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Building Business Resilience and Sustainability

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The peer reviewers of this Special Issue blind-reviewed each of the papers that were received in quick succession, providing invaluable feedback that enabled much improved and well-structured finished work by the selected authors. Undoubtedly, these reviewers from both the USA and overseas have made a tremendous contribution to the overall effort in producing this Special Issue. Their subject-matter expertise, prompt responses, and patient attention to detail have significantly enhanced the quality of each article—as the authors themselves have acknowledged with respect to their anonymous reviews through the iterative process of refinement of their original works.

Sincere thanks are also due to Production Specialist Jason Carland, and to Trey Carland, the Executive Director of the Institute for Global Business Research (IGBR), producer of the *Global Journal of Entrepreneurship*. We as co-editors are deeply appreciative of Trey Carland for his encouragement, enthusiasm, and enterprise that have propelled our efforts, and to Jason Carland for his patient and meticulous production efforts and tireless industry. Commendably, IGBR has ensured that this Special Issue on *building business resilience and sustainability* through the pandemic environment is made widely available for scholars around the world through this timely, open-source, and online publication.

Victor S. Sohmen, Co-Editor
Denise V. Siegfeldt, Co-Editor
Marvin Ludlum, Co-Editor

Global Journal of Entrepreneurship
(Special Issue)

Special recognition is provided for Dr. Victor S. Sohmen, the Editor of the *Global Journal of Entrepreneurship* (GJE), whose extraordinary dedication and enormous energy, encouragement, and relentless pursuit of perfected peer-reviewed articles for this Special Issue of the GJE kept things moving on a steady path. Dr. Denise V. Siegfeldt, the Associate Editor of the GJE, is hereby recognized for her sustained efforts in completing the final reviews meticulously, and in grading the selected articles with competence. We also wish to acknowledge Dr. Marvin Ludlum, the Co-Editor of the GJE, whose alacrity and attention to detail served as a system of checks and balances to help maintain the integrity of this Special Issue.

Jeff Mankin, President
Institute for Global Business Research

INTRODUCTION

This 2021 Special Issue of the *Global Journal of Entrepreneurship* comprises scholarly articles on *building business resilience and sustainability* for entrepreneurship under the prevailing COVID-19 pandemic environment. The twelve topical articles selected for this publication provide a diversity of pointers for entrepreneurs to avail of windows of opportunity, adapt to a rapidly changing scenario, and optimize limited resources under these challenging conditions. As the economic, societal, business, and political systems in which we live are in a state of flux, entrepreneurship is vital, resilience is critical, and sustainability has become an imperative watchword to secure the future.

In the opening article, Yu-Feng Lee revisits Hofstede's culture paradigm to demonstrate that cultural aspects of nations and regions have impacted responses to the pandemic and suggests ways for businesses and communities to tailor their responses constructively by adapting to cultural realities. Next, William Casey looks at the impact of the COVID-19 pandemic on globalization and foreign direct investment (FDI) flows, and how these twin challenges can be tackled for a sustainable future. Robert Fleming explores small-business resilience and customer retention during these uncertain times when spatial distance is introduced between the business and customer due to the contagion of the pandemic. Robert Lahm takes a panoramic view of the entrepreneurial landscape to advise on coping with the constraints presented by the COVID-19 pandemic. To underscore the need for resilience, Jonathan Reed explains how strategic agility can be gainfully leveraged to combat the turbulent environment around us. The Bresslers recognize the stress precipitated by the pandemic and suggest that entrepreneurs challenged by psychological disorders—such as narcissism, attention deficiency, and dyslexia—have a fighting chance of success if they could marshal the positive traits intrinsic to their maladies to overcome obstacles.

Dennis Zocco looks at the financial aspects of commercial lease renegotiation strategies of small businesses for post-pandemic cash flow sustainability and risk mitigation. Stephen Childers and Andrea Stanaland consider how to preserve and sustain innovation and to promote “workplace collisions” in the absence of face-to-face interactions during the pandemic. Brooke Envick provides a continuity template that can be applied to small businesses as a strategic design tool to sustain recurring revenue during times of crisis. Ellen Raineri and Victor Sohmen embark on an empirical study of how socially responsible crowdsourcing can be included in entrepreneurship curricula and invigorate small businesses by tapping into external sources of information to adapt appropriately to a changing scenario. Carlos Aimar and D. K. Smith revisit the popular VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) framework as a management tool for dealing with the kaleidoscopic pandemic environment. In the final article, Murat Arik, Jessikah Riley, Azizakhon Mirsaidova, and Mariyam Sumaiya empirically explore and analyze family businesses to identify frustrations, and threats to their survival.

The mosaic of articles presented in this Special Issue should serve as food for thought, as triggers for critical analysis, and as springboards for further research into the multiple challenges presented by the fluid and evolving pandemic environment. Through identifying needs, seeking alternatives, taking actionable decisions, and continuing the search for viable solutions, we can look forward to adopting multi-pronged and resilient approaches toward a sustainable future through critically informed entrepreneurship in crisis situations—now, and well into the future.

COVID-19 CRISIS AND INTERNATIONAL BUSINESS AND ENTREPRENEURSHIP: WHICH BUSINESS CULTURE ENHANCES POST-CRISIS RECOVERY?

Dr. Yu-Feng Lee

New Mexico State University, NM

ABSTRACT

Since the global outbreak of Coronavirus (COVID-19) at the end of 2019, while all countries were trying to respond to the shock by working together or acting alone, countries are still racing to save their economies and develop vaccination plans, while minimizing all possible damages to attain a speedy recovery. However, little attention has been paid to cultural aspects of responses to the pandemic across countries and regions. Based on Hofstede's cultural paradigm with five dichotomous dimensions, this study examines the variation of cultural practices across international economies as it is deemed to potentially promote or hinder COVID-19 relief, as well as consequent business recovery around the world. It is concluded that cultural characteristics under relatively long-term orientation, collectivism, high power distance, low uncertainty avoidance, and low self-indulgence would tend to subdue the public health crisis and enhance economic restoration. Corporate policy makers and entrepreneurs are therefore advised to consider infusing and practicing such cultural norms as proposed, to regain post-COVID-19 business growth and sustainability.

Keywords: COVID-19, Hofstede's paradigm, corporate policy, entrepreneurs, sustainability

INTRODUCTION

Since the global outbreak of the Coronavirus (COVID-19) from the end of 2019, all countries have been trying to respond to the shock by working together or acting alone. They are all racing to save their economies and develop vaccination strategies, while minimizing all possible damages to attain a speedy recovery from the pandemic. The COVID-19-induced demand shock is real and substantial, starting from the days when universal business and social lockdowns and stay-at-home orders were issued; this led to pervasive production shortfalls and business sales followed by employee furlough and lay-offs. Numerous studies have focused on the ‘hardware’ capacity relating to public provision and shortage of medical rescue and assistance, economic and business impact and relief, and other socioeconomic aids (Bartik, Cullen, Glaeser, Luca, Stanton, & Sundaram, 2020; Cavallo & 25 MBA/Harvard students, 2021; Cohen & Meulen Rodgers, 2020; Cutler & Summers, 2020; Khot, 2020; Nicola, Alsafi, Sohrabi, Kerwan, Al-Jabir, Iosifidis, Agha, & Agha, 2020; Schellekens & Sourrouille, 2020; Sheridan, Andersen, Hansen, & Johannesen, 2020). These are done concurrently with research and development on COVID-19 vaccines, whereas the equally important disease preventive scheme centered on cultural practice, referred to as the ‘software’ capacity, nevertheless receives little or no immediate attention (Bruns, Kraguljac, & Bruns, 2020). Although nationals across countries either completely or incompletely with complaint or resistance followed the state-mandated public safety measures (e.g., face-masking and social-distancing), many have little or no idea that cultural forces may essentially play a role in curbing the pandemic—both in medical and macroeconomic terms.

