

Radboud University Nijmegen

# MASTER THESIS

*The role of Workplace Innovation in Business Strategies ensuring  
Resilience in an Uncertain and Disruptive Environment*

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## **Preface**

January to August 2020 will go into the books as a half-year of accumulation of significant events on a global scale, as a result of the COVID-19 crisis. Under these extraordinary circumstances the thesis, ‘‘The role of workplace innovation in business strategies ensuring resilience in an uncertain and disruptive environment’’, has been conducted on the basis of some 900 database articles on organisations and their strategic decision making in times of severe uncertainty and disruptive dynamics. The thesis has been written to meet the graduation requirements of the master Strategic Management, Nijmegen School of Management at Radboud University in Nijmegen (RU).

The topic of this thesis stems from my affinity with social innovation, particularly social innovation in the work environment of employees. My key research question has been developed in close consultation with my supervisor, Dr. Hans Schaffers. Through the network of Dr. Schaffers I got in touch with Prof. Steven Dhondt (TNO). who assisted me in getting access to the data files, which ultimately constituted the factual foundation of my research. Dr. Schaffers and Prof. Dhondt gave me ample opportunity for consultation and advise throughout the process. I would like to express my gratitude to both distinguished gentlemen for their guidance and support.

The COVID-19 crisis imposed limitations on meeting people in person. Nevertheless my supervisors were easily accessible, many times through video conferencing. Furthermore the university responded quickly and thoroughly to the uncertainties many students including myself encountered.

I would also like to thank my family, girlfriend and friends for their support and the various insights I gained from many constructive debates. As a result, I was able to be goal orientated, focused and very motivated. All in all, it has been an inspiring and grateful experience during turbulent times.

Finally, I hope that workplace innovation will receive more scientific attention through further theory development and empirical research resulting in practical concepts ready for implementation in workplaces. Dare to change, especially now!

August 2020 - Bjorn Barts

## **Abstract**

Organisations are confronted with increasingly dynamic markets and complicated supply chains characterised by uncertainty and disruption. In 2020, the corona crisis intensifies uncertainty and disruption. Firms need to reflect on the extent their business strategies are or should become resilient to these dynamics in order to survive and in the long run thrive in these ever-changing markets. Workplace innovation could be a vital instrument in strategies to pursue resilience.

This research aims to explore to what extent firms are developing their resilient business strategies by addressing workplace innovation. From this the research question is derived: To what extent and how are organisations developing or altering strategies building upon workplace innovation in order to become more resilient in environments characterised by high levels of uncertainty and disruptiveness? Workplace innovation is defined as the degree to which firms aim for innovations in order to increase employee engagement by improving working conditions, enhancing productivity and create a culture of effective responsiveness to environmental changes.

Qualitative content analysis has been conducted to answer the research question. The content analysis is based on researching during March and April 2020 a database of 900 newspaper articles about firms and their strategic decision making. The results show that integrating workplace innovation into business strategies under the uncertainty and disruptiveness conditions of COVID-19 contributes to the strengthening of resilient business strategies.

This leads to the recommendation to use workplace innovation practices in the development of business strategies for resilience and continuity. Future follow-up research could investigate whether firms with active workplace innovation practices experience less negative impact and experience a faster recovery in era after the COVID-19 crisis subsides.

**Title:** The role of Workplace Innovation in Business Strategies ensuring Resilience in an Uncertain and Disruptive Environment

**Keywords:** Workplace innovation, Business resilience, Strategies, Digital technologies, COVID-19

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# **1. Introduction**

## **1.1 Topic**

This research examines the role of workplace innovation in business strategies of organisations aimed at strengthening resilience hence business continuity in environments characterised by high levels of uncertainty and disruption. This research in particular investigates to what extent decisions are being made regarding workplace innovation in relation to strengthening resilient business strategies, and how such decisions are taking into account trade-offs regarding long-term (continuity and sustainability-oriented) and short-term (profitability and efficiency-oriented) business goals. Through a concrete case study, this thesis focuses on the development of workplace competence- and collaboration-based resilience strategies addressing the business implications of COVID-19.

## **1.2 Background and motivation**

Due to the increasingly dynamic markets and complicated supply chains, contemporary firms are confronted with a business environment characterised by uncertainty and disruption (Ahlquist, Irwin, Knott, & Allen, 2003). In 2020, the corona crisis aggravated existing environmental uncertainty and disruption. In this context, there is a need for businesses to reflect on the extent their business strategies are or should be ensuring resilience, continuity and longer-term sustainability (Ortiz-de-Mandojana & Bansal, 2016). The challenge addressed by this master thesis is to obtain knowledge and insight about the relationship between workplace innovation and the development of business strategies to provide insights and recommendations on how firms can address resilience-oriented challenges in their business strategies.

Workplace innovation as innovation has not often been researched by scientists (Oeij, Dhondt, & Korver, 2011). This can e.g. be deduced from the fact that studies on innovations mainly concern technological innovation such as Industry 4.0 and business innovation (Howaldt, Kopp, & Schwarz, 2015; Musgrave & Woodman, 2013). The COVID-19 crisis triggers further study on workplace innovation in view of strengthening resilient business strategies. Workplace innovation also contains aspects of business innovation and technological innovation. Several scholars defined workplace innovation in the formal organisation and organisational behaviour as a strategic innovation; the goal of realising competitive advantage by employing unique intangible resources in the development of business strategies (Fiksel, 2006; Totterdill, 2015). Workplace innovation consists of four resources that expose the capabilities of organisations;

strategic orientation, product-market improvement, flexible work and organising in smarter ways (Oeij et al., 2011). These forms of innovation focus not only on internal performance but as well on social functions in organisations such as work-life balance and employee development and training. Therefore, it is serving the interests of both employee and employer, profit and non-profit. Pott (2011) emphasises that workplace innovation does not include technological innovation. However, workplace innovation indicates the suitability of technological innovation within the organisation. Technological innovation requires an all-embracing approach including organisational, social and economic factors in respect of innovating the workplace (Oeij et al., 2011).

The workplace innovation concept is related to the Resource-Based View (RBV), which is based on creating a competitive advantage through unique assets of the organisation (Barney, 2001; Oeij et al., 2011). The four resources of workplace innovation can be distinguished as follows: first, strategic orientation is related to environmental factors, second, product-market improvement is related to sales and market development, third and fourth, flexible work and organising smarter are related to the internal variability that can dynamically respond to developments in the environment in which the organisation operates (Oeij et al., 2011). The first and second resources mentioned are mainly externally oriented, and the latter two are mainly internally oriented.

Furthermore, resilient business strategies have been mostly oriented towards digital innovation into products, processes, and market development (Musgrave & Woodman, 2013). So far workplace innovation received limited attention in scientific literature on resilience strategies despite the fact that several studies see workplace innovation as a gamechanger for quality of working life and firm performance in several industrial sectors (Dhondt & Van Hootegeem, 2015; Kalmi & Kauhanen, 2008; Pot, Dhondt, & Oeij, 2012). Moreover, scientific literature has emphasised the crucial role of human and organisational capabilities and skills as enablers of innovation parallel to technological capabilities, (Ortiz-de-Mandojana & Bansal, 2016). There is indeed some literature emphasising the impact of human and organisational capabilities on effectiveness of collaboration and networking in addressing potential business impacts in environments of extreme uncertainty and disruptiveness (Tracey, O'Sullivan, Lane, Guy, & Courtemanche, 2017).

The dependence on resilience strategies during the COVID-19 crisis is noticeable, as firms in the digital economy such as Bol.com, Picnic and other online-oriented firms benefit from the

Internet of Things (IoT); online orders, online warehouses and digitised picking systems (FD, 2020). Resilience strategies enable firms to adapt to changing requirements of a disruptive environment and enable firms to adequately deal with environmental (macro) uncertainty (McDonald, 2006). On top of this game-changing technologies change the working environment of the employees; the demand for other skills and the impact on working conditions changes (Howaldt et al., 2015). These new technologies, such as IoT, digital technologies, enhance the scale and scope of track and tracing systems along with the creation of information pipeline systems and supply chain finance applications (Hofmann, Strewe, & Bosia, 2018). According to Pot, Dhondt, Oeij, Rus, and Totterdill (2019), firms that have invested in digital technologies can only benefit if workplace innovation is the core of the strategic development process and investments of organisations. Four significant characteristics in workplace innovation towards strategic development can lead to resilient organisations, namely; flexible structures (adaptability), a synergy of systems (cohesion), procedures (diversity) and human capital (efficiency) (Fiksel, 2003; Stoverink, Kirkman, Mistry, & Rosen, 2018; Totterdill, 2015).

There is an urgent need to conduct quality empirical studies to gain more insight into developing resilient business strategies (Bhamra, Dani, & Burnard, 2011). There are no empirical studies elaborating on the motives for integrating or not integrating workplace innovation into business strategies aimed at developing resilient business strategies (Casalino, Żuchowski, Labrinos, Nieto, & Martín, 2019; Oeij, Rus, & Pot, 2017). These insights form the basis of this thesis and its objective, which is further elaborated below.

### **1.3 Research objective and research question**

#### ***1.3.1 Research objective***

The objective of this research is to obtain insight into the extent firms develop resilient business strategies on workplace innovation in order to boost resilience and sustainability. The research aims to contribute to further theory development and to provide firms enhanced knowledge and insights therefore allowing them to implement practical measures to strengthen workplace innovation in business strategies.

#### ***1.3.2 Research question***

Stemming from the research objective, the key research question has been formulated. This research question is extended with propositions in order to guide the specific research activities

and the collection and interpretation of data. Chapter 2 centres on the theoretical framework that allows further detailing of the main research question.

**RQ:** To what extent and how are organisations developing or altering strategies building upon workplace innovation in order to become more resilient in environments characterised by high levels of uncertainty and disruptiveness?

#### **1.4 Relevance**

The dynamics unleashed by the COVID-19 pandemic profoundly affect the working environment of both employees and firms hence exponentially increasing the relevance of this research on workplace innovation in e.g. economic sectors such as manufacturing, Big Tech, and construction (Casalino et al., 2019). There is ample evidence that firms actively invest in and actually apply resilience strategies by matching digital technologies with workplace changes such as online shopping in the supermarket sector, all aimed at mastering vastly changing volatile market circumstances and securing first of all corporate survival and subsequently boosting its growth potential (FD, 2020).

This research subsequently aims at expanding existing knowledge concerning the development of resilience strategies and their effect on workplace innovation in corporate strategic decision-making. This knowledge is to be translated into practical guidelines for firms effectively improving their business strategies in particular on workplace innovation, employee well-being and productivity. The results of this research support firms in reconfiguring their strategy development by means of integrating workplace innovation into their overall business strategies on enhancing resilience in an increasingly uncertain and disruptive environment.

#### **1.5 Research approach**

This research applies qualitative literature content analysis including techniques of in-depth deductive coding (concept, dimensions, and elements) and document analysis. The operationalisation forms a theoretical framework of the concept of workplace innovation in relation to resilient business strategies. Qualitative content analysis focuses on the scale of firms in various economic sectors during the first wave of the COVID-19 pandemic in the March-April 2020 timeframe. The research unit in this study is the integral organisation as it is assumed that strategies applied will impact the entire business operation in all segments of such an organisation. Firms under investigation are those who appeared in public media, such as newspapers and news websites during the aforementioned timeframe elaborating on strategic



renewal in time of crisis. The research draws conclusions on the industry as a total, no in-depth analysis on specific industries and sectors is conducted. The width of the research allows collection of a broader set of data and information on potential (best) practices, especially in view of employee perspective in terms of workplace changes. The secondary data publications were obtained from a dynamic database of Prof. Steven Dhondt (TNO Knowledge Institute). More specifically, secondary data is evoked from a database containing 900 available publications of the mainstream media (e.g. De Volkskrant, NRC, NOS, The Guardian) based on firms in the context of strategic renewal in times of the COVID-19 crisis.

The period of March and April 2020 has been selected as time demarcation since it constituted the early months if not first wave of the Covid-19 pandemic; firms were triggered to adapt their strategies almost at once. The derived dataset is analysed by encoding and comparing transcripts through a deductive code tree with dimensions such as strategic orientation, product-market improvement, and smart organising. This research will be characterised as an iterative process, with the position of the research question as a leading component. Chapter 3 will go into more detail on the research approach and activities.

### **1.6 Research outline**

The outline can be described as follows: Starting point in Chapter 2 is an elaboration on the literature review resulting in further identifying and defining propositions in lieu of the research question. The same chapter subsequently frames and exhibits the conceptual model with mutual dependence. Chapter 3 proceeds in explaining data collection methods, techniques. Furthermore it addresses research ethics towards data collection. Chapter 4 deals with research reporting and results. Finally, Chapter 5 elaborates on conclusions and discussion, managerial relevance and implications for follow-up research.

## 2. Theoretical background

This chapter encompasses a review of the critical discussion of academic literature in the field of development of resilience strategies and workplace innovation (related to the Resource-Based View perspective; e.g. both are creating competitive advantage to deploy on unique assets of the organisation) and interdependence in their relationship, aimed to analyse the formulated research questions: *“To what extent and how are organisations developing or altering strategies building upon workplace innovation in order to become more resilient in environments characterised by high levels of uncertainty and disruptiveness?”* The central interrelationships and themes are exhibited and clarified. Subsequently a conceptual model is elaborated, structuring the interdependence and interrelations among the five propositions and two critical concepts. A total of five propositions have been identified in order to answer the research question; through validation of the propositions by the findings of Chapter 4.

### 2.1 Development of resilient business strategies

This section analyses how business strategies on building a resilient organisation are developed. This section will focus on the definition of the concept of resilience as used in various studies, secondly, proceeding with the argumentation why development of resilience strategies is indispensable and inevitable, what role exploitation and exploration plays in the strategy development process, and finally it elaborates on a derived proposition from this literature study.

