# Entrepreneurial ecosystems during COVID-19: the survival of small businesses using dynamic capabilities

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Sumayya Rashid and Vanessa Ratten Department of Management, Sport and Tourism, La Trobe University, Melbourne. Australia

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#### Abstract

Purpose – The world is going through a global crisis after the outbreak of coronavirus (COVID-19) in most areas of the world. Businesses particularly small ones do not work in isolation but instead are embedded in an entrepreneurial ecosystem that is dependent on environmental conditions. The disruptive changes from COVID-19 have caused serious damage to the global economy, so it is up to entrepreneurs to bring equilibrium by introducing change. This paper adopts the lens of dynamic capabilities to study how small business entrepreneurs are trying to survive and grow in an entrepreneurial ecosystem affected by coronavirus.

Design/methodology/approach – Using qualitative research methods, 20 Pakistani entrepreneurs have been interviewed in order to assess how the entrepreneurial ecosystem in an emerging economy has been affected by COVID-19. This enables a contemporary and realistic understanding about the way small business entrepreneurs have adjusted to a crisis.

Findings - From the data analysis, the three main dimensions of dynamic capabilities for small business entrepreneurs emerge, which involve a sensing, seizing and transforming capability.

Research limitations/implications - The findings suggest that small businesses utilise the following strategies to cope with change: emergent humanitarian crisis, carte blanche agile business models and effectual business functions. These findings contribute to the literature about the challenges of current crises and how businesses can cope in this situation using a dynamic capabilities perspective.

Practical implications – The findings contribute to the ability of small businesses to cope during the current pandemic situations and anticipate how to manage future crises. Furthermore, the entrepreneurial practices exercised by small businesses are also presented that represent an innovative way to understand crisis management techniques by entrepreneurs in emerging economies.

Social implications - These findings contribute to the literature about the challenges of current crises and how businesses can cope in this situation using a dynamic capabilities perspective.

Originality/value – By drawing on the existing literature of COVID-19's impact on businesses, the theoretical contribution of this paper highlights the applicability of dynamic capabilities on small businesses to survive during the global crisis.

Keywords Coronavirus, Covid-19, Dynamic capabilities, Emerging economy, Entrepreneurial ecosystem. Pakistan, Small business entrepreneurs

Paper type Research paper

#### Introduction

The coronavirus pandemic has left economies around the world wondering what normal life would look like when it is over. The virus has affected 188 countries in the world and its impact has been felt globally. As a result, economies and social conditions around the world have become more volatile in nature with the pandemic affecting developed and developing countries at the same rate (Shankar, 2020). Governments are trying to handle their healthcare systems to manage its severity with many experts advising its after effects on economies and businesses that are yet to come (Beech and Anseel, 2020). The pandemic started in January 2020 with the physical lockdowns starting later in different countries. Businesses have been significantly affected due to these new security measures including DOI 101108WJEMSD092000110



World Journal of Entrepreneurship, Management and Sustainable Development Vol. 17 No. 3, 2021 pp. 457-476 © Emerald Publishing Limited physical distancing with small businesses more vulnerable to such a crisis due to their limited resources. Many small businesses operate on limited cash reserves and do not have savings to help them live through any crisis (Shankar, 2020). As a result, the social, cultural, environmental and political environment of every country has changed. A way to understand these environmental affects is through an ecosystem perspective, which defines the interactive and collaborative systems that can affect the dependency of a business (Ratten, 2020).

Entrepreneurial ecosystems have affected many small businesses particularly during the COVID-19 pandemic as surviving in the new economy is tough. The role of entrepreneurs to support the local industry of any economy is widely acknowledged and is considered the lifeline of an economy in times of hardship (Budhwar and Cumming, 2020). Recent evidence suggests that dynamic capabilities help keep surviving businesses in a constantly changing environment (Eisenhardt and Martin, 2000). However, the literature on entrepreneurial ecosystems indicates that entrepreneurs practice dynamic capabilities to sustain their success. The changing ecosystem due to COVID-19 poses many threats to small business entrepreneurs. For this reason, in this study, we explore the role of dynamic capabilities in the survival of small businesses operating in more complex and challenging entrepreneurial ecosystems. Thus, this research aims to answer the following research question and subresearch questions:

- RQ. How are small business entrepreneurs using dynamic capabilities to survive and grow in entrepreneurial ecosystems affected by COVID-19?
- SRQ1. How are small business entrepreneurs using their sensing abilities to survive and grow in entrepreneurial ecosystems affected by COVID-19?
- SRQ2. How are small business entrepreneurs using their seizing abilities to survive and grow in entrepreneurial ecosystems affected by COVID-19?
- SRQ3. How are small business entrepreneurs using their transforming abilities to survive and grow in entrepreneurial ecosystems affected by COVID-19?

This paper aims to deepen the understanding of business life during COVID-19 and its impact on small businesses. Therefore, 20 semi-structured interviews were conducted with small business entrepreneurs. These small businesses are in Pakistan. The research aims to provide an emerging economy context to COVID-19. Developing countries are already facing uncertainties in their economic and political environment. The coronavirus pandemic has affected their stability more than developed countries due to their reliance on export trade. After conducting the interviews, the findings suggest that entrepreneurs have accepted the fact that this situation is not going to get better soon. They are preparing their survival plan and re-purposing their business models to survive and grow in this environment. The data were analysed using the Gioia methodology, which helps in highlighting three aggregate dimensions which can answer our research questions.

This paper begins by highlighting the theoretical background of entrepreneurial ecosystems in COVID-19 and the role of dynamic capabilities. It then details the methodology and the research context. After presenting the findings which emerged through the Gioia method of analysis, the practical implications will be presented along with the limitations of the study.