As more and more business sites announce, “No mask, no business,” people with mixed feelings may wonder, “Is this a ‘point of no return’?” The pre-epidemic business convention (i.e. open and free customer behavior without protective devices) seems so distant and currently unappreciated. Even if an advanced era of business ‘digitalization’ seems imminent and inevitable, most customers still maintain hopes of returning to their pre-COVID-19 social life and business norms. Currently developed literature pertaining to the studies of public-health (medical) conditions and global or domestic economic impacts and remedies would shed light on the cross-regional cultural analysis between Western and Eastern economies to add relevant intellectual contribution to the ongoing COVID-19 crisis (Bartik et al., 2020; Cutler & Summers, 2020; Cavallo et al., 2021; Egger, Miguel, Warren, Shenoy, & Vernot, 2021; Jackson, Weiss, Schwarzenberg, Nelson, Sutter, & Sutherland, 2021; Martin, Markhvida, Hallegatte, & Walsh, 2020; Nicola et al., 2020).

COVID-19 Fallacy—It Is More Than Just a Medical Disease!

COVID-19 creates ironically more ‘excitement’ than scenes from a science fiction movie. It is heavily political, religiously intermingled, and said to be theoretically conspiring. This is supported by strong medical evidence (Cheng, Wong, Huang, So, Chen, Sridhar, & Yuen, 2020; Eikenberry, Mancuso, Iboi, Phan, Eikenberry, Kuang, & Gumel, 2020; Feng, Shen, Xia, Song,

Fan, & Cowling, 2020), rational use of face (Liu & Zhang, 2020; Lyu & Wehby, 2020; Martin et al., 2020), including recent statements of the U.S. Center for Disease Control and Prevention (2020). It is claimed that the face-mask is one of the ‘most powerful weapons’ to fight against COVID-19, as mask-wearing can effectively protect individuals and their communities from virus spread; any related fallacy is ill-founded, and lacks medical and scientific support.

COVID-19 vs. Politics: Is Wearing a Facemask ‘Politically Correct’?

Politics is paramount today, with COVID-19 being no exception. From face-masking to COVID-19 vaccine production and allocation, politics is inevitable—even the six-feet social distancing is claimed to be the ‘military protocol’ (National Public Radio, 2020). In late May of 2020, as facing the COVID-19-related death toll reached 100,000—and currently close to 600,000 as of June 2021—the then-U.S. President Trump disparaged those who wore face masks, calling it ‘politically correct’ not to do so. Despite U.S. former Vice President and current President Biden arguing that “it is not political; it is just ‘correct’ to fortify face-covering to prevent the virus from spreading (CBS News, 2020), Trump’s gesture however has invited his followers to disapprove of face-masking to show their loyalty to the party. Rather unsurprisingly, some other national leaders, such as Brazil’s President Bolsonaro, Belarus’ President Lukashenko, and Mexico’s President Obrador, were poised to ‘lead by example’ choosing largely not to cover their faces in public and downplay COVID-19 as a ‘little flu’ with small danger (see Painter & Qiu, 2020; Etehad, 2020).

COVID-19 vs. Religion: Is wearing of facemasks not biblical and social-distancing against God? Will those who comply receive the ‘ultimate punishment’ from God?

In East Asia and many other places around the world, it is common that people use ‘folklore therapy’ to treat medical conditions with or without the use of formal medicine, and often invoke the supernatural or religious force of deity beyond science. Since the outbreak of COVID-19 across the U.S. and other Western countries, ‘in the name of God’, people against face-masking alleged that wearing a mask is not biblical while social-distancing for evangelical activity disgraces God (Yezli & Khan, 2020; Venkatesh & Edirappuli, 2020; Huynh, 2020). In a late-June, 2020, county commissioners hearing at Palm Beach, Florida, the citizens who were anti-maskers charged that the state mask-mandate was not only political as a ‘devil’s law’ and a ‘communist dictatorship order’ against ‘constitutional right’ and ‘freedom of choice’, but it also led to an act of ‘throwing God’s wonderful breathing system out’, while people who ‘obey the devil’s law’ by wearing masks would be ‘punished by God’ and not able to ‘escape [from] God’ (The Telegraph, 2020; TYT Investigates, 2020).

COVID-19 vs. Conspiracy Theory: ‘Who’ is really behind COVID-19?

As summarized by U.S. National Public Radio (2020), conspiracy theory is conceived on the essences of ‘a plausible but not necessarily real element’, ‘one (rich) individual or institution having the desire to ‘control the world’, and ‘the anti-tech movement’ (Ahmed, Vidal-Alaball, Downing, & Seguí, 2020; Jovančević & Milićević, 2020; Meese, Frith, & Wilken, 2020). Different scenarios of COVID-19 conspiracy have been denounced from the national level where, for instance, both the U.S. and Chinese governments each finger-pointed calling COVID-19 the ‘Wuhan’ or ‘China Virus’ against ‘U.S. Virus’, desiring to condemn to potentially suppress the counterpart’s political power amid the already-tense U.S.-China trade wars (Pomfret, 2020). The other scenario involves the Hollywood science-fiction creativity in Schwarzenegger’s style or superhero of Marvel movie series fighting against the ‘bad guy’ who attempts to deploy a lethal weapon, through some unprecedented high-tech scheme to control the world. In the COVID-19 incident, three key ingredients—Coronavirus and its ‘ultimate vaccine tracking chips’; Bill Gates and his global vaccination research; and, 5G cellular network (i.e. the ‘high-tech’)—sketch the ‘perfect’ conspiracy. The fictitiously conspiring plot then goes that Bill Gates, the world-renowned elite and the ‘bad guy’, secretly triggers the pandemic which would rely on his Gates Foundation funds and vaccination research to develop the vaccine for a cure. Then, once the vaccine with a tracking device is injected into the human body, it sends signals to the 5G activated network which is Gates’ ultimate control. Regrettably, such deceitful intrigue goes viral via telecommunication and across social media, causing many to believe them. Rather than the combat the virus epidemic, such ‘infodemic’ (misinformation spreading) from ambitions anti-vaxxers and anti-techs could potentially lead to more devastating damages than the deadly COVID-19 itself.

COVID-19 Verity—Cultural Practice Affects COVID-19 Crisis Management

Although many believed that the Coronavirus does not choose who and where one is—rich or poor, male or female, young or old, powerful, or weak, public, or private, or domestic or foreign—the infectivity of the disease and its control do reflect somewhat in national practices of culture. So, does culture play a role in a country’s COVID-19-crisis management? It certainly does. Since the outbreak of COVID-19, in economies such as China, Japan, Hong Kong, Singapore, South Korea, Taiwan, and Vietnam, although they faced initial intensities of outburst with surges of confirmed cases and sudden high death rates (in thousands in China), the sign of worsening was quickly under control after the first couple of months due to instant state interventions. In contrast, in Western countries including the U.S., U.K, Italy, France, Germany, Spain, and Brazil of the Southern Hemisphere, the spread of the virus lagged a couple of months after rising in the East, but not effectively contained as it progressed gravely like a ‘wildfire’ across these regions and beyond.

COVID-19 is new to every country where mostly none is prepared for its inception. The urgency of generating immediate medical hardware and taskforce to the rescue is needed while facing resource shortages and challenges. Countries which could promptly and effectively

respond to the crisis and curb the casualty must rely on factors other than the hardware and utility infrastructure, such as the ‘software’ in one’s culture (Hofstede, Hofstede, & Minkov, 2010). Such software in cultural traits reflecting whether a government could work cohesively with its citizens in all aspects (e.g. maintaining political, economic, and social order; comprehensive mandates followed by complete civil compliances) become crucial to fight against, and control, the contagion. When many argued that the lagged months after the Eastern outbreak should provide enough time for the Western nations (especially the well-developed ones) to prepare themselves for the potential hit. This nonetheless ended up with disappointing crisis responses. It is deemed to be the fact of culture—to say the least, the political aspects included—as some of the bureaucrats appeared over-confident in their disbelief and shortfalls in conquering the formidable virus-war.