Resilience is a subject that many organisations, beyond the current COVID-19 crisis, pursue organisational development by increasing competency and capacity levels, in order to be able to act in an environment of uncertainty and disruption (Bardoel, Pettit, De Cieri, & McMillan, 2014; Branicki, Steyer, & Sullivan-Taylor, 2019). Fiksel (2006) applies the following concept of resilience: *“The capacity for an enterprise to survive, adapt, and grow in the face of turbulent change”* (p. 16). Due to the contemporary complexity and turbulence of value chains, it is a requirement that organisations implement resilient strategies with collaboration and participation between all primary and support activities within the firm (Ahlquist et al., 2003). Thereby is it possible that creating an alignment of the dimensions strategic orientation, product-market improvement, and flexible work and organising smarter concerning workplace innovation, may result in the development of resilient business strategies. This alignment on an intra-organisational level requires alignment on an inter-organisational level with all business partners in value chains at stake too; external cooperation and internal participation are needed (Pettit, Fiksel, & Croxton, 2010). Talking current, often global value chains, they face

vulnerability and complications due to the global COVID-19 pandemic and its macroeconomic and operational business disruption of global and very complex value chains (Casalino et al., 2019). Pettit et al. (2010) argue that value chain disruptions are partly caused by globalised supply chains, centralised distribution, and specialised factories, among others. The trade-offs between alignment and adaptability are seen as the foundation of organisations with the ability to achieve both aspects simultaneously and the ability of organisations to be excellent in daily processes and to change and innovate in an uncertain and disruptive environment (Bodwell & Chermack, 2010; Gibson & Birkinshaw, 2004). Organisations should pursue for teams and individuals to develop techniques to be consistently inconsistent by simultaneously balancing between centralised and decentralised, short-term and long-term, and sustainability and efficiency (Benner & Tushman, 2003).

Stokes et al. (2019) argue that resilience is more presumable to unfold through ambidextrous organisations. Organisations are having the propensity to be simultaneously aligned and efficient in its management of today's business demands as well as being adaptive to ongoing and sometimes disruptive changes in the environment. Ambidexterity is achieved by balancing exploration and exploitation, combining creativity and adaptability with continuous, proven methods of daily business (Stokes et al., 2019). Firms that focus on workplace innovation may be able to achieve ambidexterity rapidly and therefore pursue resilience. Besides, the strategic improvement perspective is focused on exploitation with continuous improvements, and innovations and ideas can arise from internal and external stakeholders, and low risks of investments in innovations (De Wit & Meyer, 2010). Radical rejuvenation perspective focuses on exploration with disruptive aspects such as innovations that are characterised as dramatic and in the short term, high returns, increased risks in terms of investments in innovations, and stability and instability alternate for design purposes of the future (De Wit & Meyer, 2010). Exploitative resilience stands for the extremes that nestle externally in organisational complexity and explorative resilience stands for the extremes that naturally nestle internally as organisational complexity (Stokes et al., 2019). This demanding balancing act must be secured in corporate strategy, culture, organisational design and in all key work processes therein. Moreover, ambidextrous organisations expose the ability to embrace and balance simultaneously among deliberate (planning), and emergent (incrementalism) approaches to strategy development (De Wit & Meyer, 2010). Bodwell and Chermack (2010) emphasise that organisational ambidexterity can be analysed through the multiple frameworks of adaptation, design, and learning. Besides, environmental uncertainty and disruption, competitive dynamics,

firm efficiency and flexibility moderate the ability of firms to be ambidextrous (Bodwell & Chermack, 2010; Stokes et al., 2019). Ambidextrous firms are capable of effectively reacting to -fast- changing environments while simultaneously managing ongoing businesses and their much-needed profit and cash-flow contributions efficiently. Hence they are more resilient to disruptive change than organisations focused on either the exploration or exploitation end of the spectrum (Stokes et al., 2019).

Strategic developers who are proactive and deal with uncertainty and -potential- disruption can ensure sustainable growth (Leitch & Volery, 2017). A fortiori, a critical success factor such as resilience strategies is needed for firms to survive uncertainty and disruption, including strategic training related to long-term strategic decision making and how to boost ad hoc responsiveness to short-term adversity (Herbane, 2019). Strategic decision making must deal with the short- and longer-term dichotomy. Strategic development planning has become ever more formalised and can be characterised as a systematic, deliberate process of assessing internal strengths and weaknesses and external opportunities and threats to arrive at a management agenda, strategic direction and desired tasks (Herbane, 2019). This formalisation is essentially first intention development, strategic improvement perspective of emergent strategies and implementation of those strategies more than developing firm-based capabilities towards managing the consequences of uncertainty and disruption when and where they occur (De Wit & Meyer, 2010; Mintzberg, Ahlstrand, & Lampel, 2009).

Corporate strategic development is firstly focused on specific external business objectives and the road towards meeting those objectives; secondly on strategic programming and how resources are allocated, and which structures, systems and people are deployed, as well to create synergies; thirdly on budgeting and monitoring of control, incentives, staffing systems and learning systems (Chakravarthy & Lorange, 1991). Scenario planning is frequently applied in order to create sensing (developing and analysing trends), seizing (identifying which developments are of interest), and re-configuration (firms can translate this into organisational change) (Bodwell & Chermack, 2010). Strategic development can, therefore, anticipate and orient possible uncertainties in the environment, since anticipative developments proactively look for benefits of the future intending to reduce and endure the uncertainty in the environment of the organisation (Veliyath, 1992).

The topic of strategic development is widely represented in scientific theory and practice (De Wit & Meyer, 2010), in addition, strategic resilience development is a younger paradigm that

focuses on both deliberateness and incremental perspective, so is particularly polysemous (Herbane, 2019). Former strategic risk management planning is mainly focused on information systems failures. It is mainly concerned with a single contingency focus rather than the strategic business continuity concerning the entire firm. Moreover, development of strategic planning mainly focuses on top-down activities, while the development of strategic improvement mainly focuses on bottom-up, so emerging over time (De Wit & Meyer, 2010; Ismail, Poolton, & Sharifi, 2011; Mintzberg et al., 2009). Besides, the strategic framework of top-down is leading in organisations to develop a degree of resilience during turbulent environments and uncertainty (Ismail et al., 2011). However, if an organisation is more flexible in strategic development, so pursuing both from top-down to bottom-up, response time can be enhanced, allowing the organisation to be proactive during disruption (Tracey et al., 2017).

Furthermore, developing business strategies can proceed through the following process, first identifying the mission setting (purpose and principles) and agenda-setting (influencing specific people or groups), second diagnosing the external assessment (macro-level; uncertainty and disruptiveness ) and internal assessment (structures, systems; digital technologies, capabilities and competencies), third conceiving the option generation and option selection, fourth realising resilient strategies through action taking and performance control (De Wit & Meyer, 2010). To conclude, the structure needs to follow strategy since strategy determines long-term objectives, adoption of action, and the allocation of resources to achieve the objectives in question (Mintzberg et al., 2009). The structure is designed based on the developed strategies as well as changes in strategy require new structures, as current structures may cause problems when implementing new strategies to create resilience regarding current and future uncertainty and disruption in the environment.

Based on the literature of strategic development towards resilient business strategies, an initial proposition emerges from this to overcome the gap whether resilient business strategies are positively influenced by ambidextrous organisations, namely: *Proposition 1: Ambidextrous organisations may positively affect resilient business strategies, due to increased cooperation and employee engagement, and due to pursuing both exploration and exploitation.*

## **2.2 Workplace innovation and business strategies**

Workplace innovation is more about high involvement workplaces, sustainable work systems, high-performance workplaces and employee-driven innovation, among others (Pot et al., 2012). There is an underlying relationship between workplace innovation, flexible structures, a

synergy of systems, employee-driven improvement and innovation, and people-centred practices (Fiksel, 2003; Oeij et al., 2017; Totterdill, 2015). By defining workplace innovation, the success of integrating workplace innovation into business strategies can be increased. Having stated this, overall success is more determined by the business environment of firms and the path dependency of organisations such as current structures and systems (Pot, 2011). For this research, the definition given by Kesselring, Blasy, and Scoppetta (2014) is used, namely: *“Those innovations aim at improving staff motivation and working conditions, thereby enhancing labour productivity, organisational performance, innovation capability, reactivity to market changes and consequently business competitiveness”* (p. 13). Kankaraš and Van Houten (2015) argue that there is not an unambiguous workplace innovation policy by firms, as they more often rely on a more diffused set of practices. Nevertheless, all their choices result in higher firm performance and better workplaces for employees.

Work environment factors characterise workplace innovation, and these factors determine the competencies and capabilities to improve firm resilience during and after uncertain times. The three resources – strategic orientation, product-market improvement, and smart organising (a combination of flexible work and organising smarter) – of workplace innovation are used to assess the essential elements of workplace innovation in organisations (Oeij et al., 2011). To foster potential business resilience and workplace innovation, a synergy of the three resources is required. In addition, a substantial level of shared collective awareness towards workplace innovation is needed in firms to achieve success (Pot, Totterdill, & Dhondt, 2016; Oeij et al., 2017). Comprehensive, Pot et al. (2016) argue that workplace innovation predominately helps to overcome the dilemmas of long-term versus short-term strategies, innovation versus operational excellence, and control versus participation.

### **2.2.1 Strategic orientation**

Strategic orientation is linked to long-term business goals, and the development of resilience business strategies may more often be linked to incremental improvement responses to direct adversity or disruption (Ortiz-de-Mandojana & Bansal, 2016). Hence it could be reasoned that organisations are ambiguous towards both aspects of strategic developments of strategic activities being present in order to bridge the gap between long-term development and short-term containment during uncertainty and disruption. By creating a connection, the firms can pursue a state of affairs where a major crisis can be simply perceived and managed as business as usual. However, there is the paradox of deliberateness and emergence strategy formation arising as a result of conflicting elements of both; the former need to figure out the internal and

external situation of the firm in advance (formally structured and comprehensive), vis-à-vis, the latter need to find the internal and external situation along the way (thinking and acting intertwined) (De Wit & Meyer, 2010). Thompson (1967) appoint the paradox of firms in previous years as follows: *‘The paradox of firms involves the dual searches for certainty and flexibility’* (p. 150). Although strategic orientations are rarely deliberate or emergent, but rather a gathering of both, as shown in Figure 1 (Mintzberg et al., 2009).

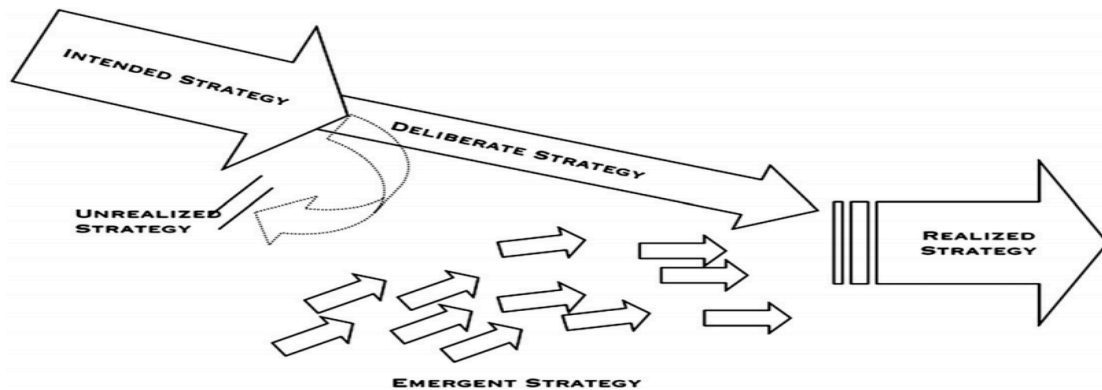


Figure 1: Paradox of deliberate and emergent strategy development (Mintzberg et al., 2009)

The resilience of business strategy addresses the trade-off elements of business continuity, sustainability, profitability and operational excellence thus pursuing short-term and long-term success (Ivanov, Sokolov, & Dolgui, 2014; Mansouri, Mostashari, & Nilchiani, 2009; Ortiz-de-Mandojana & Bansal, 2016; Sahebjamnia, Torabi, & Mansouri, 2018). In this context business continuity and sustainability are mainly considered determining organisation-specific structures, processes, systems, resources and people roles to respond agile and adaptively to direct and indirect operational interruptions (Herbane, 2019; Ortiz-de-Mandojana & Bansal, 2016; Sahebjamnia et al., 2018). Developing resilient business strategies is in line with business continuity as an adaptive process by creating responsiveness and achieving reinvention on strategic challenges at the macro-level (Herbane, 2019; Sahebjamnia et al., 2018). As a result, resilient business strategies are crucial for the agility and business continuity of organisations. Besides, a trade-off concerning short-term and long-term strategic orientation can be achieved through a deliberate and emergent strategic development, and by adapting existing and new resources in order to respond agile to adversity, uncertainty, and disruptiveness (Herbane, 2019).

Moreover, Ortiz-de-Mandojana and Bansal (2016) stress that strategic orientation is associated with social and environmental practices. They define social and environmental practices as

improving firms' impact on the social and natural environments, including employee relations, diversity, human rights, product quality and safety, through these organisational practices, among others. By pursuing this, firms can create resilience and mitigate threats, thereby helping firms to sense and seize long-term opportunities (Ortiz-de-Mandojana & Bansal, 2016). As well as firms pursuing social and environmental practices experience the following effects; higher growth, firm survival, lower short-term profitability. As an example American firms that had placed their strategic orientation focus upon social and environmental practices experienced less impact and a faster way to recovery from the 2008 financial crisis compared to their peers (DesJardine, Bansal, & Yang, 2015).