#### Theoretical background

Entrepreneurial ecosystems during COVID-19

Entrepreneurs are predisposed to adapt themselves in changing environments. COVID-19 has not only changed the perspective of people's lives, but it has changed the global business landscape (Ratten, 2020). An entrepreneurial ecosystem refers to the collaborating dynamic

network of systems that interacts together and results in a conducive environment for entrepreneurship (Roundy and Fayard, 2019). The main components of an entrepreneurial ecosystem are the culture, networks and infrastructure (Heaton et al., 2019). This means that the development of an entrepreneurial ecosystem in any economy is based on the environmental factors. Entrepreneurial ecosystems do not thrive in isolation but are dependent on multiple factors. In times of coronavirus, the definition for entrepreneurship in terms of opportunity and necessity has been changed. This is due to the needs and wants of the consumer have been drastically shifted due to "new normal" life situations that are characterised by social distancing and personal hygiene. According to Nambisan and Baron (2013), ecosystems can be measured in terms of connectivity, diversity, density and fluidity. During the COVID-19 pandemic, the dependencies of different entities included in an entrepreneurial ecosystem fluctuate based on societal need. In absence of the usual business functions, different modes of technology and strategy have been utilized to manage small businesses. Another important element in entrepreneurial ecosystems is the formal networks supporting the entrepreneurial activity (St-Pierre et al., 2015). These networks are evident in community groups in online contexts during the pandemic, which play an important role in connecting customers with their desired service.

Entrepreneurial ecosystems provide resources to all new and existing entrepreneurs in the community. The resources needed for new venture creation and business development emerge from the entrepreneurial ecosystem (Muldoon *et al.*, 2018). Under the current conditions faced in the coronavirus pandemic, there is a need for new and fast entrepreneurial activities. Emerging economies like Pakistan, rely heavily on the import of raw materials and other products for their businesses. With the borders shutting down, the gap in the inflow of imports has also created an entrepreneurial opportunity for many entrepreneurs (Tatoglu *et al.*, 2020). The transitional system of an emerging country to a developed country requires dynamic capabilities. This is due to entrepreneurship not being static in nature but occurring in a dynamic context (Beech and Anseel, 2020).

Small businesses nurture the idea of entrepreneurship and innovation. At the same time, they face the liabilities of being new in the market (Carniel and Dalle, 2020). During the current pandemic of coronavirus, where big brands are filing for bankruptcy, consumers are depending on local and small businesses. The ideal solution for small businesses to eradicate their alienness in the market is to develop strong social networks to facilitate the exchange of resources (Jha, 2018). Small businesses are always vulnerable to changes in the external environment. The environmental conditions constitute both positive and negative vibes amongst members of an entrepreneurial ecosystem. Entrepreneurial ecosystems are not only restricted to the support and facilitation of tangible resources and networks but also provide other necessary support. Entrepreneurial ecosystems also foster an entrepreneurial environment by the presence of open-minded customers. Due to the lockdown all over the world during coronavirus, customers have become more open-minded as they are connected with the wider world and have been exposed to more inflows of information.

Theoretical framework: dynamic capabilities to survive and grow

The dynamic capabilities perspective proposed by Teece (2012) is rooted in the entrepreneur's competencies and capabilities to come up with new products and respond well to changing market conditions. No prior research predicted the current changing market and life conditions in a pandemic (Beech and Anseel, 2020). Dynamic capabilities focus on businesses being responsive to changing conditions and reconfiguring their existing resources in a volatile environment (Arend, 2014). The basis of dynamic capabilities refers to three important areas of action: sensing, seizing and transforming. Competitive advantage

itself is not enough for businesses to survive the current changing business landscape (Darawong, 2018). Having an ability to predict the opportunities and addressing them by using existing resources is needed (Eikelenboom and de Jong, 2019). Coronavirus has affected all countries with some more affected than others. Businesses being closed in the lockdown have opened up new ways of conducting business transactions that are facilitated by digital technologies. Existing resources need to be fine-tuned and where needed create new resources for businesses to survive in this pandemic (José Carlos, 2011).

Identifying the opportunities at the right time is crucial in times of a crisis (Faroog, 2019). The huge market gaps have compelled a number of new players to enter the marketplace. The consequences of this short-term vision of entering a market based on the current need cannot be judged and measured now. Predicting what will be needed soon will help businesses to cope with the coronavirus in a more stable manner. To pursue opportunities in the marketplace resources needs to be mobilised at the same time (Teece and Leih, 2016). No business or economy was ready for such a pandemic as the current one, thus, the acting upon and mobilising of resources is bounded with time constraints. Upgrading and re-evolving resources could help to address the problems in the future as well. A small business with a competitive advantage can never be imitated (Sabai and Ho, 2019). Hence, dynamic capabilities allow the business to maintain their competitive advantage in an uncertain and more volatile market environment (Woldesenbet et al., 2012). Dynamic capabilities help businesses to be more resilient in the presence of unforecastable uncertainty (Teece and Leih, 2016). These capabilities are rooted partially in the cognition of entrepreneurs (Maldonado-Guzmán et al., 2019). The dynamic capabilities framework aids entrepreneurs in integrating the technology, business and strategy in a complex environment (Verbeke, 2020). Under the current pandemic of coronavirus, entrepreneurial ecosystems can grow, decline or be reborn (Brammer and Clark, 2020). Thus, the way an entrepreneurial ecosystem evolves depends on the entrepreneurs that shape and utilize the support system embedded in their environment.

## Entrepreneurship and crisis management

A crisis is referred as a phenomenon that entails a high level of uncertainty. It does not happen very often but when it does, it can affect society on a massive scale. Coronavirus originated in 2020 and has been considered as a health pandemic. The virus is spread by a droplets passed between individuals based on close contact. With every crisis, a sense of urgency to respond comes at an equal pace (He *et al.*, 2020). The nature of this virus has led to a lockdown of daily life activities and businesses with the result being a major change in life perspective (Shankar, 2020). Small businesses are vulnerable to volatile conditions (Arend, 2013). The COVID-19 pandemic has been a huge shift in the management and survival of small businesses (Budhwar and Cumming, 2020). Due to the need for quick transformation of current business practices there has also been a growth in opportunities. Small businesses are revamping their business models to quickly adapt to the changing market condition. There are new customer needs that must be addressed and dynamic capabilities that can help small businesses to survive and grow in this health pandemic.

## Methodology

#### Research design

In adopting dynamic capabilities framework as the theoretical foundation, this study will examine how small businesses in Pakistan are coping in a changed entrepreneurial ecosystem environment during the coronavirus health pandemic. A qualitative research design has been selected for this study. Pandemics bring a great deal of uncertain and volatile political, economic and environmental situations. Qualitative research methods

allow the researcher in times of crisis to achieve a nuanced understanding of the processes involved (Crotty, 1998). Moreover, qualitative research allows the researcher to gain a rich description and insight into the phenomena. To do this properly, the qualitative research needs to be designed in a way that can help study why the processes occur in a specific institutional context (Pratt, 2009). Under the current circumstances of great societal change during the health pandemic, understanding the changed context is very important for small business. Economies around the world are facing financial downfall but developed countries tend to have more ability to survive through such pandemics. On the other hand, emerging economies are more vulnerable to international uncertainty. In this study, a qualitative research approach will help yield more information regarding the changed entrepreneurial ecosystem conditions under which small businesses are trying to survive and grow by using the dynamic capabilities perspective. The purpose behind selecting an emerging economy context is not to give privilege to one type of ecosystem that normally involves developed economies. The objective is thus to explore different types of relationships between the factors involved within an entrepreneurial ecosystem. Moreover, this research also aims to study how different attributes in an emerging economy entrepreneurial ecosystem affect the capabilities of entrepreneurs to survive and grow during the COVID-19 health pandemic.