COVID-19 vs. Culture: Theoretical Foundation

Across generations, culture is reckoned to be the foundation of human behavior even if defined in conceptual variations. Hofstede (2001) identified culture as the “collective programming of the human mind that distinguishes the members of one group or category of people from another”, whereas Matsumoto (2000, p. 24) defined it as “a dynamic system of rules—explicit and implicit—established by groups in order to ensure their survival, involving attitudes, values, beliefs, norms and behaviors, shared by a group, but harbored differently by each specific unit within the group, communicated across generations, relatively stable, but with the potential to change across time”. Essentially, culture endogenizes human behavior while how humans act reflects their underlying culture.

Since the early 1980s, the Hofstede paradigm or cultural system by Geert Hofstede (Hofstede, 1980) has been widely used in cross-cultural psychology, which later became a popular application in international business and multicorporate management. It follows six categories classifying human and business behavior into long-term versus short-term orientation, individualism versus collectivism, high versus low power distance, strong versus weak uncertainty avoidance, indulgence versus self-restraint, and masculinity and femininity. (See Table 1B for extent of these dimensions in the U.S. national culture).

Long-term versus short-term orientation

Long-term orientation refers to “the fostering of virtues related to future rewards—in particular, perseverance and thrift” whereas, short-term orientation denotes “the fostering of virtues related to the past and present—in particular, respect for tradition, perseverance of ‘face’, and fulfilling social obligations” (Hofstede et al., 2010). A culture with a high score is labeled as long-term-oriented—orienting towards the ‘future’ and promoting personal assertiveness and materialism, whereas a low score culture implies short-term focus—favoring ‘presence’ (‘now’) with a more relaxed lifestyle and less material gain.

Individualism versus collectivism

Individualism refers to “societies in which the ties between individuals are loose; everyone is expected to look after himself or herself and his or her immediate family”, whereas collectivism denotes “societies in which people from birth onward are integrated into strong, cohesive in-groups, which throughout people’s lifetime continue to protect them in exchange for unquestioning loyalty” (Hofstede et al., 2010). A culture scoring high in individualism indicates that as individuals are prone to self-interest, it is contrary to those in collectivism with low score who tend to integrate into a strong and cohesive group with consistent loyalty.

High versus low power distance

Power distance refers to “the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally” (Hofstede et al., 2010). For a culture with high power distance scoring high, organizational ranks are palpable and hierarchical, and power is distributed favorably toward superiors but inauspiciously against subordinates. In cultures of low score reflecting low power distance, rewards, force, and prestige are more equally shared within organizations.

Strong versus weak uncertainty avoidance

Uncertainty avoidance refers to “the extent to which the members of a culture feel threatened by ambiguous or unknown situations” (Hofstede et al., 2010). A high-scored culture implies people insecurity and less daring to take risks. In the workplace, employees are contained by formal rules and likely to shy away from challenges, resulting in difficulty of implementing new changes in the organization. In contrast, a low-scoring culture shows low uncertainty avoidance as people are open to changes, and will accept new ideas, thoughts, and beliefs.

Indulgence versus self-restraint

Indulgence refers to “a tendency to allow relatively free gratification of basic and natural human desires related to enjoying life and having fun”, whereas self-restraint denotes “a conviction that such gratification needs to be curbed and regulated by strict social norms” (Hofstede et al., 2010). A high-scored culture typically approves indulgence and encourages individuals to ‘treat oneself good’ and ‘reward oneself’, while a low-scored counterpart sinfully disgraces self-pleasure, believing self-restraint and strict discipline honor intrinsic human value.

Masculinity versus femininity

Masculinity refers to societies “where emotional gender roles are clearly distinct: men are supposed to be assertive, tough and focused on material success, whereas women are supposed to be more modest, tender and concerned with the quality of life”. Femininity, on the other hand, signifies societies where “emotional gender roles overlap: both men and women are supposed to be modest, tender, and concerned with the quality of life” (Hofstede et al., 2010). As linking to the definition and distribution of gender role, a masculine society with high score means that men seem to be assertive and competitive, prioritizing goal-achieving over relinquishment, whereas in a feminine culture both genders are deemed to be more caring, harmonious, and mutually modest.

Data and Sample

Fourteen countries from well-industrialized and first- and second-tier newly industrialized economies (NIEs) across the West and the East which are ranked highly in COVID-19 cases and deaths against their relatively low-impacted counterparts are studied. These comprise the U. S., Brazil, the U. K., France, Italy, Spain, and Germany in the West, and Japan, South Korea, China, Singapore, Hong Kong, Vietnam, and Taiwan in the East. Data of COVID-19-confirmed cases and total deaths of these countries are extracted from WHO (2021a) and from data banks including Statista (2021) for Hong Kong, Worldometers (2021) for South Korea, and the Taiwan Centres for Disease Control (2021) for Taiwan between March 9, 2020, and March 3, 2021, across 51 weeks. The percentages (rates) of cases and deaths are estimated by dividing the country-specific cumulative number of cases and deaths, respectively, by the country’s population. The statistics on regional and global economic outlook are retrieved from McKinsey & Company (2021). The corresponding cultural dimension scores are extracted from the website of Hofstede Insights (2021).

Empirical Findings and Discussions

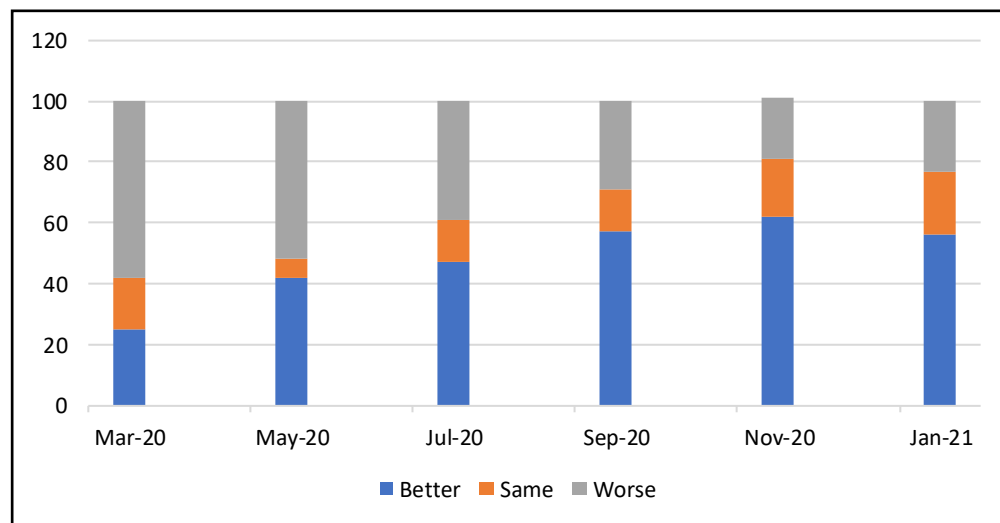
COVID-19 Impact on Business and Future Economic Outlook

In the wake of the global public health crisis since early 2020, the global economy has been shattered by widespread cross-country business and social lockdown, temporary or permanent shutdown of businesses, suspension of trade and travel, record-high unemployment or furlough, and under-performance of government. Numerous studies (Bartik et al., 2020; Cavallo et al., 2021; Cutler & Summers, 2020; Egger et al., 2021; Jackson et al., 2021; Martin et al., 2020; Sraders & Lambert, 2020; OECD, 2021) reported that over a million companies worldwide, big or small or domestic or foreign, suffered from different degrees of COVID-19-affected sales reduction and business closures; others fought against time to transform into omnichannel operations while avoiding ‘bricks and mortar’ to survive. Even if most governments work jointly or act alone trying to appease the pandemic and rescue their

economies from being austere, most businesses still face ongoing challenges. This is because the pre-crisis level of operations would not seem to easily resume if the universal vaccinations is not achieved, as commented by WHO with a currently unknown percentage to reach the herd immunity threshold of world population (see WHO, 2021b).