Furthermore, generic strategy orientation is a way for firms to pursue profitability as a business goal, with the vital component of cost leadership (Spanos, Zaralis, & Lioukas, 2004; Wright, Kroll, Tu, & Helms, 1991), even if the hybrid strategy, a combination of components such as cost leadership and differentiation leadership, may be more successful than merely focusing on a pure generic strategy. The positive causal relationship of hybrid strategy to profitability depends on the vital component such as cost leadership (Spanos et al., 2004), assuming that the development of resilient business strategies merely focused on profitability and efficiency. In this line of thought firms hardly invest in workplace innovation, but prioritise investment in digital technologies (Modrak, Soltysova, & Poklemba, 2019). The focus on short-term profitability by contemporary management may result in a counterproductive strategy to obtain resilience (Korhonen & Seager, 2008). More specifically, this can have consequences and negative impact on firms' growth, survival, and long-term volatility, thus harming the resilience functionality of organisations (Ortiz-de-Mandojana & Bansal, 2016). To become more resilient, firms could specify their strategic orientation in the areas of social and environmental practices such as workplace innovation to deal with unexpected uncertainty and disruption.

In short, the strategic orientation approach is challenged by the capability-centered approach by organisations which are pursuing resilience (Denyer, 2017). The ability of organisations to adapt through uncertainty or disruption is a determinant of resilience that can be strategically developed despite or due to the absence of strategic planning formation in organisations. Aldrich (2012) emphasises the role of social networks in organisations objectives as of higher priority to a successful level of organisation resilience than planning formation.

Based on the literature towards the strategic orientation of businesses, an initial proposition emerges from this to overcome the gap whether the exploitation of workplace innovation is



influenced by the priorities concerning long-term vis-à-vis short-term strategy, namely:

*Proposition 2: Priorities regarding long-term vs short-term strategy affect the exploitation of workplace innovation opportunities.*

### **2.2.2 Digitalisation and product-market improvement**

Contemporary firms are more likely to analyse the game-changing digital technologies to new products, services, and process and then transform themselves into a ‘digital organisation’ in order to survive in an uncertain and disruptive environment (Nambisan, Wright, & Feldman, 2019). However, firms that invest in an integration strategy of workplace innovation and product-market strategies may be more successful organisations in the long term, likewise in the areas of sustainability and responsibility (Casalino et al., 2019; Oeij et al., 2017).

Furthermore, there is a need to ensure that firms improve their labour resilience and productivity in terms of people's wealth and social amenities, through a synergy of workplace innovation and product-market strategies (Bhamra et al., 2011; Pot et al., 2016). However, Howaldt et al. (2015) argue that product-market strategies are mainly approached as a technology-centred logic rather than a sociotechnical system. Nevertheless, several scholars are convinced that social demand rather than technological demand should guide the development of new resilient business strategies (Casalino et al., 2019; Howaldt et al., 2015; Oeij et al., 2017). In other words, firms are compelled to take a participatory role to learn about workers’ needs and whether digital technologies can contribute to fulfilling those needs. Side effects of digital technologies are that routine jobs may disappear, which is inevitable. Although, as firms become more and more dependent on digital technologies, there is more need for highly skilled and practiced workers in firms, among others to restore technological failures (Peruffo, Contreras, Molinuevo, & Schmidlechner, 2017). As a result, workplace innovation can play a significant role in being resilient (Ras, Wild, Stahl, & Baudet, 2017).

Leyh, Schäffer, Bley, and Forstenhäusler (2016) argue that digital technologies are compelling to alter product and market strategies. Work systems and processes are seen more as improving economic performance and resilience of organisations rather than the workplace of employees (Boxall & Macky, 2009). According to Oeij et al. (2017) a comprehensive strategy development is needed with a focus on services and innovative workplaces which contribute to employee participation, thus a sociotechnical strategic approach, rather than the full focus on digital technologies in products and markets. However, there is an alteration required in leadership behaviour and vertical communication (Oeij et al., 2017). Koukoulaki (2014) emphasises that

the performance of workplace innovation appears later than the returns towards shareholders thinking. Thus, focus on profit optimisation, and thereby is implementing technological innovation less complicated than social innovation. As a result, it can be assumed that firms are more disposed to invest in technical innovation rather than workplace innovation.

According to Howaldt, Oeij, Dhondt, and Fruytier (2016) firms with business strategies may benefit from a strategy consisting of the integration of workplace innovation and a critical examination towards the obsession with digital technologies, which is frequently treated as separable from human capital. This research concludes that an appropriate strategy is needed with integrated workplace innovation practice rather than a full focus on products, services, and process, thus to fully utilise business resilience and allow both employee and employer to benefit from workplace innovation as a best practice approach in their aim to create organisation resilience (Casalino et al., 2019; Totterdill, Dhondt, & Milsome, 2002).

Based on the literature of product-market strategies, an initial proposition emerges from this to overcome the gap whether firms invest more in product and market strategies instead of workplace innovation, namely: *Proposition 3: Firms are more disposed to invest in product and market strategies through the focus on profit optimisation rather than workplace innovation as best practice, the impact of workplace innovation is underestimated.*

### **2.2.3 Smart working and organising**

Resilience can emerge through normative content on an organisational level, for example in actions, cognitions, and influencing the common elements formed by a top-down approach; leadership and communication, and bottom-up approach; interpersonal exchange (Stoverink et al., 2018). However, strategic developers need data from employees to develop a resilient strategy; teams must work in coordination of interdependence to exchange information quickly and to interact with each other, since this improves strategy development and implementation (Stoverink et al., 2018).

The potential to be more resilient compared to competition differs in learning experiences, business age, development, workforce growth, and strategic planning development (Herbane, 2019). According to Herbane (2019), running strategic and resilience activities at the same time ensures maturity in growth survival so that uncertainty and crisis circumstances become an opportunity to create local benefits in creating better physical and mental environments and people-centred practices. Ismail et al. (2011) suggest that a resilient organisation is developed

over time, effectively absorbing future stress and strain during disruptiveness. The advantage of this is that organisations not only survive but also thrive in situations of uncertainty and adversity (Cameron & Dutton, 2003), improving capabilities to deal adequately with future adjustments (Ismail et al., 2011). Firms can make preventive use of multiple growth strategies and scenarios to develop and examine internal capabilities in terms of strengths and weaknesses.

Actual people in organisations co-determine the resilient possibilities of the firms, and therefore it may be of relevance that strategic leaders focus on the workplace of employees (Pettit et al., 2010). Subsequently, Christopher and Peck (2004) argue that organisations can create resilience through four key factors; first, resilience can be created by advanced digital technologies, second, a high degree of collaboration and participation is needed intraorganisational and interorganisational in the value chain, third, strategic agility can provide ad hoc response to unforeseen macro factors, and fourth, there is an existing culture and actual level of competence of risk management required. The characteristics of successful strategic management responses are mentioned as flexibility, redundancy, efficiency and participation (Sheffi, 2005). This is in line with the implementation of smart working and organising elements in organisations such as flexible structures, a synergy of systems, employee-driven improvement & innovation, and people-centred practices & collaboration (Fiksel, 2003; Totterdill, 2015). Thus, it can be assumed that strategic development concerning smart working and organising into business strategies may very well result in resilient business strategies. Besides, social interpretations of resilience, indeed focused on smart working and organising, incorporate people's adaptability and dynamic learning (Meyer, 1982; Totterdill, 2015). Organisations in times of uncertainty and disruption are more capable of responding to ad hoc and adapting their strategy and structures, subsequently transforming them to the new standard.

Furthermore, firms can create smart organising through operational flexibility and agility by making iterative progress through three different phases, robustness, responsiveness and proactiveness (Ismail et al., 2011). Robustness can be achieved by reducing variables that make the organisation vulnerable, such as inflexible and unreliable processes; responsiveness can be achieved by creating an alignment of business processes and capacities of jobs and teams; proactive organisations can be created by fundamentally building on improving capabilities and skills in the workplace. Firms developing proactive strategies thrive on a top-down approach (Ismail et al., 2011). Nevertheless, firms may predominantly commit the development of

strategies with operational capabilities. However, research shows that during periods of uncertainty and turbulence, firms make less use of strategic planning development (Matthews & Scott, 1995). This is partly because turbulence requires a mere faster approach 'to combat the effects as a firefighter' rather than plan and behaving strategically. Although, firms that are initially flexible and agile and employing a hybrid strategy formation regarding strategic planning and incrementalism simultaneously, can be more proactive and endure uncertainty and disruption as well as sustainable survival (De Wit & Meyer, 2010; Fiksel, 2003; Herbane, 2019; Ismail et al., 2011; Tracey et al., 2017). The creation and application of a multiple-strategy approach enables firms to mitigate the effects of uncertainty and disruption through reducing potential risks. Moreover, this approach ensures that the skills and capabilities of firms are improved and subsequently use exploration activities to achieve sustainable growth potential (Ismail et al., 2011).

Firms need to find a balance for their employees among job control (requirements) and job demand (control capacity) leading to an active and agile worker, in other words creating resilient organisations through learning and innovation opportunities in workplace innovation (Pot et al., 2016; Totterdill, 2015). Specifically, sociotechnical development aims to improve firm resilience, employee resilience and participatory relationships among employer and employees, simultaneously (De Sitter, 1981; Pot et al., 2016). In addition, Karasek (1979) predicts that low job control and low job demands create a passive worker, high job control and low job demands create low strain towards workers, low job control and high job demands create high strain towards employees thus causing stress risks and a diminishing effect on a resilient employee, and the last prediction is high job control and high job demands create an active worker, thus foster learning and innovation opportunities and potentially a more resilient organisation. Dhondt (2012) claims that a higher degree of workplace innovation creates a situation where firms and employees can both benefit rather than become a trade-off.

The organisation can pursue to smarter organise the workplace of employees adequately on four elements, firstly: effectively completing the tasks collectively (efficiency), secondly: the common denominator of the mental model of teamwork; employees commit to their roles, responsibilities, and interactions between people (cohesion; both being accurate about the right work at the right time and sharing whether everyone agrees on what is supposed to be done), thirdly: enabling employees to improvise; this is about the deliberate process of adaptations to change circumstances, so to reconfigure existing knowledge of previous experiences into

innovative ideas when there is a backlash (adaptability), fourthly: employees have confidence and safety in processes, systems, and in other employees; so there is a safe working environment to take interpersonal risks that leads to diversity of perspectives rather than fear and criticisms arises after risks taken (diversity and culture of safety) (Fiksel, 2003; Stoverink et al., 2018; Totterdill, 2015). Through developing these four elements, strategic developers and managers can increase organisational resiliency. Nevertheless, organisations choose rarely for workplace innovation, thus smart organising, because less well-structured firms can persist for a long time (Bloom & Van Reenen, 2010). Firms have to deal with environmental pressure as well. This two-edge concept, in turn, causes firms to be less disposed to innovate their strategy, or conversely, firms must change their strategy and innovate due to pressure from competitors (Oeij et al., 2017). To conclude, strategic developers who want to propagate a responsible and sustainable organisation can develop a sociotechnical approach to align smart organising in resilient business strategies. Thus, centralising the best practices approach on workplace innovation in resilient business strategies and embrace products, process and workplace in strategies that can provide adaptability and culture of safety, among others (Oeij et al., 2017).

To conclude, contemporary literature for the development of resilient business strategies focuses primarily on structures, processes and digital systems that improve the ability of organisations to respond towards disruptions and uncertainty (Denyer, 2017). However, the emphasis of smart organising on firm-level towards resilience strategies lacks or underexposed in academic literature. Moreover, the strategic decisions of the resource-based view approach, from a different field, supports smart organising in the development of business strategies as well as focus on internal resources, capabilities and core competencies of the organisations, thereby advocating for strategies developed on this foundation to ensure competitiveness and long-term success (Barney, 2001; Quenum, Thorisson, Wu, & Lambert, 2019; Totterdill, 2015).

Based on the literature of smart organising in the development of resilient business strategies, an initial proposition emerges from this to overcome the gap whether the macro-environmental pressure increases the attention for smart organising, namely: *Proposition 4: External environmental pressure (COVID-19) increases attention for smart organising, therefore smart organising could make the firm more pro-active and resilient.*

#### **2.2.4 Dimension comparison of workplace innovation**

Oeij et al. (2011) argue that there is a difference between the resources of workplace innovation concerning the motivation of applying the resources in daily business operations. This means

that organisations have a more definite preference for strategic orientation and product-market improvement relative to smart organising (flexible work and organising smarter). As a result, organisations seem to focus more on sales, business and strategy. Additional research is needed to argue whether organisations in uncertainty and disruptiveness in the COVID-19 case as well reveal a stronger motivation for strategic orientation and product-market improvement relative to smart organising.

Based on the literature of the resources concerning workplace innovation, an initial proposition emerges from this to overcome the gap whether the motivation for strategic orientation and product-market improvement is more influential relative to smart organising due to uncertainty of COVID-19, namely: *Proposition 5: Uncertainty of COVID-19 means that organisations show a stronger motivation for strategic orientation and product-market improvement relative to smart organising.*

### 2.3 Academic concepts, themes and relations

This section offers a summary overview of the academic theories and the way leading up to the five propositions. The concepts in this research are: development of resilient business strategies and workplace innovation, including the dimensions of strategic orientation, product-market improvement and smart organising (Oeij et al., 2011). The insights, relationships and connections pertaining to academic knowledge are aligned and highlighted and explained in the sections above, as Figure 2 depicts. The overview shows which literature took a leading role in the developed proposition after each section in Chapter 2. Figure 2 also provides insight into the operationalisation to make the concepts assessable, and this will be further explained in Chapter 3. Propositions and concepts are further discussed in section 2.4.