#### Research context and data collection

The focus of this study is Pakistan, which in recent years has grown in terms of world output as an emerging economy. Pakistan has a population of 212 mwith almost 64% of the population in the age bracket of 30–35 years old. It has the highest proportion of young people in the population in its history, and it is forecasted to continue to grow till 2050. With the recent political change in Pakistan, an entrepreneurial culture has been encouraged more at the governmental levels. In this study, purposeful sampling has been used to select the entrepreneurs in this study. Entrepreneurs selected in this study vary in the size, industry and life span of their respective businesses. According to Steyaert and Katz (2004), qualitative methods have the potential to study and understand the socially constructed nature of entrepreneurial processes. The identified entrepreneurs for this study have their businesses life cycle being between 2-10 years. In addition, the selected entrepreneurs had achieved business success and had financial stability before the COVID-19 crisis. All the businesses were well-known and already made their mark in the market. In choosing these entrepreneurs, the objective of this study was to ascertain whether their development, growth and survival of their business are based on the business environment (entrepreneurial ecosystem) in which they operate. The selection of the entrepreneurs is based on an information-oriented selection which aims at achieving the maximum utility of information from small number of samples.

Data have been collected through semi-structured interviews in this study. Semi-structured interviews will help in gaining an in-depth knowledge about the topic of inquiry whilst addressing a phenomenon in a specific context. We conducted 20 semi-structured interviews with entrepreneurs in Pakistan. Interviews were focused on the entrepreneur's view of Pakistan's entrepreneurial community and how coronavirus has affected the way entrepreneurs run and grow their existing ventures. Table 1 below states the main interview questions asked during the semi-structured interviews.

All interviews were audio-recorded and later translated and transcribed. Semi-structured interviews allow the researcher to explore the answers and motives of the informant. Due to the COVID-19 health pandemic crisis, all entrepreneurs were contacted prior to the interviews to inform them about the interview questions. All the entrepreneurs were informed about the nature and objectives of this study. The entrepreneurs had to have knowledge about the

# WJEMSD 17.3

## 462

entrepreneurial ecosystem and researchers expected that the entrepreneurs provide constructive and valuable information to achieve data saturation (Alasuutari, 1995). Due to the social distancing measures and lockdown in place, interviews took place via Zoom. All the entrepreneurs included in this study are running a successful small business in Pakistan. Interviews were solely focused on their experiences with the changing entrepreneurial environment in Pakistan due to the coronavirus pandemic. The profile of each entrepreneur and their pseudonyms is presented in Table 2.

How COVID-19 has affected your business?

Was your business model resilient enough to cope this pandemic?

How are you managing with your employees and keeping a check on their wellbeing in this time of crisis? How are you communicating with your employees to maintain a well-coordinated business? How do the declined demands have affected you and how you plan to overcome it?

**Table 1.** Interview questions

Participant code	Age	Number of employees	Years of business's existence	Role of interviewee	Industry	Market focus
WE1	35	10	5	Founder	Food (desserts and bakery)	B2C
WE2	40	7	3	Founder	Food (restaurant)	B2C
WE3	38	12	6	CEO	Photography and event planner	B2C
WE4	42	15	5	CEO	Home decor	B2C and B2B
WE5	45	18	8	Co-founder	Food (desserts)	B2C
WE6	33	12	5	Founder	Food (café)	B2C
WE7	37	7	4	Founder	Food (savoury and sweets)	B2C
WE8	29	5	2	CEO	Home decor items	B2B and B2C
WE9	45	16	3	CEO	Kids clothing	B2C
WE10	36	11	8	CEO	Home decor	B2C and B2B
WE11	37	10	4	Founder	Home bedding	B2B and B2C
WE12	43	13	7	Founder	Food (desserts)	B2C
WE13	42	8	3	Owner	Food (bakery)	B2C
WE14	38	10	5	CEO	Food (restaurant)	B2C
WE15	36	11	7	Owner	Event planner and photographer	B2C
WE16	30	11	2	Co-founder	Food (catering)	B2C
WE17	26	17	4	Founder	Clothing	B2B and B2C
WE18	35	6	6	Founder	Home decor	B2B and B2C
WE19	44	9	8	Founder	Kids clothing	B2B and B2C
WE20	40	12	6	Founder	Home bedding	B2B and B2C

**Table 2.** Participant details

#### Data analysis

Qualitative data analysis comprises of various steps. The preparation and organization of data helps the coding process later. The data were entered into Microsoft Word then translated from Urdu to English. Following this translation process, the data were entered into NVivo but then analysed using the Gioia methodology that focuses on identifying main themes. This analysis process was deemed most appropriate given the emphasis on finding themes related to entrepreneurial ecosystems and COVID-19. The data analysis for this study aims to combine the theoretical explanation of identified themes emerging from the data. The data analysis process followed the Gioia methodology proposed by Gioia et al. (2013). This methodology explains the analytical process of identifying concepts in data, grouping them as themes and then finding the aggregate dimension at a wider level. The data generated from the interviews helped us in establishing the first order concepts. Furthermore, the relationship established among the first order concepts created higher order themes. Second order themes then resulted from constructs having a similar meaning. At this step, the research question and the theoretical background presented earlier in this paper helped us to identify the aggregate dimensions. Figure 1 shows the visual representation of these first order concepts, second order themes and aggregate dimensions.