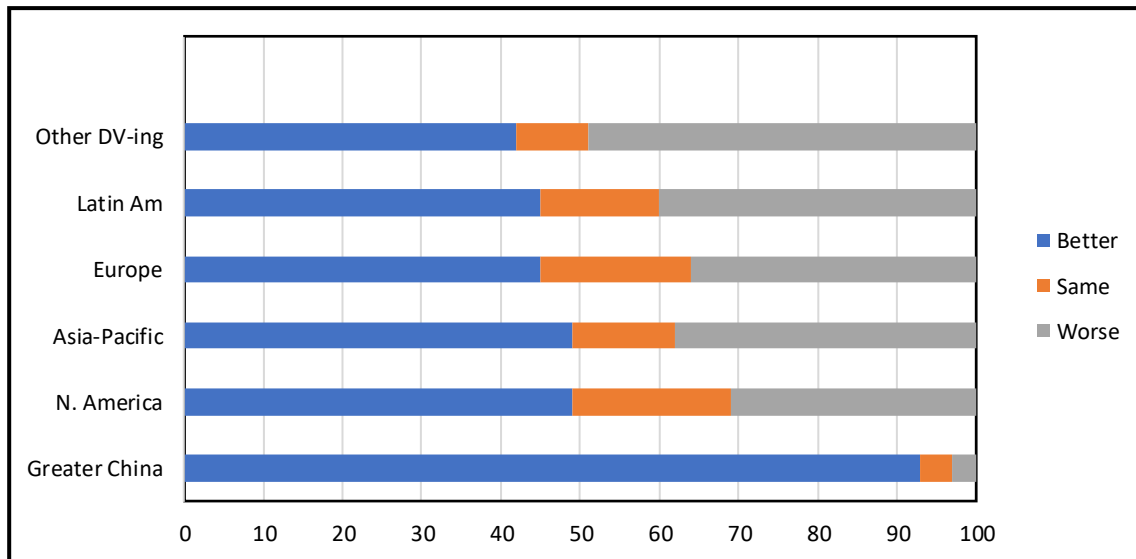
Nevertheless, amid various uncertainties, McKinsey & Company (2021) surveys released the information that global business executives expressed their optimism in forthcoming economic climate. As illustrated in Figure 1A, global business atmosphere was gloomy at the inception of COVID-19 outbreak but were progressively filled with confidence and positivity in the hope of seeing the ‘light at the end of the tunnel’, thanks to the development of global disease-fighting networks and plans of action for vaccination. Its recent survey shown in Figure 1B even depicts highly positive economic sentiment among the companies’ home-offices in the region of Greater China (including Hong Kong and Taiwan), followed by those in North America and the Pacific-Rim, although a somewhat pessimistic business mood is observed in Europe, Latin America, and other developing regions.

FIGURE 1A
Global Economic Outlook in the Next Six Months



Source: McKinsey & Company (2021).

FIGURE 1B
Home-Country Economic Outlook in the Next Six Months
 (Survey Time: September 2020)



Source: McKinsey & Company (2021).

Preliminary Statistics of COVID-19 Across Regions

Table 1 presents the COVID-19 condition across the West and the East as of March 03, 2021, where both infections and deaths were topped in the U.S., Brazil, and Europe, while the crisis control seemed relatively effective in East Asia. The population-based affected cases and death rates of COVID-19 virulence were high in the U.S.A., U.K., Spain, and France, in contrast to the less-than-1% low rates across major Asia-Pacific economies (except Singapore's 1% virus-affected case rate).

TABLE 1
Western vs. Eastern Economies, COVID-19 Statistics as of March 03, 2021

Country	Cumulative No. of Cases	Cumulative No. of Deaths	TTL Population	Affected Cases (%)	Affected Deaths (%)
Western Economies:					
U.S.A.	28,825,174	522,469	331,002,651	8.7084	0.1578
Brazil	11,122,429	268,370	212,559,417	5.2326	0.1263
U.K.	4,229,002	124,797	67,886,011	6.2296	0.1838
France	3,860,118	88,613	65,273,511	5.9138	0.1358
Spain	3,164,983	71,727	46,754,778	6.7693	0.1534
Italy	3,101,093	100,479	60,461,826	5.1290	0.1662
Germany	2,518,591	72,489	83,783,942	3.0061	0.0865
Eastern Economies:					
Japan	443,001	8,402	126,476,461	0.3503	0.0066
China	102,172	4,849	1,471,286,879	0.0069	0.0003
S. Korea*	92,471	1,634	51,710,000	0.1788	0.0032
Singapore	60,062	29	5,850,342	1.0266	0.0005
Hong Kong**	11,258	203	7,507,000	0.1500	0.0027
Vietnam	2,529	35	97,338,579	0.0026	0.0000
Taiwan***	978	10	23,570,000	0.0041	0.0000

Source: WHO (2021a)

*Worldometer (2021).

**Statistica (2021).

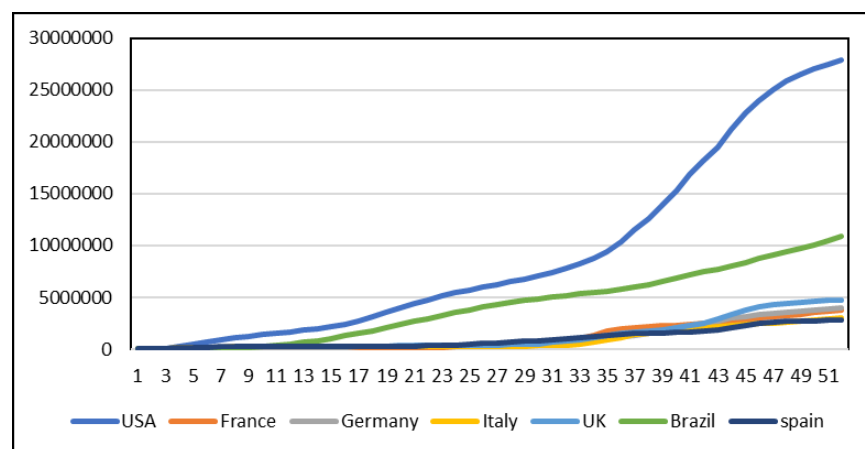
***Taiwan Centres for Disease Control (2021).

Alternatively, from a flow and dynamic viewpoint, the trends of COVID-19 in cases and deaths across the West and the East over 51 weeks between March 2020 and 2021 are illustrated in Figures 2A and 2B (Western economies), and 3A and 3B (Eastern economies). As somewhat expected, the cases followed by growth of death rates after the first several weeks (Weeks 7 or 9 in most countries) reveal the intrinsic human nature and governmental character as they first reacted to the shock and then acted either proactively or reactively to the crisis management. Proactive governments tended to activate proactive safety measures such as imposing face-masking and social-distancing orders and limiting business and social activities; whereas, reactive governments refuted the effectiveness of public safety measures, with a few even claiming such calls to be some sort of political or economic conspiracy. Consequently, a proactive government supported by its proactive citizens, such as those in major Asian economies except Japan would seem to ameliorate the COVID-19 crisis, while the misfortune tends to linger when a reactive government is followed by a skeptical and resistant public, as seemingly observed in the Western world.