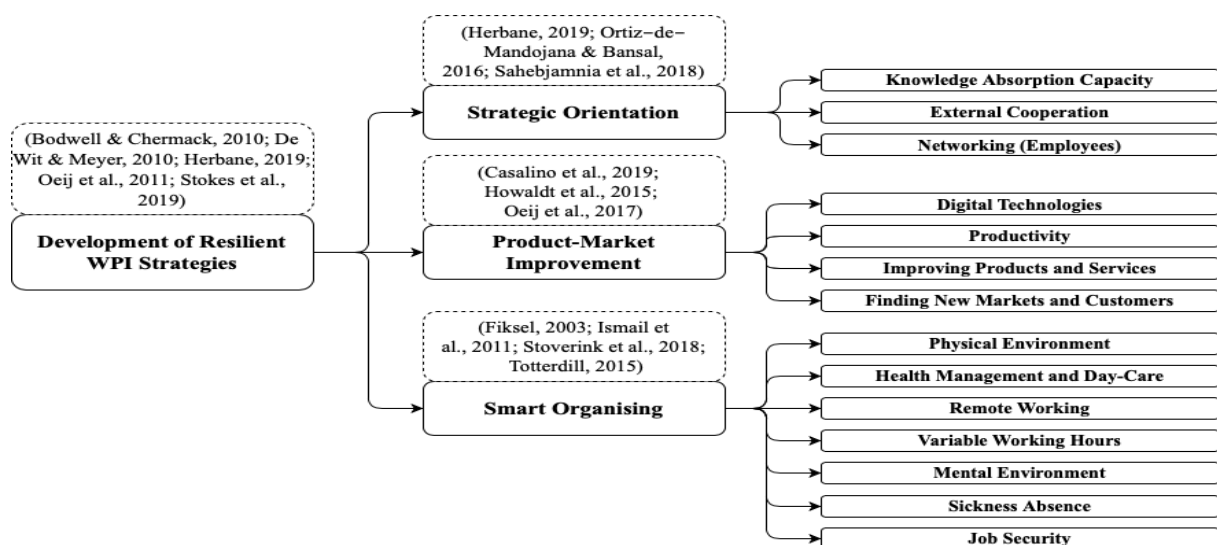


Figure 2: Structure of relationships and connections

## 2.4 Conceptual model

The conceptual framework shown in Figure 3 evokes various mechanisms that are interrelated. It links each proposition to the concepts described earlier in the prior section and vice versa. The insights, relations and central concepts that serve as a guide for this research are in consecutive order: workplace innovation and resilient business strategies on an organisational level. The propositions are derived from existing theories in order to make them assessable through operationalisation and then to evaluate the propositions. As well as to answer the research question through validation of the propositions. The existing theories can thereafter possibly be adapted or enriched. As the literature study in this research encountered partially conflicting theories the study will explore which theory can be supported or not supported. This conceptual framework exhibits whether integrating of workplace innovation in business strategies conditioned by uncertainty and disruptiveness from COVID-19 leads to strengthening resilient business strategies, among others. For each proposition, the following relationships were identified: First, the relation between ambidextrous organisations and resilient business strategies; second, the effect of long-term versus short-term strategy on the exploitation of workplace innovation; third, the relationship between firms that focus on profit optimisation and preferential investment in product and market strategies; fourth, the effect of external environmental pressure on smart organising leading to proactive and resilient organisations; fifth, the relationship between the uncertainty and disruption of the COVID-19 pandemic and the stronger motivation of organisations for strategic orientation and product-market improvement rather than smart organising.

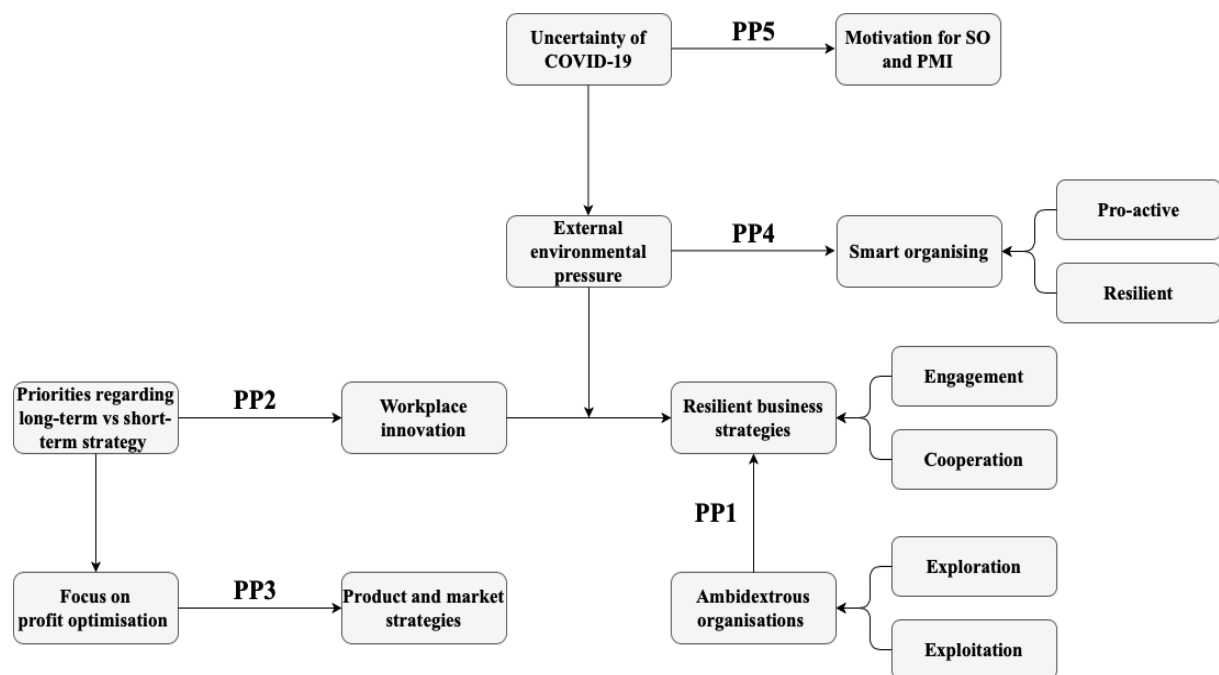


Figure 3: Conceptual framework

### **3. Methodology**

This chapter elaborates on the research approach, research design, data collection and analysis, and research quality and ethics. Furthermore this chapter explains which methods and tools are used to answer the research question and conclude on the propositions. It will make transparent how data collection methods relate to the main research question and the five formulated propositions which provide further direction to this research.

#### **3.1 Overall research approach**

This qualitative research project constitutes a content analysis in the context of business (renewal) strategies during the COVID-19 crisis in March-April 2020 by firms. Content analysis is a method to analyse the content of texts from, e.g. newspaper articles and transcripts of interviews (Myers, 2013). The complexity of texts in the newspaper articles, in this research, has been reduced by the content analysis by filtering out texts that do not load on the concepts, dimensions and elements. It was decided to conduct a content analysis since at the beginning of the research it appeared that it would be challenging to approach firms for interviews. Qualitative interviews and observations were not conducted because of the COVID-19 crisis, but could provide more insight into the validity of propositions in follow-up studies; further limitations are described in section 5.4.

Besides, the qualitative deductive method is applied as an assessment method of the concepts, dimensions and elements. According to Bleijenbergh (2016), a deductive qualitative study has its starting point in existing theories and then builds on data collection and interpretation in order to test and possibly accept or reject propositions resulting in potential impact on these existing theories. Qualitative research has an exploratory character allowing more in-depth data collection, new interpretation and new insights, enriching further proposition building leading to further and more accurate theory building as it seeks to understand more relevant dimensions and so far undisclosed variables at work in the studied environment. Chapter 4 will further elaborate on this.

The research question and propositions were formulated from existing theory. In order to answer the research question data obtained from 900 publications in the database of the TNO knowledge institute were collected, studied and interpreted. The TNO database is maintained for a period of 6 months (March to August 2020) and stores data on firms and their corporate strategic choices during the COVID-19 crisis in the given period. The data reveal many quotes from entrepreneurs, management and employees on how they handled the COVID-19 crisis as



an organisation and to what extent strategic decisions were made by addressing workplace innovation. This research has chosen the period March and April 2020 as time demarcation since this period constitutes the early months of the COVID-19 crisis; many firms were compelled and triggered to adapt their strategies to the sudden change in their business environment and business outlook. This qualitative research is to offer further insights in order to contribute to further investigative, possibly quantitative research, also distinguishing between types of industries and possible variations in policies adapted during the COVID-19 crisis.

The concepts and five propositions were evaluated based on the information from the mentioned database. The nature of the propositions was twofold; testing the research question through sub-claims as well as reflecting on existing theories. Table 1 provides an overview of the concepts and five propositions concerning the method used and the assessment approach based on various elements. Specifically, all concepts and propositions were assessed through the method of content analysis with various elements, further summarised in Appendix II. Thus, the concepts and five predetermined propositions were analysed and connected to the 14 elements, as a result of the conducted deductive data analysis regarding the transcripts. The different relationships within the propositions were mentioned above in section 2.4, as shown in Figure 3.

The objective contains several aspects that appreciate the use of theory-oriented research as an appropriate means. Firstly, this research aims to gain insight into what extent firms are developing resilient business strategies through addressing workplace innovation; therefore, propositions are formulated regarding prior research. Secondly, this theory-oriented research aims to contribute to scientific knowledge and to further expand this on the phenomenon of organisational-level, such as in this research, the relationship between workplace innovation and resilient business strategies.

Concepts and Propositions	Method	Assessment
C1: Workplace innovation	Content analysis	Elements: Networking employees, physical environment, health management and day-care, remote working, variable working hours, mental environment, sickness absence, and job security.

C2: Resilient business strategies	Content analysis	Elements: knowledge absorption capacity, external cooperation; digital technologies, productivity, improving product and services, and finding new markets and customers.
PP1: Ambidextrous organisations may positively affect resilient business strategies, due to increased cooperation and employee engagement, and due to pursuing both exploration and exploitation.	Content analysis	Elements: knowledge absorption capacity, external cooperation, networking, improving products and services.
PP2: Priorities regarding long-term vs short-term strategy affect the exploitation of workplace innovation opportunities.	Content analysis	Elements: knowledge absorption capacity, external cooperation, networking.
PP3: Firms are more disposed to invest in product and market strategies through the focus on profit optimisation rather than workplace innovation as best practice, the impact of workplace innovation is underestimated.	Content analysis	Elements: knowledge absorption capacity, external cooperation, and networking; digital technologies, productivity, improving products and services, finding new markets and customers.
PP4: External environmental pressure (COVID-19) increases attention for smart organising, therefore smart organising could make the firm more pro-active and resilient.	Content analysis	Elements: physical environment, health management and day-care, remote working, variable working hours, mental environment, sickness absence.
PP5: Uncertainty of COVID-19 means that organisations show a stronger motivation for strategic orientation and product-market improvement relative to smart organising.	Content analysis	Elements: knowledge absorption capacity, external cooperation, networking; digital technologies, productivity, improving products and services, finding new markets and customers; physical environment, health management and day-care, remote working, variable working hours, mental environment, sickness absence, job security.

Table 1: *Concepts and Propositions*

### 3.2 Research operationalisation

The qualitative research assessment method used a deductive data collection method, content analysis, to determine the context to resilient business strategies in the COVID-19 crisis. This

is further explained in section 3.3. Firms that were appearing in the articles were examined as organisations as a whole; thus, this research concluded on an organisational level (Bleijenbergh, 2016; Myers, 2013).

The four dimensions explained in this research are strategic orientation, product-market improvement, flexible work and organising smarter. The latter two, flexible work and organising smarter, were combined during the data analysis process into one dimension: smart organising, as flexible work substantially overlapped with organising smarter. All three dimensions are discussed in detail and defined in the theoretical framework in Chapter 2 as well as Appendix II. All labelled transcripts can be found in Appendix V and VII. The dimensions were then divided into several elements that invariably came back in the theoretical framework. Firstly, strategic orientation: knowledge absorption capacity, external cooperation, and networking (employees); secondly, product-market improvement: digital technologies, productivity, improving products and services, and finding new markets and customers; thirdly, smart organising: physical environment, health management and day-care, remote working, variable working hours, mental environment, sickness absence, and job security. The deductive research design was used to analyse the relevant transcripts. This systematic process operates as follows: firstly, from the research question, the variable terminology was used as a framework to encode the data. Secondly, the texts were carefully fragmented and read and then labelled related to the central concept: resilient business strategies. Thirdly, the texts were reread and again labelled in order to relate to the dimensions and elements of the central concept. Fourthly, looking for possible gaps by rereading the texts, allowing to make adjustments. The adjustments made have been described earlier in this section.

### **3.3 Data collection and analysis**

Data collection is not a straightforward process and contains numerous requirements. This research encompasses firms from several industries offering a broad and holistic perspective on their organisational business strategy decisions during COVID-19 in March and April 2020.

The data analysis process centres on content analysis. The analysis of the component is elaborated by using the coding process, incorporating the deductive approach. A coding scheme is applied based on the principles explained in chapter 3.2. The content analysis is characterised by the concept, dimensions and elements (Myers, 2013). In the coding process, the obtained data are compared in identifying the transcripts (secondary data) to find similarities in statements to corroborate the conclusions (as shown in Appendix III, codebook). Through the

visual comparisons of the articles, patterns could be found that form the basis for accepting or disproving the proposition theory. As a result, different outcomes arise concerning resilient business strategies that address workplace innovation; these results are discussed in Chapter 4.

In order to pursue reliability and reproducibility, the RapidMiner encoding software program has been used, in addition to using the encoding structure analysis as described above. This software program assisted the researcher in the creative coding process. This analytical process started with downloading the operators from RapidMiner text processing and web mining, once in place the operators Read to Excel and Read to CSV uploaded the data file in RapidMiner. Subsequently operator's tools Nominal to text, Process documents from data, Filter stop words dictionary, Generate n-gram, and Filter tokens by length were used for the analysis. The parameters per operator were set as follows: Filter stop words dictionary: the Dutch stop word list retrieved from <https://eikhart.com/nl/blog/-moderne-stopvragen-lijst> (the English stop word list is already available in operators), Generate n-gram: maximum length of five tokens, Filter tokens by length: the choice was made to retain as much information and variation as possible, so minimum characteristics were set to 1 and maximum characteristics to 9999. The above procedural steps were used to support and supplement the manual coding process by the researcher. The most frequently loaded labels by RapidMiner are listed in Appendix IV.