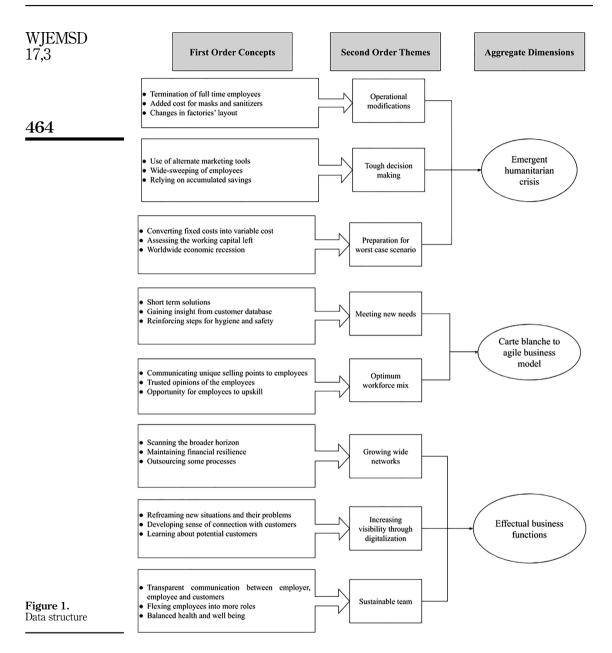
## **Findings**

In this section, the results of the analysis will be presented. There are some useful quotes and information emerging from the data analysis. This information will be useful in achieving deep insights which will help in analysing how small businesses are using different dynamic capabilities to survive and grow during the time of COVID-19.

#### Emergent humanitarian crisis

The interviews reveal that small businesses are actively trying to sense the changed market trends during the coronavirus health pandemic. This crisis has affected the health, safety and well-being of many communities and larger numbers of people in the world. COVID-19 has shown that communities living in faraway regions can relate to a shared experience. In this case, the experience brings fear and suffering. Due to the massive lockdown, global economic activities have been affected. This brings a toll to all economies but particularly emerging economies, which are more vulnerable in such situations. Coronavirus threatens some communities more than the others. This study focuses on small business communities driven by entrepreneurs in Pakistan. Some founders in our study explained the impact of COVID-19 on their businesses rigorously throughout their interviews. The founder WE17 mentioned that after the lockdown in March 2020, there were many changes that have been made at an operational level in their business. These changes were not intentional but were purely based on the need of the time. They described the feeling of being made to change quickly as "forceable change". The nature of this virus brings more damage in close interactions and confined spaces. Thus, the usual business processes were not feasible to continue running in such situations. During this time, many businesses were not able to pay the salaries of their employees. As a result, they had to terminate many jobs. WE4 stated in their interview:

There are some businesses who are responsible enough to cut down their own luxuries and checking on employee's wellbeing. It was difficult for me to manage being a small business. I have terminated many of my employees too because I cannot afford their pays. My revenue came to a few thousands in these months. It is not enough for me to pay my bills how can I afford more employees. This kind of situation was never in our mind. We were not ready for such kind of calamity. My business does not have the potential to deal such situations. We have bills to pay. So, it is difficult to survive these days what to say of looking for wellbeing. We, being a small business did not have the financial cushion that we can afford at such times.



Difficult times demands difficult decisions for many small businesses. Their revenue has been way lower than expected. Many founders mentioned in their interview the kind of hardships they have been faced with in their business environment.

The SOPs (standard operating procedures) given by the government of Pakistan must be followed to run the business. Many small businesses who have less than 10 employees shared how hard it is for them to just provide the essential kits to their employees and workers.

The operating hours have been changed for all businesses in Pakistan from the government. This has made it difficult for some food chains to cope. The founder of WE8 expressed in her interview that the change in operational hours has left her working longer shifts. Being a small business owner, she was working double shifts to finish up her order demands. Longer working hours have put additional physical and mental burden on the entrepreneurs. As a result, the health and well-being of individuals working from home has put many people at risk.

The current environment of coronavirus is uncertain and has resulted in incomplete information for entrepreneurs to make decisions. Urgency in making decision within uncertain circumstances is not ideal. Many entrepreneurs talked about their change in marketing techniques. The usual marketing techniques are no longer needed in this time. Businesses have switched to digital technologies to market their products. The entrepreneurs also talked about how they have laid off many jobs due to insufficient funds. Businesses are not generating enough revenue in order to pay their employees. Small businesses have less employees and the scale of the business does not allow them to hire multiple people for the same job role. Hence, with the business going to complete lockdown, it was difficult for them to retain their employees. Businesses invest their savings in future products in order to grow their brand. In this pandemic, businesses have used their accumulate savings to survive in the market and pay their bills. WE5 expressed the same experience in their interview:

I have used my savings to cope up in last few months. My usual vendors are very helpful. I understand that they are not getting their supplies. They are trying to help me out of the way. But then my cost benefit ratio got disturbed. I am not having any profit in lockdown. Profit ratio has just gone down. Last week, I finished an order but due to high prices of all materials, I was not able to break even my cost with the price I got. I arranged things out of the way. Still the product was not like what customer demanded. I cannot store things for unlimited times. Things are not getting improved. I am going to different vendors and still not getting things. I have been using my savings entirely in these last months.

The situation is uncertain, and no one can predict when life will get back to normal. Under such circumstance, businesses have started preparing their survival plan as well. In the initial days of the outbreak, no one had any idea about the full impact of the virus. Later, the seriousness of the virus has brought a layer of fear for everyone. Entrepreneurs in their interviews have also mentioned that they are preparing for the worst times. The costs which were considered essential to the business once are no longer needed and cannot be fulfilled. The costs in the balance sheet of the businesses have been re-prioritized. Many assets have been dissolved to pay the running expenses of the business. Businesses are unable to pay their bills and installments. As a result, the government of Pakistan initiated a relief plan for small businesses in which they have flexibility to pay for their bills. Yet this cannot be continued for an indefinite period. In order to cope with this change, WE15 discussed how their team has come up with a survival plan. She added:

Due to the lockdown there is no import and export going on in Pakistan currently. Materials that we usually import are not coming into Pakistan. It is getting very difficult for me to get the raw material. I usually get my raw material from UK. There is a delay in cargo services. Clients do not understand that. If I find them somehow, they are at higher prices. Due to which the budget went off the radar. I have decided to take my own raw material here or contacting the local vendors.

Businesses have less working capital left to manage the businesses. With the visionary team, WE15 decided to switch from imported raw material to local raw material. The shutdown measures to contain the virus have pushed the global economy to contract. Pakistan with already high debt levels have hit by this virus badly. There is no surety and forecast about when the vaccine will become available. Hence, the uncertainty has brought high currency

## WJEMSD 17,3

466

level exchanges with inflation affecting every industry. Entrepreneurs have talked about the high prices of their raw materials and the service resources becoming too expensive. Small businesses do not have the financial ability to sustain such pandemics. It is essential for them to keep going by modifying the business functions and sense the trend in the market for future positive outcomes. Table 3 provides a brief overview of illustrative quotes for the emergent humanitarian crisis.