In Asia, China as the outbreak origin—and given its largest and dense population—was able to suppress and stabilize its infection and death, while Singapore and South Korea were able to curb their COVID-19 incidents after experiencing cases and death surges, respectively, in the early months due to Singapore's 1.4 million Southeast Asian migrant workers. These workers mostly lived in crowded dormitories, and South Korea's first outbreak epicenter in the City of

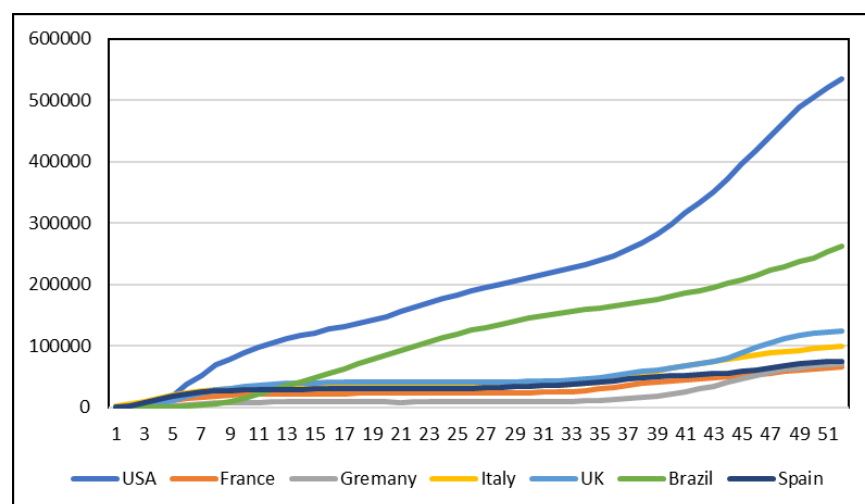
Daegu hosted mega-religious gathering. In Japan, its casualty outburst included the case and death tolls of the Diamond Princess cruise ship. In October 2020 it was reported that a sizeable elderly (70 years and older) population was subject to developing serious medical conditions (see report by Japan's Ministry of Health, Labour and Welfare (2021)). See also, Clark, Jit, Warren-Gash, Guthrie, Wang, Mercer, and Checchi (2020). As Japan is anticipated to host the COVID-19-postponed 2021 Summer Olympic Games in Tokyo, its government is under pressure to tamp down the pandemic with time constraint while showing its strategy and capacity in ongoing crisis management to ensure and provide a COVID-19-safe Olympic environment.

FIGURE 2A
Cumulative Weekly Changes to Number of Cases in Western Economies
 (World Economies: March 9, 2020, to March 3, 2021—51 weeks)



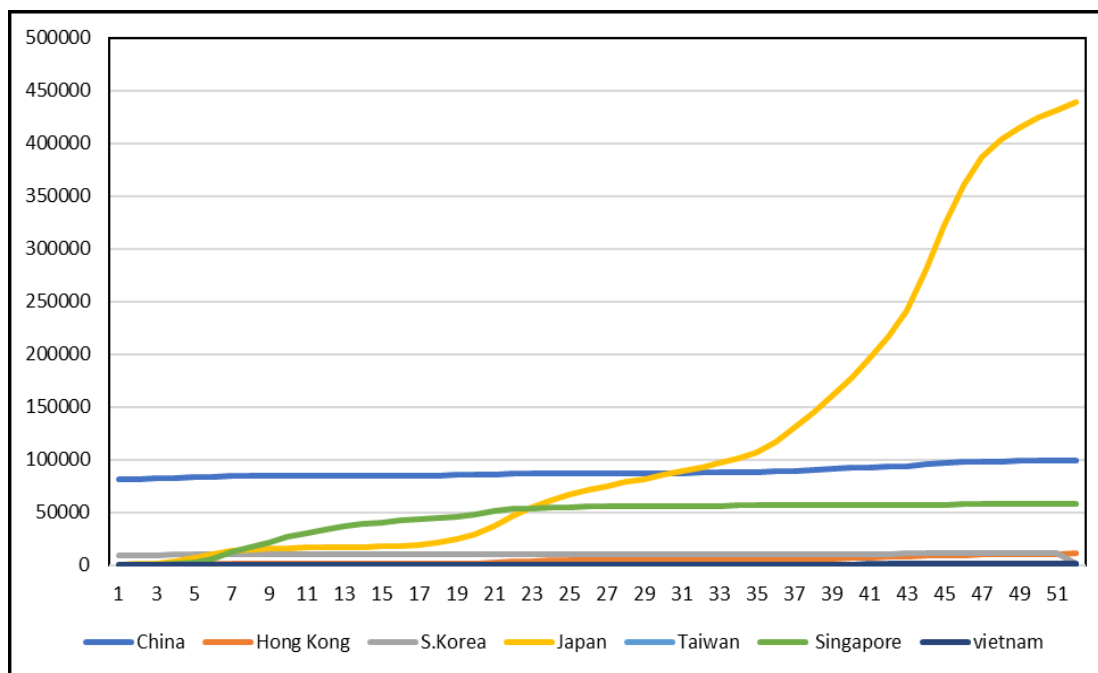
Source: WHO (2021a).

FIGURE 2B
Cumulative Weekly Changes to Number of Deaths in Western Economies
 (World Economies: March 9, 2020, to March 3, 2021—51 weeks)



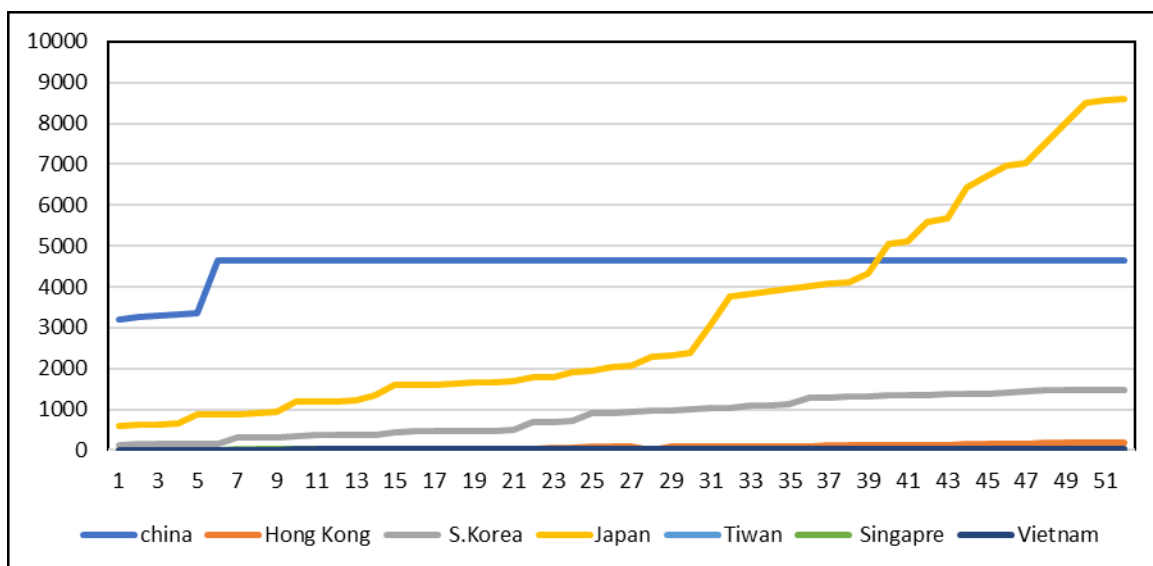
Source: WHO (2021a).

FIGURE 3A
Cumulative Weekly Changes to Number of Cases in Eastern Economies
 (World Economies: March 9, 2020, to March 3, 2021—51 weeks)



Source: WHO (2021a).