### **3.4 Research quality and research ethics**

The reliability of the obtained data has been achieved in the manner of the reliability of the sources. Most of the sources came from mainstream media (e.g. De Volkskrant, New York Times, NRC, among others) and were often adopted and used by several other publicists. These sources can be further verified in Appendix VI. In this qualitative research, the four criteria regarding credibility, transferability, dependence and confirmability were being pursued (Myers, 2013). This is explained as follows: first, credibility: by applying patterns and by systematic operationalisation, an attempt has been made to refine the theory until all cases fit. Second, transferability: the research context is described in detail in order to transfer the findings to different contexts. Third, dependency: through a coding scheme and correctness and completeness of the data analysis process. Fourth, confirmability: employing peer review and a described critical methodological reflection by the researcher, as shown in section 5.6. In general, the conception and epistemological principles of this research focused on social constructivism.

Furthermore, the research was conducted by desk research executed beyond the premises of the Radboud University of Nijmegen. During the process data collection was iteratively tested for reliability and validity. This research aims to eliminate idiosyncratic theory formation in order to warrant analytical generalisability and reproducibility. All steps conducted in the data collection process are described and explained in this chapter. Peer debriefing, intersubjectivity, and self-reflection are employed to increase the quality of the research (Myers, 2013).

This research has allowed covering a broad scope of businesses and firms. The research data have been processed with care and anonymity. The database obtained will not be used or distributed by third parties. This research neither used methods that run the risk of accidental findings, nor unobtrusive methods. No participant or contributor has been exposed or subjected to situations, requests, behaviour or actions violating common law and generally accepted societal norms of civilised behaviour. The chance of deception (e.g. when collecting data) has been minimised in this research. In summary this research meets established criteria on ethical and technical research practice.

## 4. Results

This chapter contains the findings and interpretations from the content analysis. The similarities and contradictions from various findings have been determined for each element. In doing so, citations from employees, management and board members have been used from relevant articles that have been translated (from the transcripts) in the sections below. More specifically, the deductive data analysis of 900 articles from the period March and April 2020, creating three dimensions in the form of strategic orientation, product-market improvement and smart organising who is influencing the development of resilient business strategies through addressing workplace innovation in environments characterised by uncertainty and disruptiveness of COVID-19. The relation between workplace innovation (elements: networking employees, physical environment, health management and day-care, remote working, variable working hours, mental environment, sickness absence, and job security) and resilient strategies (knowledge absorption capacity, external cooperation, digital technologies, productivity, improving product and services, and finding new markets and customers) has been exposed through the corresponding elements and will be further discussed in Chapter 5.

### 4.1 Strategic orientation

In the strategic orientation dimension, the following elements were used to label the texts from the publications: ‘knowledge absorption capacity’, ‘external cooperation’, and ‘networking employees’.

#### 4.1.1 Knowledge absorption capacity

Organisations that prematurely deployed their strategic orientation to the ‘new way of working’, thus before the COVID-19 uncertainty and disruption emerged, noted that they have become more resilient as an organisation during the COVID-19 crisis. The strategic orientation of several organisations focused mainly on self-organising teams in which small teams are formed in which learning by doing is practiced, thinking and acting becoming intertwined. As the following statement summarises: *‘How happy I am that we have entered this IAO-process. By working with self-organising teams, taking responsibility, I notice that in these times of crisis, we are really resilient as an organisation’* (WZC Avondvrede, 288). Firms also apply the hybrid strategy of formal, intended, deliberate strategy planning as well as emergent strategies focused on incremental policies and actions in order to boost resilience. Several firms use a five-year plan with their vision, mission and objectives as a guideline in combination with bottom-up incremental approaches trying to tap on their employee resources and contribution. This can be observed from the following quotes: *‘Every day we talk about strategies, [...] how*

*should we build our roadmap for the future?’’ (AMD, 235) and ‘‘We are a modern organisation and all employees think along about the strategy and know our financial position’’ (Charlie’s Travels, 590). From the above results, a relation can be recognised between deliberateness and emergence strategy formation and resilient business strategies. In addition, the self-organising teams are empowered to make bottom-up decisions, and their firm uses the data and capabilities from the self-organising teams in the development of their overarching management driven top-down strategy which may have a positive effect on employee engagement.*

Several firms were also focused on multiple scenario planning in their strategy development in response to the first months of the crisis. What external dynamics are at work and how do they affect the firms’ business outlook and how does that influence strategy, operations, allocation of tangible and intangible resources of the firm? How to become -more- resilient? As the following quotations illustrate: *‘‘[...] we must have worked out plans for unexpected situations [...]. Coincidentally, we had just updated that scenario. That way we immediately knew what to do. We needed a week to get used to the situation, then it was business as usual’’ (Brand New Day, 893) and ‘‘Especially in 2008. We had no scenarios at all, ready for the what-if of such a recession. Now we have good finance teams that have drawn up three scenarios: [...]. And that gives peace of mind: for each scenario, it has been calculated what the organisation should look like’’ (Young Capital, 386). The results showed that these firms were able to anticipate regarding the consequences of the COVID-19 crisis and implemented a rapid renewal of direction as the scenarios were already developed. These scenarios mainly emerged from analytical reasoning rather than intuition based upon contemporary issues.*

#### **4.1.2 External cooperation**

The uncertainty posed by COVID-19 is sparking new initiatives as organisations shift their orientation towards joint innovation and co-creation, platform development, and onshoring of business units to achieve resilience (e.g. Airbus, 294; Kandinsky, 490; The Quarantainer, 516; ART4L, 548). More specifically, radical decisions were taken in the short term affecting the long term of the organisation. Strategy shifts towards onshoring business activities, bringing them back to the firm’s mother country in response to the vulnerability of global value supply chains exposed by the pandemic. Management faced massive operational problems in their downstream supply chains (raw materials, parts, logistics) affecting their delivery reliability towards their customers. As confirmed by the following quotes: *‘‘Global supply chains will become more robust and diversified’’ (Candriam, 400) and ‘‘The organisation is ‘onshoring’ jobs that were outsourced to call centres in India and the Philippines and are now affected by*

*the 'lockdown' in these countries. [...] As well as creating flexible employment opportunities for people who need to find work in the short to the medium term''* (Virgin Media, 167) and *‘‘The manufacturer of rapid diagnostic testing [...] has decided to relocate part of the assembly of its COVID-19 screening tests [...]’’* (Biosynex, 900). A mix of strategic planning as well as incremental strategies affects the strategic direction of firms. Firms management realises a better balance is needed between pursuing cost efficiency in a -global- value chain and pursuing firm resilience in that same chain in order to respond effectively to major market disruption now and in the future. Rethinking business unit geographic positions, onshoring, creating buffers within the organisational design, reviewing the entire value supply chain on potential risks are now part of the intentional and formal strategy development process.

During the heath of the crisis more attention was given to bottom-up suggestions and actions. Decision making and immediate and tangible actions in order to prevent disaster in the short run are key. Reliance on employees, their knowledge, expertise, loyalty, creativity and abilities in quick problem solving became manifest. This may spell new employment opportunities to appear, whereby organisations have chosen to deploy their personnel flexibly and work on job content enrichment.

#### **4.1.3 Networking employees**

Organisations respond to the crisis by redirecting their strategy towards facilitating innovations regarding the workplace of employees. Organisations increase training opportunities in order to boost knowledge and competence levels of their staff, increasing agility, flexibility and resilience of both the individual and the organisation. Organisations are in the process of relocating employees to other positions within a changing supply chain. Organisations pay more attention towards working conditions, better balancing work-life as well as contract conditions, as emphasised by the following quotes: *‘‘The typical KPIs [...] such as turnover and profit/loss [...] are no longer so important in these turbulent times. [...] Why not reorient his people to the new way of working that this crisis is bringing anyway?’’* (Destiny, 141) and *‘‘People-first: Your people are at the top. [...] Put your people first, they are the distinctive character of every organisation. [...] The hierarchy of stakeholders [...]’’* (Viisi, 506). The flexible organisational structure of AFAS illustrates this as well. The organisation structure has a mere two layers of management, ensuring every manager is well-aware of what is happening in the workplace with their people. The firm can provide targeted guidance in collaboration with and between employees (AFAS, 446). Employee involvement in strategy development is broadened which has a positive impact on performance and boosting resilience in times of crisis. The following



quote refers to this as follows: *“[...] dialogues concerning human capital, [...] likely to contribute to corporate strategies that improve resilience against various shocks and ensure employment practices supportive of innovation”* (WEF, 492). The above results also apply to an organisation like Starbucks. In times of crisis, this organisation chose to focus on local responsiveness and adaptation, which were then based on decisions made by field leaders. They make decisions in which the human factor plays a leading role. As illustrated by the following quote: *“Every community will continue to monitor the Covid-19 situation, [...] and decide when to reopen [...] depending on local conditions fully. [...] The decision is a ‘human one’, based on complex and ever-shifting information”* (Starbucks, 439). This shows that firms, possibly out of necessity, are opting for a different approach in their strategy formation than was initially the applicable standard. However, partly because of this strategic flexibility, these organisations are more resilient during the first months of the COVID-19 crisis. As a result, the trend is now more focused on the re-orientation of employees and their flexibility and adaptability in varied activities. Organisations are also more focused on broadening the development of skills and learning capacities. Organisations were applying reactive strategies mainly driven by the crisis in supporting employees to be resilient in the short term. The following quote endorses the latter finding: *“[...] near-term resiliency measures serve an important purpose, we should not lose sight of the fact that, [...] strategies currently being deployed to support workers are crisis-based and reactive, [...]”* (HC Management, 492). It therefore remains to be seen if this shift is temporary crisis-related, or it will become structurally embedded in corporate strategy.

There is another reality too. Some firms refocus their strategic orientation temporarily in order to confront the urgent effects of the COVID-19 crisis. Protecting turnover, margin and cash-flow comes first. Interventions were done in terms of boosting liquidity, speed collecting invoices and reducing cost of organisation by (unpaid) furloughing employees, temporarily suspending them, lay-offs, furthermore limiting investment programs, delaying paying bills to suppliers and lessors, rethinking partnerships with others, etc. Organisations such as MS Mode and American Today try to limit the damage with this measure and thus maintain the firm's liquidity (Cool Investments, 399). As the following quotes illustrate: *“Everyone will feel the effect of the cost measures to some degree, but some considerably more than others”* (Vox Media, 477) and *“Tens of thousands [...] employees have taken unpaid furloughs”* (US Airlines, 411). Firms were more reactive in times of uncertainty and the firms determined from

that position their decisions based on the short term, by using ‘cash-is-king’ strategies and providing (temporary) support to employees as a survival mechanism.

## **4.2 Product-market improvement**

In the product-market improvement dimension, the following elements were used to label the texts from the publications: ‘digital technologies’, ‘productivity’, ‘improving product and services’, ‘finding new markets and customers’.

### **4.2.1 Digital technologies**

The development of robotisation accelerated significantly in the first months of the COVID-19 crisis. Supermarket chains and e-commerce already employing robotics technologies noticed that they had become more resilient and productive. There was no need to make rigorous adjustments concerning security issues in order to remain operational, as fewer staff was needed in the initial phase of the crisis, as illustrated by the following quote: *“Coincidentally, he had just opened an additional robotic distribution centre last year, employing only fifteen people per shift”* (Spar, 828). There is also the tendency of e-commerce organisations to open new e-fulfilment centres during the crisis with robotics technology playing a pivotal role. Simultaneously, permanent jobs can be created alongside robotics technology. As the following quote shows: *“E-commerce organisation Amazon announced the creation of 1000 new permanent jobs in its new logistic centre [...] to be recruited this summer. The centre will be equipped with Amazon robotics technology [...]”* (Amazon, 46). Firms invested next to robotics technology also in labour-savings machines, negatively impacting employment (Boxmark, 5), furthermore in 3D printing, artificial intelligence, sensors, application development, and big data. The results show firms who invested in these named technologies can quickly scale up and improve their efficiency, as the following quote shows: *“This 3D-printing technology is the way to scale up in numbers quickly”* (Oceanz, 153). Thus, the use of digital technologies provides increased efficiency and the scaling up of production, while often accompanied by increased employment.

The organisation ART4L (548) is in the business of developing so-called ‘indoor positioning technology’ that aims to ensure that personnel in production can work safely and efficiently, through keeping sufficient safety distance. Technology like this does not reduce employment levels, what it does do is improving the workplace in a sustainable and resilient way, allowing in crisis time continued production, illustrated by the following quote: *“We call these machines co-bots [...]. The approach is not to replace people [...]. What we see is that no jobs are being*

*lost*'' (Brain Corp, 593). Another aspect of applying digital technologies is the shift towards higher-value jobs and tasks requiring more knowledge and skills: *'[...] sees automation primarily as a way to allow people to spend more time on high-value tasks'* (Brain Corp, 593). The above results show that firms are indeed investing in digital technologies as a resource in order to improve their product and service strategies and performance. Investment in digital technologies is based on a wide variety of strategic goalsetting. Its effects are also showing great variance. Digital technologies can strengthen product and services market power, hence gaining market share. The effect on employment can due to growth results be neutral or even positive. Digital technologies may cause a shift in the employment mix from low added value jobs to higher added value jobs. This offers opportunities for some, threats to others in the labour force. Digital technologies generally boost labour productivity, allowing firms to reinvest profits in educating its workforce. As the following quote shows: *'We will be developing a new employability program to help people find their next positive destination, be that retirement, further education or a new job'* (Michelin Tires, 240).

