, E. Adetiba, I. E. Agbehadji, B. M. Mutanga, and V. Jugoo, "Digital Innovations for Post-CoViD-19 Pandemic Recovery," icABCD 2021 - 4th Int. Conf. Artif. Intell. Big Data, Comput. Data Commun. Syst. Proc., 2021, doi: https://doi.org/10.1109/icA BCD51485.2021.9519378.

- A. I. Abubakar, K. G. Omeke, M. Ozturk, S. Hussain, and M. A. Imran, "The Role of Artificial Intelligence Driven 5G Networks in COVID-19 Outbreak: Opportunities, Challenges, and Future Outlook," Front. Commun. Networks, vol. 1, no. November, 2020, doi: https://doi. org/10.3389/frcmn.2020.575065.
- 19. F. A. Kulak and V. L. Tuzuner, "Research in Business & Social Science A comparative analysis of flexible working patterns in Germany and," Int. J. Res. Bus. Soc. Sci., vol. 9, no. 4, pp. 1–14, 2020.
- R. M. Rawat, A. Rana, A. J. Toppo, and A. Beck, "AI based impact of COVID 19 on food industry and technological approach to mitigate," Proc. - 5th Int. Conf. Intell. Comput. Control Syst. ICICCS 2021, no. Iciccs, pp. 1743–1748, 2021, doi: https://doi.org/10.1109/ICICCS 51141.2021.9432152.
- 21. J. Berbegal-Mirabent, "What do we know about co-working spaces? Trends and challenges ahead," Sustain., vol. 13, no. 3, pp. 1–30, 2021, doi: https://doi.org/10.3390/su13031416.
- E. P. S. Manalu, A. Muditomo, D. Adriana, Y. Trisnowati, P. Zulfikar Kesuma, and H. Rini Dwiyani, "Role of Information Technology for Successful Responses to Covid-19 Pandemic," Proc. 2020 Int. Conf. Inf. Manag. Technol. ICIMTech 2020, no. August, pp. 415–420, 2020, doi: https://doi.org/10.1109/ICIMTech50083.2020.9211290.
- 23. X. G. Chaolin Huang*, Yeming Wang*, Xingwang Li*, Lili Ren*, Jianping Zhao*, Yi Hu*, Li Zhang, Guohui Fan, Jiuyang Xu, J. X. Zhenshun Cheng, Ting Yu, Jiaan Xia, Yuan Wei, Wenjuan Wu, Xuelei Xie, Wen Yin, Hui Li, Min Liu, Yan Xiao, Hong Gao, Li Guo, and B. C. Guangfa Wang, Rongmeng Jiang, Zhancheng Gao, Qi Jin, Jianwei Wang†, "Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID- research that is available on the COVID-19 resource centre including this ScienceDirect Clinical characteris," J. Formos. Med. Assoc., no. January, pp. 19–20, 2020.
- 24. D. A. Latta and D. Sarkar, "Imperative Role of Digitalization in the Indian Economy During COVID-19," Int. J. Adv. Res. Sci. Commun. Technol., pp. 164–178, 2021, doi: https://doi.org/10.48175/ijarsct-v2-i3-329.
- 25. Tellis, W. M. (1997). Introduction to Case Study. The Qualitative Report, 3(2), 1–14. https://doi.org/10.46743/2160-3715/1997.2024
- 26. Zonabend, F. (1992, Spring). The monograph in European ethnology. Current Sociology, 40(1), 49–60.
- Yin, R. (1994). Case study research: Design and methods (2nd ed.). Beverly Hills, CA: Sage Publishing.
- 28. J. Yin and V. Fernandez, "A systematic review on business analytics," J. Ind. Eng. Manag., vol. 13, no. 2, pp. 283–295, 2020, doi: https://doi.org/10.3926/jiem.3030.
- Kaiser, K. (2009). Protecting Respondent Confidentiality in Qualitative Research. Qualitative Health Research, 19(11), 1632–1641. https://doi.org/https://doi.org/10.1177/104973230935 0879
- 30. M. Venith Vijay and R. Indradevi, "A study on job enrichment and individual performance among faculties with special reference to a private university," Mediterr. J. Soc. Sci., vol. 6, no. 1, pp. 252–260, 2015, doi: https://doi.org/10.5901/mjss.2015.v6n1p252.
- 31. D. Bang and C. D. Frith, "Making better decisions in groups," R. Soc. Open Sci., vol. 4, no. 8, 2017, doi: https://doi.org/10.1098/rsos.170193.
- 32. X. Islami, E. Mulolli, and N. Mustafa, "Using Management by Objectives as a performance appraisal tool for employee satisfaction," Futur. Bus. J., vol. 4, no. 1, pp. 94–108, 2018, doi: https://doi.org/10.1016/j.fbj.2018.01.001.
- C. Risley, "Maintaining Performance and Employee Engagement During the COVID-19 Pandemic," J. Libr. Adm., vol. 60, no. 6, pp. 653–659, 2020, doi: https://doi.org/10.1080/ 01930826.2020.1773716.

- 34. K. Mikołajczyk, "Changes in the approach to employee development in organisations as a result of the COVID-19 pandemic," Eur. J. Train. Dev., 2021, doi: https://doi.org/10.1108/EJTD-12-2020-0171.
- 35. H. Hang, L. Aroean, and Z. Chen, "Building emotional attaching during COVID-19," Ann. Tour. Res., vol. 83, Jul. 2020, doi: https://doi.org/10.1016/j.annals.2020.103006.
- M. Sadovyy, M. Sánchez-Gómez, and E. Bresó, "COVID-19: How the stress generated by the pandemic may affect work performance through the moderating role of emotional intelligence," Pers. Individ. Dif., vol. 180, no. March, 2021, doi: https://doi.org/10.1016/j.paid. 2021.110986.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