FIGURE 3B
Cumulative Weekly Changes to Number of Deaths in Eastern Economies
 (World Economies: March 9, 2020, to March 3, 2021—51 weeks)

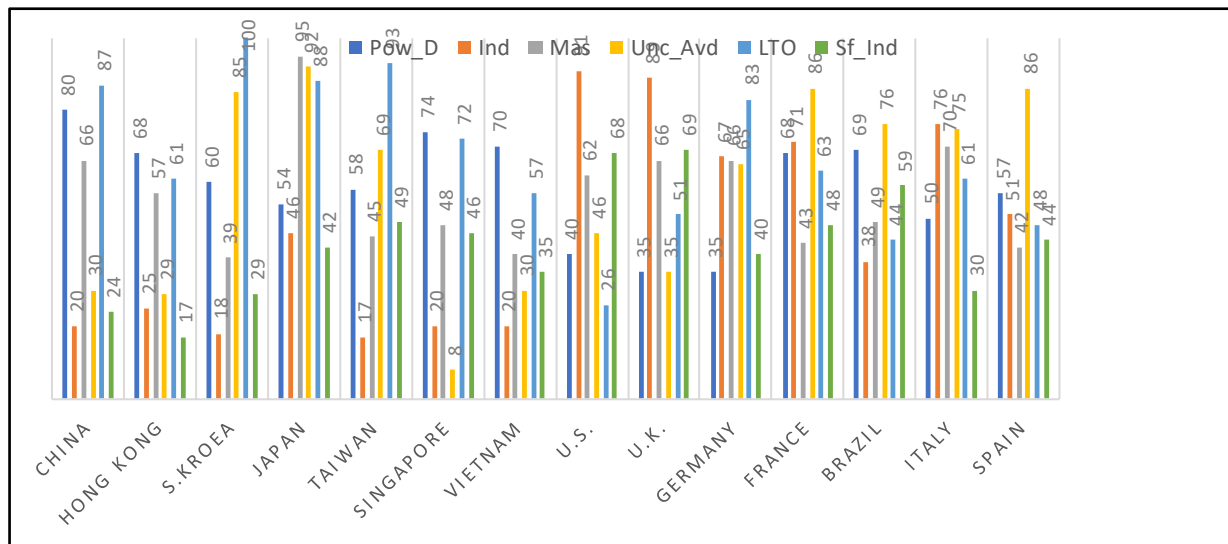


Source: WHO (2021a).

Hofstede's Cultural Evidence of the West and the East

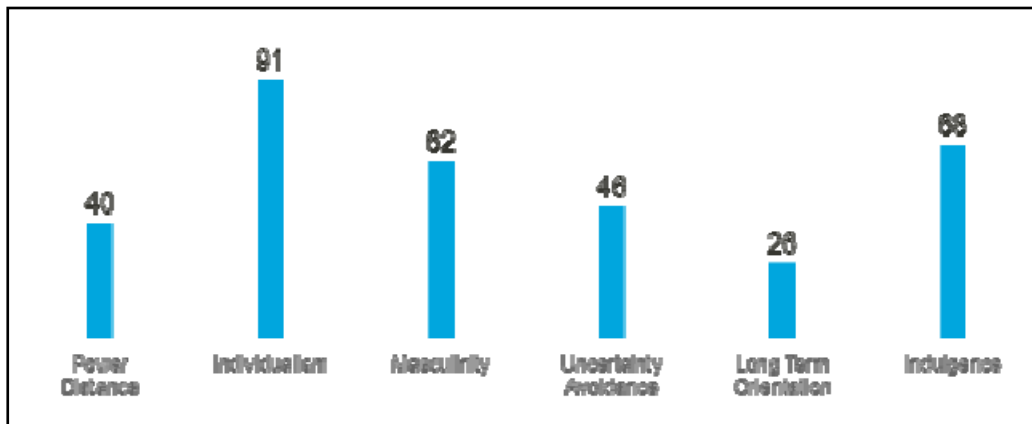
Figures 4A, 4B and 4C demonstrate regional cultural traits, cultural traits in the USA, and uniqueness across Western and Eastern economies. In sum, as compared with those in the East, the general culture of the West maintains lower power distance, higher individualism, higher uncertainty avoidance, less long-run focus, and higher self-indulgence, as it signifies Westerners who favor less hierarchy (especially in the U.K. and Germany), encourage the pursuit of self-interest (especially in the U.S. and the U.K.), possess likelihood of resisting challenges (especially in France, Brazil, and Italy), prioritize short-run goals (especially in the U.S. and Brazil), and endorse personal pleasure-seeking (especially in the U.S. and the U.K.). On the contrary, Easterners emphasize overall conservatism in high-power gap (especially in China, Hong Kong, Singapore, and Vietnam), social collectivism (especially in China, South Korea, Taiwan, Singapore, and Vietnam), long-term orientation (especially in China, South Korea, Japan, Taiwan, and Singapore), low self-indulgence (especially in China, Hong Kong, and South Korea), while being flexible and ready for necessary changes (especially in China, Hong Kong, Singapore, and Vietnam).

FIGURE 4A
Hofstede's Culture Dimensions: Eastern vs. Western



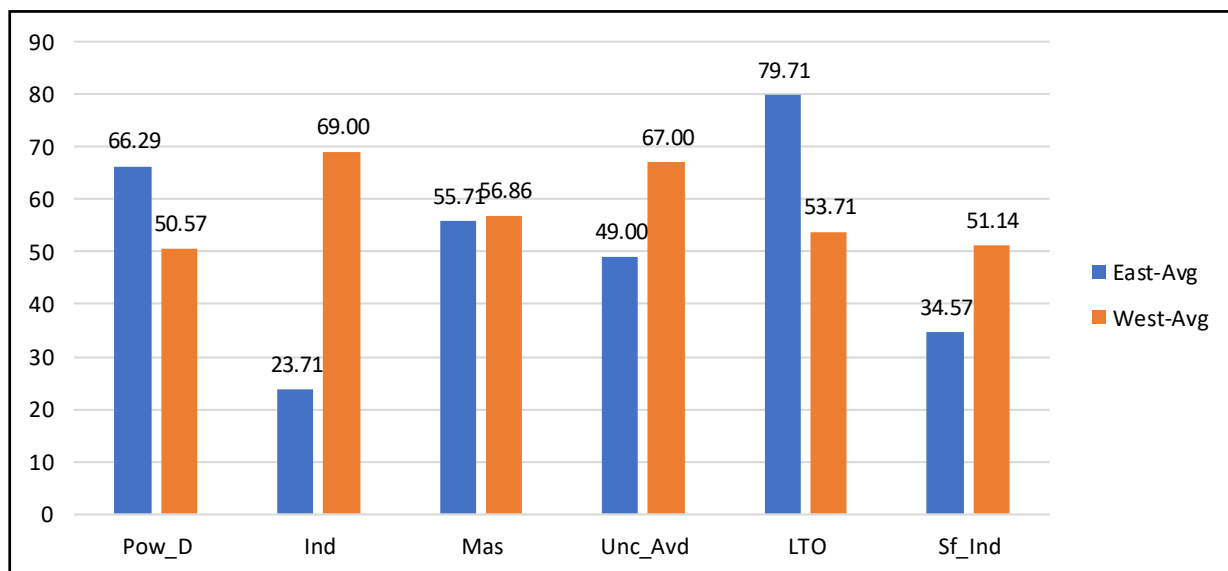
Source: Hofstede Insights (2021b).

FIGURE 4B
Hofstede's Culture Dimensions: USA



Source: Hofstede Insights (2021b).

FIGURE 4C
Hofstede's Culture Dimensions: East-West Regional Comparisons



Source: Hofstede Insights (2021b).

Culture Combined: What can international entrepreneurs learn from cross-cultural practices to promote post-crisis growth and business sustainability?

Since the coronavirus outbreak, only scant literature attests to the implication of cultural perspectives on pandemic prevention and control. Gokmen, Baskici, and Ercil (2021) suggested that Hofstede's 'individualism' and 'self-indulgence' pose positive impacts on the increasing rate of total COVID-19 cases per million (IRTCCPM) across Europe, while a 'power-distant' culture is observed to lead to negative IRTCCPM, meanwhile leaving 'masculinity', 'uncertainty avoidance', and 'long-term orientation' insignificantly improving COVID-19. Similarly, in a pre-COVID-19 study by Deschepper, Grigoryan, Lundborg, Hofstede, Cohen, Van Der Kelen, and Haaijer-Ruskamp (2008), 'power distance' and 'uncertainty avoidance' play more positive and impactful roles than other Hofstede dimensions in European antibiotic use, suggesting that European patients tend to respect the 'power order' from their physicians to avoid the consequential risks.