#### **4.2.2 Productivity**

Organisations could keep up productivity and production despite (regional) shutdowns during the first stages of the crisis by changing the workflow geographically and in case organisations already had a sufficient digital enabling system in place accompanied by a workforce already quite familiar with digital work processes could relatively easily shift from 'working offline' to 'working online', as the following quote reveals: *'Ford was able to shift some of those tests elsewhere, [...], Ford's electric vehicle development programs. [...] Some work is getting completed faster, [...] since people have access to their computers and vehicles at all hours. Employees are driving their test Mach-Es on the weekends when they would not normally have access to them'* (Ford, 555). This is an example of organisations managing continuity in their key business processes such as technology development despite all lockdown measures. Thus, a relationship is likely to exist between applied digital technologies and product-market improvement strategies during a period of uncertainty and disruption: organisation resilience can be supported by digital technologies, the latter can even increase productivity. Nonetheless, increased productivity during the first months of the COVID-19 crisis is not necessarily accompanied by increased employment. Firms also opted for a stop on hiring new personnel by saving costs and by focusing on efficiency and optimisation in operationalisation. As the following quote illustrates: *'In times of crisis, people and organisations become more economical, and generally more effective because productivity is increased where possible. You*

*do this by saving costs, whereby the largest cost item is often staff*” (2theloo; ContactCare; 3DWD, 866). Firms concentrated on big data technology in order to get a better understanding of customer needs and behaviour especially in a time of disruption. What to offer to the market and how to make the internal organisation could warrant those products and services actually, purchased or produced, shipped and sold. Focus on cash-flow in days of crisis requires among other things an effective low stock policy without threatening service levels. This data technology support firms in achieving this goal. Many firms did increase their stocks however in order to create buffers in order to counteract on supply chain problems: *‘By gaining insight into online search behaviour, they know how to manage their stocks very smartly’* and *‘[...] We are increasing our stocks slightly. No wild hamster campaigns, but we want to strengthen our resilience’* (Coolblue; FonQ, 7).

#### **4.2.3 Improving product and services**

The uncertainty and disruption of the COVID-19 crisis caused organisations to use their creativity in the first months to develop new products or services (exploration) or to improve their products or services (exploitation). These organisations took measures to improve products and services through closer cooperation in the supply chain and through training of employees to make them more flexible in producing potential new products. As the following quote reveals: *‘Production has since been significantly scaled up. To this end, various measures have been taken: expanding the number of production lines, more intensive cooperation with suppliers and training of production employees, from our own house and fellow organisations’* (Demcon, 571) and *‘We have to buy a special machine and employees learn from it to work. But the effect is somewhat similar to that of machines with which we normally stitch mattresses’* (Auping, Afpro, 388). Next to this, product development strategy around digitalisation got an impulse due lockdowns and the social distancing measures. As with AFAS (446), online products were initially not on their strategic priority list. Therefore, the online strategy has been accelerated due to the crisis and created a situation for employees in which they had to switch quickly to digitisation.

The crisis shows that organisations who focused their work processes on digitisation could quickly switch to producing new products, such as when using 3D-printing technologies, and then accelerate the introduction of designs (Materialise, 80). Other organisations also realised that the digital transformation is being accelerated due to COVID-19, such as Fixico (867): *‘We make claims handling completely digitally, with as little physical contact as possible. That*

*is the digital transformation that has always been pushing. That is now suddenly very fast. We do notice a dip here and there, but especially for the long term this is fantastic''.*

Firms build resilience that allowing them to remain operational in the short and long term due to the adaptability and flexibility in product development based upon market demand, as the following quotes claim: *''We originated as a firm that makes flags and banners, but recently we also install LED screens. I use the available time to expand our range. Innovation becomes important when we are operational again''* (Herva, 348) and *''Henkel switched some of its production lines to produce hand disinfectants''* (Henkel, 378) and *''INEOS announced the construction of two purpose-built plants in UK and Germany to produce hand sanitiser''* (INEOS, 379). The results mentioned above show that the COVID-19 crisis is accelerating innovations upon exploration and exploitation in product development strategies, whereby firms as well relying on COVID-19 developments such as DoorDash and SmartEagle: *''DoorDash says it began to test convenience store delivery earlier this year but has accelerated the launch in response to the COVID-19 pandemic, when options for pickup and delivery services have become vital''* (DoorDash, 291) and *''SmartEagle developed a sensor that keeps track of which workplaces are occupied at flex offices. But for the corona period, it converted its detector into a distance sensor''* (SmartEagle, 445).

#### **4.2.4 Finding new markets and customers**

Not only firms are shifting towards digital technologies, however, also markets and consumers. The COVID-19 crisis had a significant impact on that shift. Firms noted that older people (65+) rely more on online purchases during the crisis, although they rarely did before: *''Seniors are also increasingly placing orders at online stores. The frequency with which orders are placed is also increasing, [...]''* (Thuiswinkel.org, 324). As a result, consumer behaviour has changed to the online environment, and that will continue in the long term is the probability. As the following quote acknowledges: *''People are more concerned with hygiene. They buy more hand soap, vitamins and supplements. That will probably continue. I worked in China during the outbreak of Sars [...]. Then online shopping really took off. This is also a time when online shopping becomes a bigger part of our lives''* (Unilever, 565) and *''Customers are changing their behaviour, and the chains are doing everything they can to keep delivering. Growth is for almost everyone, even explosive online''* (Jumbo, Spar, PicNic, 828). Organisations perceive the changing behaviour as a possible opportunity in times of crisis to convert their diminishing physical demand to the online sales markets.

Firms focusing on diversification strategies and flexibility in processes in relation to digital technologies perceived, despite the COVID-19 crisis, that consumer demand remained stable or even increased. Thereby, firms that are pursuing diversification strategies were more flexible and resilient. In addition, firms made a short-term switch from a product that was less demanded to a product that was highly demanded, as is evident from the following quotes: *‘It is now tranquil in the ice cream industry. And there is a glaring demand for disinfectant. With the machines we normally make ice cream with, we can mix and make this product’* (Begeman, 133) and *‘For the time being, we can compensate for the decreased demand from one customer by additional orders from other customers’* (Ninatrans, 192). As well as focusing on market development strategies, there were new opportunities for firms, such as: *‘Online sales tripled in March, but the hospitality and business markets fell due to the lockdown. [...] Now supplies its coffee through its business customers to their home-based staff’* (Moyee Coffee, 419). Focusing on broad and diverse customer portfolios in relation to flexibility in work processes is a success factor for contemporary firms, especially when firms experience uncertainty and disruptiveness due to the COVID-19 crisis. As the following quote claims: *‘The new product line creates a good atmosphere in the organisation, which is also affected by the corona crisis, including the disappearance of festivals and the European Football championship. But the damage is manageable because her firm has a very diverse clientele. So, the work continues as usual, although the welders and painters now work in different shifts [...]’* (Groenenboom, 589).

### **4.3 Smart organising**

In the smart organising dimension, the following elements were used to label the texts from the publications: ‘physical environment’, ‘health management and day-care’, ‘remote working’, ‘variable working hours’, ‘mental environment’, ‘sickness absence’, and ‘job security’.

#### **4.3.1 Physical environment**

The workplace was subject to change as a result of the COVID-19 crisis. On the one hand, workplaces have to change along the lines of applying social distancing between workplaces, reliable ventilation, routing (one-way) and mudguards to prevent corona spread, due to the crisis. Firms that did not integrate these criteria were unable to resume their business operations and operational processes, which subsequently had a negative impact on employment. However, the results show that firms rapidly implemented essential changes. As the following quotes claim: *‘Employee workstations will be separated by clear plastic panels. Workers will also wear surgical-style face masks and clear plastic face shields whenever they are required*

*to work close to one another'' (General Motors, 856) and ''We are going to redesign casinos and change how gaming tables and slot machines are. We have a relatively large number of square meters, so the space between people can be properly safeguarded'' (Holland Casino, 434). On the other hand, the COVID-19 crisis has a positive impact on the workplace of employees. Employers recognise that a vital and flexible workplace has a positive impact on employee engagement and resilience. Thereby initiatives to renew workplaces emerge by trade unions, employers and governments, as the following quote shows: ''As some return to work, the health ministry has published a new 'code of best practice' that lists the bolstered safety measures applied on transport and in workplaces in order to limit the spread of coronavirus. In the Spanish construction sector, the employer organisations CNC and Seopan have agreed with trade union groups CCOO and UGT a series of specific measures that reinforce the best practice guide'' (ANFAC, 435). Due to the COVID-19 crisis, the workplace has become central, whereby employees are benefiting from appropriate changes such as new workplace layouts that support employees to work safely, transparently and more ergonomically. Those organisations that have invested and continue to invest in workplaces and focused on employees, emphasised that it also benefits organisations in terms of proactivity, flexibility and resilience in times of uncertainty: ''Organisations that look after their workforce and actively engage with the challenges and possibilities inherent in the current crisis are likely to be better positioned to handle other uncertainty [...]. Many workplaces were already going through and preparing for a major transition brought on by this fundamental change'' (HC Management, 492).*

#### **4.3.2 Health management and day-care**

The safety and health of employees have become an issue for organisations due to the COVID-19 crisis. Firms developed safety protocols to remain operational, as well as to support the well-being of employees and create better working conditions: *''[...] the measures that were adopted at the beginning of the pandemic will be reinforced, with the use of the most advanced prevention tools. And a significant commitment to the training of staff to ensure that those tools are applied'' (FCA, 313). Firms, such as Twitter (58), made prevention top priority concerning the safety and health of their employees. Thereby firms changed their policy to adopt the new reality. Thus, these firms took their responsibility in protecting their employees. New initiatives were also elaborated to relieve workers with children. Firms made new decisions regarding their personnel policy by allowing employees to take care of their children at the workplace, or to place them in a firm supported day-care centre, or allowed paid leave to mind the children.*

As revealed from the following quotes: *‘Employees who are unable to meet their work obligations due to the closure of schools, kindergartens or after-school care centres can benefit of up to 10 days of paid leave’* (LEAG, 278) and *‘As an organisation, we look at the health of our employees every day. [...] The children of our employees are even allowed to go to day-care’* (CM.com, 214) and *‘Its policy for workers who are parents will also be given a boost, with 15 days of paid leave granted to those who need to take care of children, [...]. Finally, to provide its teams with psychological support, Workday will give its employees free access for one year to the Headspace meditation app’* (Workday, 140). These smart changes have a positive impact on the improvement of workability and may propose working parents more vital in the long term. However, some cases had a negative impact on the health and safety of employees and how firms implement policy concerning employees, partly due to the crisis. As the following quotes argue: *‘People in the high-risk groups (chronic leukaemia and diabetic) are expected to continue working as usual. Health and safety officer engaged in this case’* (De Jong Gorredijk, 270) and *‘[...] employees are worried about getting the right protection and whether they are safe’* (Tyson, 829). The findings, as described above, negatively impacted workers' workability and productivity. Besides, this elaborated policy created even more uncertainty, causing employees to quit their jobs and firms risked their continuity, because the cases resulted in a temporary shutdown of operations until the safety and health of employees could be guaranteed: *‘Amazon is going to temporarily close its six warehouses in France after a court-ordered it to stop all but essential deliveries. [...] The court said Amazon had failed to recognise its obligations regarding the security and health of its workers’* (Amazon, 424).

#### **4.3.3 Remote working**

The most notable changes that firms implemented as a result of the COVID-19 crisis was remote working or teleworking as being considered the new way of working: *‘[...] that working from home is now mandatory for all employees around the world due to COVID-19 concerns’* (Twitter, 58). For firms it was possible to implement this strategy rapidly, due to the presence of digital technologies. Firms that had already digitalised their business processes perceived that employees quickly embraced working from home, as the transition went smoothly, without inhibiting productivity. As the following quote illustrates: *‘Just before the corona crisis started, we moved all of our design files into the Cloud. In retrospect, we are very happy that we had already installed everything at the beginning of this year. We certainly notice that in these days. All employees can be productive from their home workplace’* (VO-A, 265). Implementing the ‘new way of working’ allowed firms to continue their business operations



flexibly and resiliently despite various lockdowns. Firms found a flexible way to monitor continuity by working in different teams; whereby teams were split into one part working from home and the other part working from the office, these teams alternated every other week (ABN Amro; ASML, 59).

Firms realised that teleworking made many business processes more efficient, whereas employee productivity was not reduced, since there is no distraction from office issues, among others: *‘Of course we have been working a lot via video calling for years, but we still did our training face-to-face. We now notice that we can also do this completely via video. It actually works very well’* (24sessions, 309) and *‘[...] that the 250 employees of Brand New Day had to work from home turned out to be no problem for the organisation’* (Brand New Day, 893) and *‘We now see employers who say: when this is over and we can go to the office, we will not go back. Everyone works more efficiently, if only because you no longer have to commute. Employees also want to stay at home’* (Remote.com, 898). Employers and employees merely experience the positive impact of working from home in the first months of the COVID-19 crisis and that may have long-term consequences for the way firms will organise the way of working after COVID-19 rather than firms purely going back to the ‘conservative’ way of working. As the following quotes claim, *‘Many workers praised their employers for the quick and straightforward move to the home office and offerings such as online sports courses, chef podcasts, or virtual coffee kitchens’* (Kununu, 359) and *‘[...] and added that Sensée is confident that, in the near future, working from home will be of key importance in customer services’* (Sensée, 259) and *‘Everyone is connected to the server and everyone can work from home. In fact, it has surprised me so much that we keep going like this after the corona crisis. Not literally as much as now, but we do want to discuss how many hours per week working from home is desirable and feasible’* (Lars Courage, 322). The new way of working may move towards a flexible balance between office and remote working, whereby employees have the opportunity to discuss the alternations between the two components. Moreover, this may have a possible positive effect on the resilience, work-life balance and secondary working conditions of employees (workplace innovation) in the short term and long term: *‘People who can work from home receive extra benefits, such as an exemption from the payment of their energy bill. In order to motivate people to keep working, these things are best equated’* (Febev, 192).