## Carte blanche to agile business models

Although all businesses have different ways to react to the situation, the findings suggest that based on the information currently available on coronavirus, businesses have started moving to a more agile business model. Agility helps in developing the capability to react quickly in uncertainties. The needs and wants of the consumer have been changed under the new lockdown measures all over the world. Most small businesses have moved to online buying and selling with convenience stores in the residential areas also providing online buying and home delivery. The power of technology and online business have increased at a greater level in this pandemic with many entrepreneurs talking about how they have added a few more dishes to their menus, more services offered and more deals to give to the customers. These are some solutions that businesses have come up with to deal with the short-term side effects. Businesses have also learnt the importance of returning customers. Returning customers are loyal to the brand and they are the best people to gain insights from. WE16 mentioned the importance of customers for their business:

#### Example quotes

#### Operational modification

"For my employee's safety, I have provided my all riders full safety kit which they use. Face mask, safety kit which they wear before starting their shift, hand sanitizers have been sprayed on delivery boxes before and after the order has been delivered. All the SOPs provided by Pakistani government have been kept in place to run the business. The package itself is sanitized inside and outside. So, the customers can see which level of service they are getting. There is a whole lot of cost added to our budget adapting to these measures." (WE17) "Decline demand means squeezed profits. Demand has been declined majorly in last few months. We have increased our working hours now. We are more flexible in taking orders. If my baking station is open for 8 h before this pandemic, now it has stretched to more hours and flexible timings. There is no profits and no face to face dealing with customer now." (WE8)

#### Tough decision making

"Due to lockdown, operating hours have changed for all businesses. It is getting difficult to get hold of these things. People are staying at home so what is the point of spending marketing budget on posters and billboards now. Everything has gone digital. We have also restructured our whole marketing department in this crisis." (WE12)

"In early days of lockdown, I was low on my stock. It was a huge difficulty to get the raw material. Eid (Festive occasion) was also in times of lockdown. There were huge customers' orders that I was not able to fulfil. Parcels were not delivered at time. Postal services were badly compromised. I did not want to lose my employees. But then I did not have any option. Business is not making any profits." (WE10)

#### Preparation for worst case scenario

"Indeed, small businesses are more vulnerable now. They have less cash and asset reserves. This wide spread of COVID-19 has left an impact on the economy of Pakistan as well. Demand for my products has also been affected. Our team has come up with a survival plan analysing our assets. We still believe that there is a long time for us to survive on our assets now. It is very important to make smart choice now." (WE13)

"Customers are also reluctant at paying the same price. People always ask for lower prices. They are not willing to pay more price for same thing. Three days back, I delivered an order, the material which they demanded, I could not get it. They gave a bad review to my business. The overall economy has been hit so hard. Everyone is facing the effects of this transition." (WE9)

**Table 3.** Illustrative quotes for the emergent humanitarian crisis

There are some measures that we have taken to overcome this current pandemic situation. It is to communicate more and more with customers and providing them complete information how their product has been prepared and how it will be delivered. So, they are fully aware about everything. I try my best to give them all the information about each process. There are many return customers. We try our best to establish a connection with them so we can help our business.

The government have imposed restrictions to follow the essential guidelines for businesses. These SOPs (standard operating procedures) have put a cost burden on small businesses. Entrepreneurs belonging to the food industry have talked a lot about the difficulty to maintain the SOPs. The cost of sanitizing and ensuring the safety of all employees available has put an additional pressure on the businesses.

After laying-off so many jobs, the work force planning has also been re-prioritized in all industries. Entrepreneurs have talked about their strategic plans for a minimal yet effective workforce. Employees are the asset of any business, and a good team can take any business through such tough times. Table 4 provides examples of illustrative quotes for carte blanche for agile business model. These quotes show how agility is an important trait to be present amongst all businesses to survive through this pandemic.

During the interviews, another element that kept coming from all entrepreneurs was their trust and strong belief in one or two employees throughout the lockdown journey. There was always a special and prominent presence of a few individuals amongst the team who have helped the business to grow in lockdown. Another entrepreneur added to that by expressing deep gratitude to her team members as her business was B2C initially. During lockdown, they started targeting the wholesaler retailers and resellers. It gives a new opportunity to cater for more markets. It turned out to be a profitable move for their business. Some entrepreneurs talked about enhancing their skills and expertise during this time. By staying at home, everyone had a lot of time to think and work. Some entrepreneurs used this time to upgrade their diplomas and helped their employees to do the same. WE18 said in her interview:

I am working with my passion. It does not matter to me that my business will survive or not. I will continue to do my business if my profit gives way down. It is difficult time for everyone. I keep myself in customer's and employees' shoes as well. It is the same pandemic for everyone. No one is safe from

#### Example quotes

#### Meeting new needs

"I think my business plan and idea was strong enough and based on healthy food and healthy mind. I just needed to reconceptualize the business functioning. Demand was there. I am very glad that my clientele did not fell off during coronavirus. I just made sure that the level of precautionary measures taken in running my business should be out class." (WE1)

"The declined demand has obviously hit my business very hard. All the ingredients, I was previously using got expensive. In an economy, the effect of inflation is always interlinked. Everyone is suffering in some way. For tackling all the high prices, I have also increased my food prices a bit. I am including more and more items to menu which may give a good profit with least investment. These are some steps that were taken just out of need and they are for temporal time being." (WE19)

#### Optimum work force mix

"Genuinely I like to update my social media posts and all the measures I have taken for the safety, quality, and taste of my product. I do not feel shy in sharing that with my customers on social media now. Social media has earned us trust of customers and reliable business in this critical time. We as a team try our best to post each activity happening to our daily business on social media." (WE6)

"Demand for my products in last 5 months was same. It did not go down. Then my team suggested to start dealing with whole sales and resellers. It has given more boom to my business. I am glad that some new steps we took during this crisis worked for our business. It is a team effort. I could not have achieved this without my employees." (WE14)

Table 4.
Illustrative quotes for carte blanche for agile business model

it. If God has given me resources, it is my duty to help more people in need. I also believe that people with small businesses are more socially responsible than big brands. That is why big brands are getting more bankrupt in this pandemic. All they care about is profit. There is a whole lot life more than profit. All the universities are going online. This is a good time to upgrade the skills and qualifications. My team members have used this time to upgrade their diplomas and short courses.