In this qualitative study across Western and Eastern economies, it is shown that the comparatively effective control reflected in major Asian countries' low COVID-19 case and death rates has resulted from their regional cultural practice. This may serve as a pragmatic example for other counterpart regions to assess and reflect in their pandemic management and business tactics. East-regional low 'individualism' customarily suggests that its people value collective and in-group culture, which prioritizes social altruism over those of the individuals. In the implication of COVID-19 control which needs national-level collective collaborations, a low individualistic society is deemed to follow the state order for new business guidelines and other safety calls more closely, presumably ending in lower virus contagion and spread.

'Long-term orientation' is also an Eastern cultural norm, which describes individuals to be forward-looking and 'patient' for their future while willing to endure 'present' sacrifice, as opposed to the mindset of short-term focus on present enjoyment. In the COVID-19 intervention, future-oriented Easterners may mostly aim at their long-term welfare and therefore are more likely to adhere to pressing public safety protocols and practice business promptly accordingly. Contrary to Westerners' relaxed lifestyle which may reflect in loose state-order compliance, Eastern businesses tolerate present sacrifice (e.g.: complete face-masking) to prevent any short-run disadvantages to safeguard their long-run prosperity.

As concluded in Gokmen et al. (2021), 'power distance' is influential in pandemic prevention across the European experience. Distinct power in a culture is recommended to slowdown virus transmission, while a 'flattened' power or 'squeezed' hierarchy tends to deteriorate disease control. In Eastern economies, high power distance keeps people in different ranks and 'distances', counter to the flatter hierarchy in Western societies. Facing COVID-19, oriental firms follow a normative power gap by complying with state safety regulations to avoid mandated business lockdown, and therefore conceivably contribute to restraining the disease from aggravating.

As asserted by Gokmen et al. (2021), adoption of 'self-indulgence' is to invite more virus infection. Parallel to the outcome of 'individualism', self-indulgence (hedonism) emphasizing

one's interest in the pursuit and freedom of choice may lead to lax compliance of public decrees. In Eastern businesses, practical conservatism confines the quest for such desire to persuade its buyers and sellers to support and follow the societal goals. This shows in the process of COVID-19 relief where less-emphasized self-indulgence or hedonism is normally endorsed by civil subservience in face-masking and social-distancing around the business environment.

'Masculinity' in Hofstede's cultural setting receives no significant distinction across the West and the East. As also validated by Deschepper et al. (2008) and Gokmen et al. (2021), medical exercise and public health (crisis) management in general are unlikely to be affected under masculine or feminine practice of a culture. Hence, in managing COVID-19-affected businesses, firms and entrepreneurs are advised to impose their public safety codes based on their operative capacities and customers' needs, along with other cultural references.

Finally, 'uncertainty avoidance' reveals the degree of cultural acceptance in changes. As claimed by Deschepper et al. (2008), citizens of a high uncertainty-avoiding culture are observed to follow existing rules while discrediting changes. In Eastern economies, low uncertainty avoidance compared with that in the West may offer a plausible rationale as to why they could calm their regional COVID-19 contagion, thanks to the flexibility of taking challenges and swift adjustment to public safety orders as new norms. Facing the novelty of COVID-19 and its unknown development, instantaneous crisis response of international businesses and their proactive strategies are imperative. Indeed, a culture with higher propensity to accept changes, like the one witnessed in the East, is believed to potentially produce affirmative results for business recovery and sustainability.

Post-COVID-19 Global Business Policy and Recommendation

Given the above cross-regional cultural analysis and implication of ongoing the Coronavirus spread, it is important that international business leaders and entrepreneurs, while developing strategies and safety measures to sustain organizational operations, take the country's inheritance and business culture into account for COVID-19-relevant business management. As 'prevention [following cultural norm] is better than cure' declared by Ubani (2020), Hofstede's cultural classification across Western and Eastern economies indicates that low COVID-19 case and death rates of the latter are deemed to be notably attributed to its cultural practices. These include long-term orientation, collectivism, high power distance, low uncertainty avoidance, low self-indulgence, and impartial masculinity. Cultural idiosyncrasy and difference are natural across regions which promote cross-cultural learning and should be appreciated while cultural ethnocentricity should be discouraged. During the prolonged epidemic, the gradually pandemic-fatigued public would resume some or more of their conventional business activities. It becomes critical therefore, for companies worldwide to not only be pragmatic and coordinate jointly, but also learn from one another in cultural contexts to combat the virus for global relief.

As Western businesses may ponder the low virus case and death rates across the East while assessing how its positive COVID-19 preventive outcome is achieved, it is essential to note that disease control and prevention rely on collective actions of a nation, while considering business cultural aspects of (1) long-term orientation by which firms should undertake short-term

sacrifices by requiring customers' public safety practices for long-term sustainability; (2) low individualism by which businesses prioritize societal goals to act communally by protecting one another from disease aggravation; (3) high power distance by which firms follow state safety codes with complete compliance; (4) low uncertainty avoidance by which businesses adopt social and business flexibility for changes and new rules; and, (5) low self-indulgence by which firms promote collective and altruistic pursuit rather than accommodating individual business interests through self-seeking prerogatives.

CONCLUSION

The unprecedented COVID-19 pandemic has interfered with all aspects of human life publicly or privately around the globe. Many studies have been conducted to provide advice on COVID-19-related medical rescue and public health crisis management, concurrent with national monetary and fiscal plans to alleviate the economic and business disturbances—whereas scant analysis has been applied to the cross-cultural impact on COVID-19-affected business management. This study acknowledges the importance of national or regional 'hardware' capacity, including medical remedy and economic and financial stimuli for disease relief, while it stresses the vital 'software' of cultural exercises contributing to organizational and business recovery and sustainability.

From the Hofstede cultural paradigm across Western and Eastern economies, it is believed that effective pandemic control most likely results from a collaborative culture, reflected in long-term orientation, low individualism, high power distance, low uncertainty avoidance, and low self-indulgence. An early and inclusive compliance of state-mandated safety measures need to be adopted by all citizens and businesses—while the risks of failing interventions due to any form of defiance may prevail in a contrary culture. Entrepreneurs and international business policy makers contemplating future post-COVID-19 business management should therefore take the pragmatic cultural traits of Hofstede's paradigm into consideration. Indeed, we should put away the jargon, "East is East, and West is West, and never the twain shall meet." (Kipling, 1940).

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THE IMPACT OF THE COVID-19 PANDEMIC ON GLOBALIZATION AND FOREIGN DIRECT INVESTMENT FLOWS

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ABSTRACT

The COVID-19 pandemic has inflicted economic pain on the global community as well as physical pain. The pandemic has compounded a series of global problems that preceded the outbreak. These problems include growing nationalism, protectionism, and other forms of anti-globalization. Sharp declines in foreign direct investment (FDI) flows have been recorded, particularly in those developing countries with the greatest need for capital infusions. The short-term effects of the pandemic are already visible with both demand-side and supply-side shocks damaging the global economy. Traditional supply chains have been particularly disrupted. The long-term impact is more difficult to forecast. Whether anti-globalization and declining FDI flows continue over time depends on how national governments, global health agencies, and multinational enterprises ultimately address the underlying economic issues of the pandemic.

Keywords: Pandemic, Multinational Enterprises (MNEs), Foreign Direct Investment (FDI), Global Supply Chains, Globalization

INTRODUCTION

It has been well-established in the scholarly and commercial literature that economic globalization over the past quarter of a century has contributed positively to global growth. An important part of globalization has been the promotion of foreign direct investment (FDI) including the free movement of capital, goods, services, and personnel across international borders (Erixon, 2020). Capital-poor developing countries have been beneficiaries of capital infusions by multinational enterprises (MNEs). Manufacturing companies have been attracted by favorable labor market conditions in developing countries and by the related cost advantages of establishing supply chains in these regions.