#### **4.3.4 Variable working hours**

The advance of flexibility and variety in working hours was accelerated by the COVID-19 crisis whereby many employees were working remotely, among others. Several firms supported their

employees with enhanced supports and safety: *‘Fidelity says that it has provided enhanced supports and benefits to its employees focused on time, flexibility and care services’* (Fidelity, 816) and *‘Hours will be adjusted from March 30 to avoid the cross-over of teams’* (Meyer Werft, 250). Employees were positive that working hours were more flexible: *‘It was also positively received that flexible working hours had been made more flexible’* (Kununu, 359) and *‘[...] supporting employees who are affected by school and childcare closures by providing maximum work flexibility’* (Airbus, 294). Thereby, several firms as well proposed employees the occasion to organise the day for themselves in such a way as to improve their functioning, revealed by the following quote: *‘[...] is divided into three parts of the day: 4 am, 4 noon and 4 pm. Each employee can then determine for himself which parts of the day he will perform optimally. This gives my employees the space to work in the morning and evening and spend the afternoon with their family’* (Lars Courage, 322). Implementing variation in working hours and the possibility of employees to organise their working hours may provide more benefits in terms of productivity, work-life balance and employee resilience. The following quote shows what flexibility brings about: *‘It is great to see how we have adapted so quickly to create and develop a design from a distance. Playing your music and listening in the office is fun, having lunch with your wife and children is also a pleasant change’* (Quay architects, 364). Moreover, the following quote confirms that firms perhaps advocate flexible working hours as a result of the COVID-19 crisis for reasons of workability, continuity and safety: *‘Our labour market was rigid, but careers will become more flexible and atypical, perhaps also with social distancing—more flexible hours. Even before the crisis, many employees were looking for a more flexible way of doing their job’* (Accent Jobs, 553).

#### **4.3.5 Mental environment**

In times of uncertainty, there is a greater need among employees to communicate and share mutual issues: *‘The situation is elusive for everyone, which is why communication is now crucial. So, we regularly call everyone to ask how they are doing, and we send a mailing (bi) weekly’* (Kwiik, 837) and *‘[...] communicate more than ever. You have to provide creativity and maintain the atmosphere’* (AFAS, 446). Organisations have often mentioned open communication as an element to stimulate employees and provide the opportunity to share their story.

Besides, the orientation of various firms during the first months of the COVID-19 crisis has shifted more towards the employee, with several agreements being concluded upon innovative solidarity and appropriate measures with social aspects, as shown by the following quotes:

*‘The agreement (innovative solidarity agreement red.) was highly appreciated by the workers and was taken as a model by the world of industrial relations in Italy’* (ENEL, 234) and *‘The agreement (an adaptation of measures and principles red.) also contains a section on the continuation of social dialogue during the Covid-19 crisis’* (Thales, 245). Indeed, it has been observed that multiple firms are relying on innovative agreements as a result of the COVID-19 crisis, incorporating the social and mental aspects of the employee in order to increase resilience.

Other firms as well reached an innovative agreement whereby employees can assess their workload in collaboration with their manager: *‘[...] a rather innovative measure will see each employee assess their workload in conjunction with their manager and under the supervision of staff representatives’* (Danone, 473) and *‘[...] The questions asked try to ‘take the pulse’ of its staff and assess whether employees feel well informed, how well connected they feel to their team, what their ‘mood’ is during these times’* (Axa, 834). These findings show that employees are being understood and that possible work stress will be appointed, followed by a possible action plan to pursue a satisfied and productive employee. There has also been more advocacy by several firms for independence, shared responsibility and tasks in teams: *‘As an agency, we are therefore much more actively seeking mutual coordination by regularly taking over work from each other’* (VO-A, 265) and *‘Business are discussed, one can fall back on multidisciplinary teams, roles are taken [...] it may be called a miracle, but in both facilities, no employees have dropped out despite the stressful period’* (WZC Avondvrede, 288) and *‘We are taking obvious precautions : [...] Independently working teams, decontamination and extra attention for the drivers and the unloaders’* (Greenyard, 192). Similarly, Carrefour (394) signed an agreement regarding implementation of best business practices for employees: *‘In it, the signatories undertake to exchange and work together to share best practices being implemented to prevent Covid-19 related risks for retail food workers who are playing an even more essential role today’*. These aforementioned organisations emphasise the role of the employee in shared responsibilities, participation and open communication as an essential foundation to increase resilience and may foster employee engagement in times of uncertainty.

Furthermore, new initiatives were designed in the sense of equipment for working from home, stimulating employees and ensuring that they function well mentally. As the following quotes illustrate: *‘To encourage my employees, I sent all three of them a wobble cushion. That keeps your back straight and that is so nice’* (Lars Courage, 322) and *‘I start as a manager with*

*myself. I try to convey that the most important thing is that people feel good about themselves. That is more important than completing those 8 hours of work. You must create flexibility together''* (AIM4, 812). The combination of ergonomic working and mental resilience shows that these firms want to create a social working condition with flexibility, so that productivity and continuity are guaranteed. A firm also emphasises the necessity to foster employee engagement in order to achieve a successful digital transformation: *''The agreement covers social dialogue, assessing human impact before a project (digitisation red.) is implemented, and protection of privacy, among others''* (Solvay, 346).

In contrast, some firms oppressed workers to forgo wages and not pay workers if they did not perform their duties. As the following quotes claim: *''You are just forced to cooperate, there is no free will at all''* (Signify, 345) and *''French Finance Minister Bruno Le Maire said Amazon was putting unacceptable pressure on its workers by refusing to pay them if they did not go into work''* (Amazon, 424) and *''The FD spoke to an anonymous employee who calls the request moral blackmail. There would even be a culture of fear''* (AON, 838). Fear culture, the absence of a safe environment is mentioned as a reason why employees do not dare to speak up; thereby, no safe environment has been created in which employees can speak freely. As a result, stress and high work pressure/tension appeared, which negatively affect employee proactivity and engagement.

Moreover, working from home exposes new surveillance techniques, following employees to the extreme in what they do: *''Every ten minutes, Axos takes a snapshot of their computer screen, the CEO said. Their keystrokes, their surfing traffic, their siestas, nothing goes unnoticed. Those who fail to complete their daily tasks on time await disciplinary action, up to and including dismissal''* (Axos, 843). The new surveillance techniques used by multiple firms ensure employees not to improve their mental environment and the experience of flexibility, but rather leads to higher stress and tension; a new way to exert pressure and undermine privacy.

#### **4.3.6 Sickness absence**

Several organisations experienced the consequences of the COVID-19 crisis due to a significantly higher level of absenteeism in the first month, among others. As the following statements summarise: *''Arboned and Randstad are currently receiving more sick reports, they report to BNR Nieuwsradio''* (Arboned; Randstad, 79) and *''The absenteeism rate at NS is now so high that the railway organisation is in the timetable from Saturday, prepare for half of the staff normally available. In urban and regional transport, absenteeism due to illness has risen*

to 20 to 30 per cent'' (NS, 81). Considering that employees were absent in the first month was mainly caused by fear and the chance of becoming infected. Also, COVID-19 overtake organisations and therefore, no adequate measures are taken to create a safe working environment. From the following quotes is it evident that fear was a common cause of absenteeism: *''Employer has 25% absenteeism and because the number of corona cases is 0.01%, it is unlikely that all these people are ill''* (Merkstijn, 177) and *''Employees also report sick, either because they fear infection or because they have flu symptoms''* (PostNL, 390) and *''Of the 70 men, we now have 10-12 sick. I do not know if people really have corona. It may also be that people have to stay at home because of their partner or children, but that also has to do with corona''* (Skins for Buildings, 431). Firms do not always apply open communication with and care and aftercare towards their employees, on the basis of talking openly and transparently about the cause of absenteeism. In contrast, there are firms that pull the option of establishing an action plan to counteract absenteeism by integrating safety and health measures or adapting them to the new reality. As the following organisation has implemented to minimise anxiety: *''A special fund to help those employees most in difficulty will also be created. Also, as part of efforts to limit the effects of the coronavirus, the company plans to extend its sick leave scheme to include all those who have to miss work because of Covid-19''* (Workday, 140).

#### **4.3.7 Job security**

The majority of organisations took strategic decisions concerning internal restructuring (reorganisations; layoffs) or the opposite, business expansion and recruitment, in response to the COVID-19 crisis: *''The organisation undertook this internal restructuring as a consequence of the uncertainty brought by the Covid-19 pandemic''* (Wren Kitchens, 165) and the opposite *''Picnic has already hired 500 new employees in recent weeks and will be hiring another three to five hundred people due to the accelerated opening of a new distribution centre''* (Picnic, 608). Thus, the crisis triggered ambiguous strategic developments towards job security, whereby firms took unforeseen measures in order to optimise operations and, in contrast, firms expanded their business to meet the unforeseen high demand. Job security has been subject to contradictions with a focus on job retention initiated by government regulations and in close consultation with unions, although many organisations have started to downsize their workforce due to internal restructuring and worse, bankruptcies.

Moreover, the crisis also accelerated strategic decisions among firms already in financial difficulties prior to the crisis: As the following quote illustrates: *''ThyssenKrupp has been struggling in the last two years. According to management, important decisions were delayed,*

*and this job reduction will ensure the company's long-term competitiveness on the steel market''* (ThyssenKrup, 172). The restructuring has many consequences for low-skilled workers and workers with flexible and temporary contracts. As the following quote claim: *‘‘The restructuring will affect mostly working pensioners and low-skilled workers, both with permanent and temporary contracts’’* (Arsenal, 173). However, several firms pursued the opportunity to hire talent and highly qualified workers who had fewer work options due to the crisis: *‘‘Lely, a Dutch manufacturer of agricultural machines specialised in manufacturing milking robots, has announced that it will double its production facility and offices located in Maassluis. With the expansion, 200 new jobs will be created this year’’* (Lely, 39) and *‘‘A handful of organisations are now looking extra hard for personnel. They take their chance. It was difficult for them to get good people before the crisis. Now that the competitor has stopped searching, it is a bit easier’’* (Compagnon, 861). Therefore, some organisations are using the crisis to implement their business transition with dismissals by pursuing long-term flexibility and agility in their business model: *‘‘Volvo Cars argues that these dismissals are connected to the ongoing shift towards a more agile organisational model. The organisation plans to increase its focus on online activities, fleet electrification, and self-driving cars [...]’’* (Volvo, 848). On the one hand, in the first months of the unforeseen COVID-19 crisis, many organisations were downsized their workforce merely to cut costs and to optimise operations. Although, on the other hand, many firms as well pursued to expanding their business, maintain jobs through arrangements with governments and unions, and by focusing on recruiting highly qualified personnel.

## 5. Conclusions and Discussion

This chapter discusses the main findings and limitations of this research with the propositions that are supported or not supported by the results from Chapter 4. Besides, the research question is answered, through validation of the five formulated propositions.

### 5.1 Conclusions

The conclusions on the research question and the five propositions are discussed in this section, in order to arrive at the conclusion on the research question the conclusions on the propositions will be presented first. The research question recalled: *‘To what extent and how are organisations developing or altering strategies building upon workplace innovation in order to become more resilient in environments characterised by high levels of uncertainty and disruptiveness?’* The five propositions have been formulated based on the literature upon workplace innovation in relation to strengthening resilient business strategies. Based on the literature of the aforementioned concepts, three dimensions were discussed that revealed the predetermined propositions. Specifically, the propositions are related to the dimensions and elements, and then supported or not supported appropriately by the results of the deductive analysis of the transcripts.

***Proposition 1: Ambidextrous organisations may positively affect resilient business strategies, due to increased cooperation and employee engagement, and due to pursuing both exploration and exploitation.***

The results partly support proposition 1. Ambidextrous organisations that pursue both exploration and exploitation in their product innovation and improvement positively influence resilient business strategies. Several firms used both components to respond to the COVID-19 crisis by accelerating innovations and to stay operational by improving existing products targeting contemporary market demands through the use of digital technologies. This is in line with the findings of Stokes et al. (2019); who argued that resilience is more promising in ambidextrous organisations. The results however do not indicate that these organisations apply an increased degree of external cooperation. It has been observed that multiple firms are committed to a joint venture, co-creation and partnerships, as well as that firms pursuing employee engagement in strategy orientation have become more resilient. However, it could not be determined from the results whether those firms simultaneously focus on increased external cooperation and employee engagement and exploitation and exploitation.

***Proposition 2: Priorities regarding long-term vs short-term strategy affect the exploitation of workplace innovation opportunities.***

The results partly support proposition 2. Long-term vs short-term strategy influences the exploitation of workplace innovation opportunities. The results show that all firms used a renewed short-term strategy in the first months of the COVID-19 crisis, where firms focused on downsizing and unpaid furloughing to protect cashflow and liquidity ('cash is king'), which may have a negative impact on workplace innovation exploitation. It is not explicitly possible to establish whether workplace innovation helps to overcome the dilemma of long-term vis-a-vis short-term strategies, which is argued by Pot et al. (2016). Nonetheless, firms, partly as a survival mechanism, use workplace innovation regarding improved working conditions, flexibility and new workplaces in their short-term strategy and want to improve this consistently in the long term. Several firms' state that their strategies partly based on employees affects more resilience of the firm in the near future.

***Proposition 3: Firms are more disposed to invest in product and market strategies through the focus on profit optimisation rather than workplace innovation as best practice, the impact of workplace innovation is underestimated.***

The results do not support proposition 3. Several firms have invested in renewed product and market strategies, but also in workplace innovation simultaneously. The first months of the COVID-19 crisis have made workplace innovation more urgent and many organisations have shown that improved working conditions and motivated employees lead to higher productivity, which is in line with the findings of Casalino et al. (2019) and Totterdill et al. (2002). Furthermore, the results show that several organisations are using workplace innovation as a best practice, although many organisations are recognising the benefits of workplace innovation and making more use of it. The results show that due to the COVID-19 crisis, the impact of workplace innovation has become more visible and therefore prominent in decision making, rather than underestimation.