Retaining customers is also an important task for small businesses in the digital world. With the current situation when customers have more time in hand to spend online and browse it becomes harder for small businesses to compete. Vigilance is highly needed. Entrepreneurs have talked about connecting and empowering with customers. Initiatives like arranging giveaways for customers helped them to increase the business in lockdown. Moreover, addressing the market need and delivering the promised value of a product are the characteristics that many entrepreneurs have used to gain more customers. Social media has helped them to convey their message to a maximum audience.

## Effectual business functions

All entrepreneurs expressed the thought that business management and networks are inseparable from the survivability and growth of the business in these days. When asked about the important transforming capability from them, most of the entrepreneurs emphasized the need to maintain a wide network for growth in pandemic. Customers go after brands which they care, and they have some kind of association with them. Small businesses have the advantage of merging with other businesses to offer something new. Entrepreneurs mentioned that they have hired some employees in contracts to deal with these uncertain times. It is crucial for small businesses to be financial resilient. They do not have much finance flexibility at the current time due to cash flow problems. All entrepreneurs were aware of these harsh realities. The entrepreneurs included in the study were already present in the market before coronavirus and they knew about their customers. This lockdown and different social and cultural standing gives them new perspectives to connect with their employees and the customers. WE5 mentioned about a new joint venture:

I have thought to help start-ups earn more by giving them a photography solution. So, during the pandemic, many women have started their online food businesses. I am offering sample reviews regarding photography for them so they can generate leads. The offer for them is to send in their best item for sampling review and in return I will do photography of their product free of cost. If the pictures increase their sales and they decide to invest in photography they will be offered reasonable rates. I have made so many new customers like this. There are many women for whom I am doing advertising now.

Collaborating with other entrepreneurs is a unique idea but businesses can have different objectives. The idea of such collaboration and its acceptance is a good sign for entrepreneurship in Pakistan. Table 5 presents the illustrative quotes addressing the third aggregate dimension, which is effectual business function.

Throughout many interviews, it crystallized that entrepreneurs desperately want to reach out to a maximum number of customers. Businesses who were operating in a few cities earlier are aiming to reach out to people all over the country. All the businesses are done online with the orders being delivered through the postal service. This is the new normal and customers do not have the option because it is the only way to purchase. Hence, increasing visibility to more people is the goal for all entrepreneurs. Small business entrepreneurs are practising new measures to reach out to a wider customer base and they aim to continue that in future as well. Reframing business in the new normal as an opportunity is the mindset needed to encourage entrepreneurship. WE10 stated in her interview that customers are inclined to purchase more from the brands where they can communicate with the business owner. It gives them more satisfaction and it increases their trust. She said:

#### Example quotes

#### Growing wide networks

"Technology has made it easy for people to connect with the businesses now. Closure of big brands has compelled customers to connect with small producers. My revenue has been increased in these months. My business does not involve much physical interaction so I cannot say that my demand has been declined." (WE2) "Instead of an advertisement on YouTube or television, we now post them on our social media page. It saves a major amount of our marketing cost. During the process of cooking meals and order, we live stream the videos to the customers. Satisfying customers were our best approach. We never lied to our customers. It has helped us a lot in these days. I pray my business can survive for this time. Customers are trying to adjust in this situation. They are compromising on different situations. People know that corona is uncertain. We do not know. Whatever we have we should take benefit out of it." (WE7)

Increasing visibility through digitalization

"Clients ask hundreds of questions before placing order. They want pictures of the workplace environment. We post live videos of their food cooking in our kitchen. We are trying our best to increase their satisfaction. Due to COVID-19, online business operation has become very efficient. People do not have opportunity to go and buy from big brands. Every malls and shops are closed. My sale and revenue have just got better since March 2020. I have got new customers. People are encouraging small businesses as well." (WE3)

"My businesses have coped very well in this pandemic because I have direct connection with the customer. People are now hesitant to go after big brand names since they do not have any transparency of any process there. While in my business, I can talk to them directly, which is huge satisfaction or them." (WE7)

#### Sustainable team

"There is a proper check list to follow before the order is delivered. Everything is transparent. So, customers can see the protocols being followed. People at baking station are also following all the rules." (WE11) "Employees working for me were also demanding raises in their salaries. Those prices are not affordable to me due to high cost of materials. I did not want my business to go down the road. I am concerned for their hardships as well. We came up with a solution to merge few business roles. In this way they are working on two or three different roles. It reduces the cost for me, and their job was secured too." (WE14)

"When pandemic hit in March in Pakistan, all communication and transportation system was collapsed completely for small businesses. At that time, I kept myself strong. I always keep on looking for the light at the end of dark tunnel. Slowly the cargo services were resumed. I kept my clients informed of each step. I told my clients that delivery system will get affected. It will not be that quick enough for the business to operate. I believe in two-way communication and transparent communications. My clients were sensible enough to understand that. My business survives due to two-way collaboration. Me and my clients both were onboard in this time." (WE3)

Entrepreneurial ecosystems during COVID-19

469

Table 5.
Illustrative quotes for effectual business functions

I try to send customized messages to my clients so they feel welcomed. They feel the emotional attachment and association with my brand in these difficult times. I arrange the giveaways to keep my clients happy. I have started a contest on my Facebook page so that my clients can win the products, just as a reminder that my business cares for them. To acknowledge and appreciate the customers who are ordering in these times, I take time personally to connect with them. Because they are the ones due to which my business is surviving these days. They have bear with me in these tough times.

Getting hold of efficient and innovative employees is also one of the transforming capabilities that many entrepreneurs mentioned. Managing a sustainable team where every member feels for the brand and encourages the growth and survival of the business is important. WE3 said in their interview that they have taken steps to take out time and connect with the employees. Everyone is in the same problem. It is better to go through these times together. Allowing employees to work at home and helping each other if someone contracted the virus was mentioned by many entrepreneurs in their interview. WE3 stated:

I have made groups on Facebook and WhatsApp so my employees can get connected to each other and they have the sense of connection with each other. We try to share the daily lives with each other so we can get motivated to continue our jobs. It is very important to stay motivated in these times. Creativity

cannot prosper in a depressed environment. I try my best to be active at all platforms. My employees drive their energies from my positive outlook to the problems.