***Proposition 4: External environmental pressure (COVID-19) increases attention for smart organising, therefore smart organising could make the firm more pro-active and resilient.***

The results support proposition 4. The environmental pressures caused by the COVID-19 crisis increased attention for smart organising; and firms using smart organising have observed that they have become more proactive and resilient. The results show that COVID-19 has accelerated the implementation of smart organising and that firms acknowledge the urgency of



this. Thereby, firms deployed remote working, better working conditions, flexibility in working hours and tasks, open communication and health and safety for employees. The results show that many firms were forced to make changes in the degree of safety and health improvement, since firms could not be operational without the implementation. As well as, due to the COVID-19 crisis, employees were more likely to report sick if a safe and healthy workplace could not be guaranteed.

***Proposition 5: Uncertainty of COVID-19 means that organisations show a stronger motivation for strategic orientation and product-market improvement relative to smart organising.***

The results do not support proposition 5. The uncertainty of COVID-19 caused organisations to have more ambiguous motivation regarding strategic orientation, product-market improvement, and smart organising, in the early months. The results show that many organisations simultaneously focused on strengthening their shorter-term strategies and improving their sales opportunities by focusing more on digital technologies (such as robotisation, big data, cloud works, 3D technology, among others) in product innovation and market diversification, as argued by Leyh et al. (2016). Whereas smart organising was adopted in the processes as mentioned above and with a positive impact on the continuity and flexibility of the operationalisation of the work activities. This research shows that due to the COVID-19 crisis, firms have an increased interest in adapting and improving the workplace and increasing employee flexibility, whereby Oeij et al. (2011) argued that firms have more focus on sales, business and strategy. On the one hand, many other organisations also applied the short-term strategy of internal restructuring or layoffs to improve liquidity, which then negatively impacted the adoption of smart organising. On the other hand, there are organisations that, through internal restructuring which was accelerated by the COVID-19 crisis, implement a new business model with a synergy of strategic orientation, product-market improvement and smart organising to pursue an agile and flexible organisation focused on the long-term.

### **Conclusion regarding the research question**

This qualitative research shows that business strategies are subject to change due to the COVID-19 crisis. The results show that all organisations have adjusted their short-term strategies to varying degrees in response to the COVID-19 crisis in its first months. Organisations are experiencing the need to reorganise in terms of flexibility in strategies and workplaces. Likewise, all organisations experienced the environmental pressure to implement changes in strategic orientation, product-market improvement and smart organising, which have a positive

impact on resilient business strategies. Musgrave and Woodman (2013) argued that the orientation of resilient business strategies is mainly based on technological innovation. This research as well partly confirms the latter assumption, however, the COVID-19 crisis also clearly emphasises the need for workplace innovation regarding employee motivation and engagement and improved working conditions.

Furthermore, the focus point of many organisations was mainly on internal restructuring to protect liquidity, and for some firms benefitting from the crisis the focus was among business expansion to meet exponentially growing demand. All in all, workplace innovation is rather positively impacted by the COVID-19, since many organisations are relying on the change of the work environment by pursuing safety, flexibility and health in order to remain resilient in the uncertain now and future. The new reality of teleworking looks like becoming a structural change. Specifically, organisations rapidly realised that working remotely provides the ability to remain operational during various lockdowns and other restrictive policies on social encounter. Many organisations initially underestimated the potential and the need for quick implementation of remote working. Initially some organisations thought that this would result in a reduction of employee productivity. In reality and in hindsight this assumption was unfounded. Organisations were able to quickly rely on teleworking, partly due to available digital technologies and in contrast: teleworking is likely to have increased the productivity of employees in the first month of the COVID-19 crisis.

Several organisations show that they develop their strategies in consultation with their employees and other stakeholders, which may lead to more employee engagement and therefore more resilience. There is room for open communication and participation. Also, multiple organisations use exploitation (improvement of products and services) and exploration (new products and services) simultaneously in their strategy development to adapt to rapidly changing markets and pursue resilience. Digital technologies enable organisations to accelerate and successfully implement and apply exploitation and exploration in strategies.

The results indicate that organisations that had addressed workplace innovation in their strategy development were likely to be more resilient during the first months of the COVID-19 crisis. As a result, several best practices have been revealed regarding workplace innovation, with organisations implementing and nourishing self-organising teams, open communication, sharing of tasks and responsibilities, and flexibility in working hours and scheduling. Employers who address workplace innovation as a best practice are likely to show higher

productivity and an increase in employee engagement. However, there is no consensus in a best practice approach to workplace innovation that organisations adopt, which has previously been confirmed by a study of Kankaraš and Van Houten (2015); it is primarily a diffusion of practices that all lead to better workplaces for employees, as this research confirms.

In sum, this qualitative research has shown evidence that integrating workplace innovation into business strategies under the uncertainty and disruptiveness circumstances of COVID-19 contributes to the strengthening of resilient business strategies.

## **5.2 Theoretical implications**

The findings of this research have particular implications for theory. This research provided further theory development on workplace innovation by showing how organisations develop or modify resilient strategies through (re)configuration of strategic orientation, product-market improvement and smart organising. This research also shows that workplace innovation has a positive impact on resilience strategies. Firms that integrally apply workplace innovation as best practices in their strategies are provided with adaptability, flexibility and safety in culture (Oeij et al., 2017), whereby benefiting both the employer and the employee rather than becoming a trade-off, which also is addressed by Dhondt (2012). The findings show that workplace innovation, a sociotechnical development, strengthens business resilience and improves a participatory relationship between employer and employee and between employees (De Sitter, 1981; Howaldt et al., 2016; Pot et al., 2016).

Ambidextrous organisations are able to adapt quickly during COVID-19 by pursuing a balanced approach to exploration and exploitation. As a result, these organisations are able to respond effectively to rapidly changing environments while at the same time ongoing businesses contribute to profit and cash-flow (Stokes et al., 2019). This study argues that resilience is more expected to unfold in ambidextrous organisations rather than firms that focus solely on exploration or exploitation in product-market strategies (Stokes et al., 2019).

Organisations show two advances in developing resilient strategies focused on efficiency, adaptability and employee engagement, firstly, there is an investment in digital technologies, and secondly, there is an investment in workplace innovation regarding, e.g. improved working conditions and variation in working hours. This is partly in line with the assertion by (Modrak et al., 2019) that organisations have priorities towards digital technologies, but not in line with the assertion that organisations hardly invest in workplace innovation. Developing resilient

strategies is in line with business continuity as an adaptive process by creating local responsiveness and reinventing strategic challenges at macro-level (Herbane, 2019; Sahebjamnia et al., 2018).

The strategies that were developed merely used ad hoc, reactive and emergent strategies at the time of the COVID-19 crisis. This can be explained by the fact that firms make less use of strategic planning development during uncertainty and turbulence (Matthews & Scott, 1995). Proactive and resilient strategies have been perceived, but these thrive not only from a top-down approach, as stressed by (Ismail et al., 2011), however, also from flexibility in strategy development pursuing both top-down and bottom-up approach, that subsequently improved the response time to the COVID-19 crisis (Tracey et al., 2017). In addition, resilience emerges through actions and common elements formed by leadership and communication (top-down approach) and by interpersonal exchange (bottom-up approach) (Stoverink et al., 2018).

Boxall and Macky (2009) claim that improved work systems and processes are perceived to pursue the resilience of organisations rather than the workplace of employees. However, this research shows that not only improved work systems and processes lead to resilience, but also through an improved and safe workplace of the employees, allowing firms to continue their businesses during the COVID-19 crisis accurately.

### **5.3 Managerial implications**

The results provide some guidelines that can be used to foster reconfiguration of strategy development with the integration of workplace innovation into business strategies and subsequently create resilient business strategies with employee engagement in a context of uncertainty and disruption. First of all, organisations can analyse their current processes and structures, whether they match with their current strategy and what active as well as passive role the employee has in their strategy development process and outcome. Second, the organisations can, in consultation with the employee (draw upon stakeholder approach), compose strategies for integrating workplace innovation in the direction of self-managing teams, safety and health (ergonomic working), open communication and participation, flexible working hours and planning. In addition, organisations can benefit by pursuing ambidextrous strategy building in the sense of exploitation and exploration, using appropriate digital technologies upon technology and product innovation level (Herbane, 2019). Third, the results show that workplace innovation is not universal and can potentially have a different meaning for each organisation. Employees with children may opt for flexible working hours and working

remotely, blue collar production workers may benefit more from the opportunity to get further training and education for higher value tasks rather than to be let go as lower-skilled workers. Fourth, to build on resilience, employees must experience that they feel trusted and heard, especially in times of uncertainty. Fifth, organisations can achieve resilience by pursuing intended multiple scenario strategic planning prior to any crisis causing uncertainty and disruption. Bottom-up involvement of employees is key as they know best about daily activities, events, bottlenecks, potential pitfalls and potential opportunities for improvement. Finally, as a manager, make sure that it is clear from top to bottom which direction the organisation is taking, share it with the workforce and give homeworkers a token of appreciation in times of crisis.

#### **5.4 Limitations**

This research has been conducted through a deductive approach. Existing theories about the concepts of workplace innovation and resilient business strategies form the basis of this research. The four resources of workplace innovation from the research by Oeij et al. (2011) have been used to define dimensions containing different elements. However, not all elements used in this study came from the study by Oeij et al. (2011). In product-market improvement, the element digital technologies has been added, since this has an impact on product-market strategies (Leyh et al., 2016). Smart organisational elements (which before consisted of the resources flexible work and organising smarter) are related to HR and operational management; no elements were mentioned in this but were added by the researcher of this study as a result of further literature study. Appendix II contains further explanation on this matter. Moreover, from literature research, it can be noted that little qualitative operationalisation is available regarding dimensions and elements of workplace innovation. This means that future qualitative research on this subject may arrive and determine other dimensions and elements for operationalisation.

This research has deliberately not made statements about the differences between industries, but rather provides a holistic view of the strategies developed by different organisations. This is partly because the database did not provide a representative view of the number of organisations from the relevant industries. Also, each article in the database has a different writer or interviewer who asked different questions, making some articles more valuable than others. However, it is guaranteed that all 900 articles are in the context of the COVID-19 crisis. Nonetheless, this research has attempted to falsify theories based on contradictory insights and to provide theories on a partial, provisional truth, in line with the social constructivist view. This qualitative research has further explored the phenomena put forward by various, studies,

with sometimes conflicting outcomes. In the process it found facts that corroborate theories as well as seemingly conflicting with theories.

Likewise, this study did not conduct method triangulation. This research only focused on the content analysis of the data file (secondary data) from 900 publications. Applying method triangulation such as observation and interviews (primary data) may lead to more in-depth information to construct the development of resilient business strategies. Besides, by limiting the scope of future research to e.g. a certain economic sector and specific organisation profiles within (mature organisations e.g.) may eradicate variance effects as the diversity of firms studied may blur a clear picture and bias conclusions derived from it.

A further limitation is that this research is conducted in an atypical period; the COVID-19 crisis. In other words, this pandemic is extraordinarily unique and has an effect on society and business as a whole, whereby mainstream media are responding massively upon how organisations account for strategic decisions. This may force organisations to make different strategic choices than they initially intended to apply, which in turn may not lead to culture and structure change but rather encourage prejudices. Thus, there is a possible difference in the degree of uncertainty and disruptiveness if this research was conducted at a different time with other forms of uncertainty, such as changed legislation, climate crisis, increased competition, among others. In short, the results may have a different outcome, and this research could give a distorted view due to the exceptional situation.

Finally, this research has taken the first two months of the COVID-19 crisis as its scope and forms the fundamental basis that will be further expanded to six months of data collection. This could potentially provide a more comprehensive insight into how organisations are approaching the COVID-19 crisis, and possibly more best practices regarding workplace innovation occur. Thus, future research is needed by expanding the scope.

### **5.5 Directions for future research**

This research provides multiple suggestions for future research. First of all, higher absenteeism occurs during the COVID-19 crisis. A comparative study may provide insight into whether the integration of workplace innovation in business strategies leads to less absenteeism compared to organisations that have not integrated workplace innovation. Second, a possible scope to investigate is to what extent workplace innovation influences the retention of talented employees. Third, the possibility for research after the COVID-19 crisis is whether

organisations that focus on workplace innovation practices experience less impact and faster recovery from the COVID-19 crisis compared to their peers. Finally, it was revealed from the database that there are differences between multiple industries. Follow-up research can elaborate on the extent to which best practices of workplace innovation can be universally shared between industries to integrally improve the work-life balance of the employee and increase productivity and employee engagement.

### **5.6 Methodological reflection**

This research maintains the epistemological base of social constructivism, as mentioned above. The methodological reflection focuses on the following: internal validity, usability, analytical generalisability, intersubjectivity, self-reflection of the researcher and traceability.

Internal validity is ensured by applying a tree diagram with the associated dimensions and elements, based on appropriate literature and previous research. There is a possibility that other dimensions and elements are better suited to this concept, since few operationalised dimensions and elements are available regarding workplace innovation. As well, several elements of the smart organising dimension have been found from other studies. Some elements had some overlap in the corresponding dimension. The negative impact has been limited since this occurred at the element level.

Usefulness has been shown for organisations to potentially apply the results to improve strategy formation and to successfully implement workplace innovation in the development of business strategies, enabling organisations to be resilient in the long term, as shown in section 5.3 managerial implications. However, since this research provides a holistic view of workplace innovation and resilient business strategies, organisations should consider the applicability of integration in terms of available resources and demands.

The size of the database (900 articles) foster analytical generalisability; thus, generalising to a more valid theory. However, the possible lack of essential information on how organisations develop strategies per article can have a negative effect. Intersubjectivity has also been found to be limited within this study. On the one hand, the degree and justification of the coding process have been discussed orally with a peer student. On the other hand, the peer review was conducted, and the accompanying feedback was included and processed at each assessment moment.

Self-reflection has been regularly used, not in the shape of digital memos but rather using handwritten sketches and short bullet points. This was chosen because no multiple research methods were used, so that it was possible to compare which observations and interviews might have shown different findings and which choices the researcher had made in this regard. The traceability is ensured by systematically presenting the method of research in Chapter 3. Besides, the transcripts and complete code tree are shown in the Appendices of this research.



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