Maintaining a sense of association with employees rewards the business in multiple ways. The good employer always considers their employees as a competitive advantage and differentiates one business from the other. Many entrepreneurs in our study mentioned in their interview that there came a point in their business during lockdown when it was impossible to maintain the workforce. After paying bills and other expenses, they were at the verge of closing the business. The strategy that took them out of these situations was delegating multiple roles to the employees. This helped in reducing the cost for the business.

#### Discussion

This research set out to examine how small business entrepreneurs are using dynamic capabilities to survive and grow in an entrepreneurial ecosystem affected by coronavirus. This article has studied the hitherto dynamic capabilities required of small business entrepreneurs to fight in times of the health pandemic coronavirus. In doing so, this research has identified the different nature of dynamic capabilities to cope in an affected entrepreneurial ecosystem. The results have revealed three different drivers. Small business entrepreneurs are using these capabilities to survive. Each aggregate dimension set out to address three sub-research questions. The three aggregate dimensions emerged from the study are: emergent humanitarian crisis, carte blanche for agile business model and effectual business functions. The following section will set out to examine these findings in light of dynamic capability framework proposed by Teece (2012).

## Sensing capabilities by understanding the emergent crisis

In line with the previous research, this study shows that small business's ability to respond in new situations is a function of the entrepreneurial resources available, the entrepreneur's strategic capabilities to identify the upcoming change and respond to it quickly (Eikelenboom and de Jong, 2019). Sensing capabilities of an entrepreneur are referred to the individual's analytical capacity to sense and filter the future opportunities. As described by Teece (2007), two sources for achieving dynamic capabilities are the analytical system of the organization and the individual capacities. With the complex environment in place due to coronavirus, organizations have provided subtle ways to make their capabilities dynamic. It is one of the characteristics of an entrepreneurial firm to be proactive, innovative and risk taking. Proactiveness refers to anticipating and acting on future needs and wants in complex and uncertain entrepreneurial ecosystem environments (Fernandes et al., 2017). COVID-19 has forced many leaders to take risky decisions but there is no clear precedent available to drive their decisions. There is a lack of information, which means that the decisions are bound to be risky. During the crisis and disruption, traditional business values are not able to be catered. The shift in the priorities to ensure health, safety and well-being takes the focus on profit away. Here the concept of emergent strategy has been derived whilst analysing the interview data. Emergent strategy comes into action when there is no original plan to deal with the kind of situation (Mirabeau and Maguire, 2014). The findings support the notion that entrepreneurs have taken steps to respond to the external environment. Since no one saw it coming and no one predicted the impact of coronavirus at this vast level. Hence, the capabilities they use to survive the entrepreneurial ecosystem, which is not supportive for the business, are based on their logical rationales. Although certainly all businesses included in the study recognized the importance of the decisions, they exercised in the early days of lockdown. However, learning from the external situation helped them to deploy their resources to meet the needs of the market (Park and Kim, 2013).

This health pandemic has resulted in a turbulent environment. A strong peripheral vision is required at an entrepreneurial level to deal with turbulence. An organization classified as a

learning organization will show a rapid dissemination of knowledge in a lateral and vertical manner (Rindova *et al.*, 2009). Entrepreneurs in this study can utilise their capabilities in terms of how they scan the current business environment and make their decisions accordingly. Technological boom, economic downfall and socio-political changes across the world are additional factors to deal with apart from the new normal created by the coronavirus. The findings have suggested that small business entrepreneurs were able to detect the weak signals in their entrepreneurial ecosystem (Galindo and Méndez, 2014). The measures that have been taken to harness the tensions coming from customers and the external environment were addresses dynamically. They have considered this time to be an emergent humanitarian crisis and there is a whole lot of baggage that comes along with it. These sensing capabilities will help them in managing the turbulent environment in an efficient manner.

### Seizing capabilities through agile business modelling

Sensing capabilities are not enough to address the threats in the business environment. Furthermore, the need to seize opportunities in a timely manner will make a business successful and innovative. Seizing capabilities are the second building block of dynamic capabilities (Schoemaker et al., 2018). Identifying the value and capturing it is a set goal for any successful business. Throughout the interviews, it became apparent that entrepreneurs want to adopt flexible approaches to be able to react to the unpredictable changes of COVID-19 and its affected market environment. Business agility will help the entrepreneurs to respond to internal and external changes in an efficient manner (Ghezzi and Cavallo, 2020). The demands of the customers have been changed and to adapt to these changed customer demands, seizing capabilities that can lead a change without affecting the quality of the products is required. As many scholars have pointed out many established businesses and industries have been commoditized through the digitalization (Loss and Crave, 2011). During the time of coronavirus, technology has also emerged as an important source to survive and grow. Reasons include that this pandemic seems uncertain and will be extended for a longer time. This is not a short-term crisis. Up till now, this health pandemic has proved to be uncertain and will bring a long economic recession for all economies.

The increased volume of information generated during this pandemic with people spending more time connecting via technology has accelerated the digitization. The findings suggest that the current environment is a perfect place for businesses to become more agile. A different strategic decision brings higher level of challenges within the business (Baumol and Strom, 2007). We have found that small business entrepreneurs in Pakistan have developed a sense of kinship with the consumers, employees and vendors. The idea that everyone is in this pandemic together, gives a different perspective to new problems. Small businesses have the ability to connect with the customers. Customers feel more associated with the businesses when they can communicate with the owner (Wierenga et al., 2018). This association can help as a successful ingredient to handle turbulence in a social and cultural environment. It gives a business a degree of competitive advantage where customers have some association with the brand, and they feel they are connected to the product in some way. The findings have revealed that entrepreneurs are allocating their resources in flexible manner. The constantly changing environment has compelled them to use resources in alternative ways. Due to lockdown and closure of all businesses, alternate technological resources have been used to run the business.

#### Transforming capabilities by effectual business functions

All businesses have had to change their business operations because of the lockdown. Due to the recent nature of the pandemic there is still some way to go before fully understanding its impact on business. When dealing with such an uncertain environment, entrepreneurs have decided to reconfigure their business models. This is due to the need to change in order to survive in the new market environment. As a result there has been a shift to the use of entrepreneurial ecosystems in order to encourage collaboration amongst entities in a market environment (Ratten, 2020). To gain full advantage of their business models whilst functioning in the same ecosystem, businesses must re-invent themselves. The theory of effectuation helps explain how an organization can make use of their available resources in the best manner whilst maintaining a balance between the desired goals and availability of resources (Nielsen and Lassen, 2012). The findings have revealed that due to the health pandemic, many business functions have been unable to continue. The marketing techniques considered favourable and successful before 2020 are not going to flourish now. This is due to small businesses working with less resources and being under financial strain. To gain the maximum result from lesser resources, it is their key goal for the future to adapt to more digital-based functions. With no clarity about when things will get back to normal, this is considered essential to implement.

Small businesses are interpreting the current environment in order to make new goals for future. Entrepreneurs interviewed in this study mentioned that the alignment of interests with other businesses and working together was one thing that has enabled them to survive in these times. Bridging differences amongst competitors and engaging in dialogue with them has started resulting in new ventures. The complimentary services provided by entrepreneurs to each other in an entrepreneurial community are also observed in the findings. This means that dynamic capabilities help businesses to constantly innovate their services and adapt to new market conditions (Barney, 1991). The situation emerging from the health pandemic has made the presence of dynamic capabilities an essential capability for small businesses.

# Managerial and policy relevance

The findings of this study will help other small businesses to survive in the time of the coronavirus pandemic. The practical implications of this study are significant because of the introduction of many concepts which can therefore be used by small business entrepreneurs in the health pandemic. In this section, we will reflect on the insights from the discussion to draw implications for the small business entrepreneurs in an emerging economy. The context of an emerging economy is inseparable from this study as emerging economies are posing several threats to their economic situation in this pandemic. Efforts to establish sensing, seizing and transforming capabilities for small businesses run by entrepreneurs have given insights for better understanding about the current impact of physical lockdowns and social distancing in business functions (Macher and Mowery, 2009). Small businesses should develop their survival plan addressing existing resources in order to maximize the life of the business and its growth. As a result, it has become clear that dynamic capabilities are evident for the success of any business in COVID-19. There are also implications for managers and policymakers in this study. Governments are providing relief to small businesses in this time of crisis and this study has discussed the challenges faced by small business entrepreneurs. For policymakers, there are some directions for those who are interested in keeping an entrepreneurial climate alive in their countries. This means emphasising incentives that encourage small businesses to continue to operate in times of hardship. This can include rent subsidies, tax relief and digital support packages. The results identify the need to support local businesses in order to help the economy and move through this crisis based on geographic location.

#### Limitations and future research

This research paper has several limitations that can be addressed in future research. This study is based on qualitative data, which helps in gaining deep insights into the phenomena.

However, it does not provide robust answers that can quantify the responses. Thus, the question about whether small business entrepreneurs have successfully implemented dynamic capabilities to grow or not still exists. Future research should replicate this study in other country contexts to see if small businesses are responding in the same way. To do this quantitative data in the form of panel studies or surveys could be utilised in conjunction with in-depth interviews and case studies. Second, this study focuses on one geographic region being the emerging economy context of Pakistan. The results of the study will limit the generalizability of the study. It may address the perspective of emerging economies, but it certainly does not address the current challenges faced by entrepreneurs in other regions. The whole crisis of coronavirus has started in 2020, but it is still in its early phase. No one knows the impact it will bring to all the economies in the world. Therefore, future research should delve deeper into explaining the differences between emerging and developed countries in order to understand the difference in small business entrepreneurship. This would provide more information about the way government policy, culture and business environment influence the capability of small businesses to survive in times of crisis.

## Theoretical implications

This study discussed the role of COVID-19 in changing the entrepreneurial ecosystem for small business entrepreneurs. This study has contributed to an improved understanding of underlying challenges faced by small business in the coronavirus health pandemic. The findings of this study substantially add to the challenges for businesses adapting dynamic capabilities in a turbulent environment. The dynamic capabilities framework of Teece (2007) has allowed small businesses to address the current problems in the market. This allowed small businesses to reshape their business models according to the changing environment (Spigel, 2017). One conclusion that can be drawn from this study is that, although dynamic capabilities are required and support's business's ability to respond in uncertain circumstances, external entrepreneurial ecosystems and its dynamics should not be kept separate (Harreld *et al.*, 2007). This is due to the strong inter-connected relationship amongst them.

The realization of adding agility to business models has helped small business to seize their capabilities for future challenges. The market environment has been changed due to physical lockdowns and social distancing. The role of technology to transform the capabilities for greater exposure and growth has been emphasized in this study. This paper has argued that small businesses possess dynamic capabilities (sensing, seizing and transforming) that are helping them to survive in COVID-19. The dynamics of an entrepreneurial ecosystem is not supportive for entrepreneurs. To answer the questions of how small businesses are using their dynamic capabilities to survive in entrepreneurial ecosystem affected by COVID-19, we have interviewed 20 small business entrepreneurs in different industries.

This analysis will contribute to various literatures. It has discussed primarily the role of dynamic capabilities, but the findings add the presence of agile business models, emergent and effectuation theory as well. The knowledge spillover effect of entrepreneurship that highlights the way knowledge spills from one source to another might also be a useful theory to include in future research. This theory could complement the dynamic capabilities theory as both stress the need for knowledge to be transferred amongst a group of entities. This is particularly relevant for the current study that focused on entrepreneurial ecosystems.

We have found evidence that entrepreneurs are utilizing their existing resources to gain the maximum benefit. With the current safety measures to contain the virus, it is impossible to continue many business functions. This means that it is always important to drill down to the theoretical constructs emerging from the data (Drnevich and Kriauciunas, 2011). This helps in establishing new perspectives to existing theories and helps in reflecting on understudied sectors. Entrepreneurs are essential for the economic survival of small businesses in the current scenario. With the closure of international borders, the local entrepreneurial talent needs to be encouraged for boosting the economy. Living through the crisis has been the entrepreneur's first priority in the findings. The measures they took to achieve that have been based on exercising all dynamic capabilities to secure their business' future (Dierickx and Cool, 1989).

#### Conclusion

Coronavirus has been considered as an unprecedented crisis for the world as it demands unprecedented decisions. The power of technology and its impact on the world has kept the businesses alive in physical lockdowns. We hope that further research of this kind will lead to more analysis on entrepreneurial climate that can exploit synergies amongst business, social and economic goals of countries to live through this pandemic.

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#### Corresponding author

Vanessa Ratten can be contacted at: v.ratten@latrobe.edu.au