Historically, it can be demonstrated that FDI, as a component of globalization, has produced a positive-sum game, bestowing benefits on MNEs, on capital-exporting industrialized countries, and particularly on capital-importing developing nations (Public Response Team of the OECD, 2020; Zhan, 2020). Even before the destabilization effect of the pandemic, other global events have combined to discourage outward FDI by MNEs, including the great recession of 2008 and the global financial crisis of recent memory. Unfortunately, the pandemic has compounded these problems, leading to accelerated disinvestments.

Following an outlining of the economic benefits of globalization and FDI flows, this paper will then examine the pre-pandemic FDI climate, leading to a comprehensive analysis of the negative effects of the pandemic and of pandemic-induced government policy reactions. A concerted effort is made to project short-term and long-term forecasts about what the future holds in this regard.

THE ECONOMIC BENEFITS OF GLOBALIZATION

This paper takes the position that the COVID-19 pandemic and the government policies it has nurtured are threatening the continuation of the efficient international allocation of resources through globalization. This is important for various reasons.

Globalization in the extreme involves the free movement of goods, services, personnel, capital, and other resources across international borders without artificial restrictions or barriers. These freedoms create a business environment that MNEs look for in locating and managing their international operations. Accordingly, this business environment nurtures and supports the flow of FDI capital abroad which in turn creates efficiencies and benefits to (a) investing companies, (b) FDI-exporting countries, and, (c) FDI-importing countries. (Erixon, 2020).

For the investing MNE, outward FDI has enabled firms to capture positive returns from their investments in research and development (R & D), innovations, and new technologies. It has opened access to new markets, thus producing new revenue streams. Outward FDI has also produced cost savings by creating supply chain linkages in areas where labor productivity/wage rate ratios are favorable. For FDI-exporting countries, benefits are linked to the success of MNEs in creating new markets and in translating production cost savings into cheaper imports and lower inflation rates. These benefits are also linked to the creation of expanded business

opportunities, profits, and employment in home countries through the repatriation of FDI revenues (Kokko, 2006).

For the FDI-importing country, the benefits are even more visible and perhaps more important, particularly for relatively poor developing countries. For these countries, FDI provides capital, supplementing thin local capital markets as well as advanced technologies, and promoting both supply-side and demand-side efficiencies. Furthermore, exports are spurred as MNEs establish supply chain linkages within, and both income and employment growth are stimulated through the same effect (Erixon, 2020; Loungani & Razin, 2001). MNEs are particularly important as drivers of global trade, accounting for approximately 80 per cent of total exports (Saurav, Kusek, & Kuo, 2020). All countries, including developing countries, have benefitted from the effects of FDI in producing jobs and incomes.

PRE-PANDEMIC GLOBALIZATION TRENDS

It will be argued later in this paper that the current pandemic has already had a damaging effect on globalization—including adverse FDI flows—producing both supply-side and demand-side market shocks and disruptions. In fact, it is estimated that in 2020, the pandemic caused the largest and fastest decline in modern history in terms of international flows, including trade, FDI, and international travel (Altman, 2020).

However, it is important to evaluate the negative impact of the pandemic in its true context. Globalization is under attack and the backlash against the movement of goods, services, capital, and personnel across international borders predates the recent pandemic. The anti-globalization movement has been visible for the past two decades, particularly with the political emergence globally of nationalism, populism, and isolationism (Fukuyama, 2020). Brexit is a good example of this political retreat from open borders.

Therefore, more governments, including in the U.S., have passed restrictive rules and regulations that make it more difficult to move goods and resources freely to and from foreign markets. This has weakened international trade, FDI, and foreign markets' sourcing. Accordingly, MNEs have been motivated to relocate production closer to those home markets where the goods will be sold, regardless of the cost implications (James, 2016).

Perhaps the greatest threat to globalization and to the economic benefits that it bestows is the modern version of "populism". This is an ideology which depicts the "people" as a morally good force and contrasts them with the so-called "elite". The elite are those who place their own welfare above the people (locally based) and who include among their ranks, large corporations, foreign countries, and immigrants.

Supporters of this movement globally include dominant political leaders who present themselves as leaders of the people and as enemies of the elite. Over the past several years, this group has included Donald Trump of the U.S.A., Marine Le Pen of France, Boris Johnson of Great Britain, Beppe Grillo of Italy, and Frauke Petry of Germany. All these national leaders embraced some or all aspects of modern populism and identified themselves as "voices of the people" (James, 2016).

Governmental anti-globalization policies were not the only source of global disruption over the past two decades. Financial instability has played a significant role as well. Weaknesses in the global financial system have been evident in the rise of the corporate debt burden; this has increased holdings of riskier and more illiquid assets by institutional investors, with growing reliance on external borrowing—particularly by developing countries. (Staff of the IMF, 2020).

Compounding the problems of financial instability and over-dependence on external funding are the contagious effects of business-cycle problems, such as the Great Recession of 2008 in the U.S. Such financial instability has spread with particularly damaging effects through trade and investment disruptions in the developing world (Grusky, Western, & Wimer, 2020).

SHORT-TERM IMPACT OF THE PANDEMIC ON GLOBALIZATION AND FDI FLOWS

FDI flows fell by 49 percent during the first half of 2020, and they are expected to fall during the second half of 2020, and during 2021 by 30 percent. This is a significant drop because FDI is a bellwether of globalization (Jetpissova, 2020; Staff of the OECD, 2020).

The slow growth of new investments and the accelerating rate of disinvestments were due to the negative impact of the pandemic on GDP growth in both developing and industrialized worlds. Stagnant growth, recessionary trends, and diminished export performances have all led to an erosion in investor confidence during this period. China, however, was an exception to this trend, enjoying increased FDI inflows during 2020 and early 2021 (Jetpissova, 2020).

Erosion in investment confidence was certainly based in part on the restrictive policies governments adopted in attempting to contain the virus. These restrictions worked towards anti-globalization in the sense that they resulted in reduced international flows of goods, services, resources, and personnel.

It is expected that FDI flows to developing countries will be more affected by current global economic trends. One reason is that developing countries will suffer more because of greater dependency on external capital funding (Alfaro & Chen, 2012). Also, developing countries are vulnerable because the sectors of their economies are more severely affected by the pandemic, namely the primary and manufacturing sectors, accounting for larger shares of FDI inflows in poor countries than in the industrialized world (Seric & Hauge, 2020).

Through 2020-2021, the pandemic has certainly produced both demand-side and supply-side shocks. On the demand side, declines in export activity have accompanied a slowdown in FDI flows. With declining export volumes and revenues, MNEs have become less motivated to test out new global marketing opportunities. In developing countries in particular, the consequences of disease mitigation measures undertaken by governments have led to significant reductions in income generation and in employment. Disruptions have occurred in manufacturing, services, and transportation industries as well (Pak, 2020).

The corporate reaction to global demand-side shocks has been predictable. Faced with high corporate debt, MNEs have been motivated to develop a more conservative investment strategy, involving more of an emphasis on repatriation of earnings from overseas investments, with less of an emphasis on reinvestments of the earnings (Pak, 2020). Also, the evolving MNE

strategy includes a diminished willingness to support subsidiary activity abroad, involving significant effects on global supply chain management (Keselowski, 2020).

The demand shocks caused by the pandemic will certainly produce at least a short-term disruptive effect on FDI outflows by MNEs. Predictably, the supply shocks will be more damaging. It may be noted that an important part of globalization is the effort by MNEs to establish global supply chains, particularly in developing countries, seeking to take advantage of favorable labor market conditions including efficient productivity-to-wage-rate tradeoffs.

The pandemic has created uncertainty about the future of complicated supply chain connections in distant global markets. This uncertainty is based in part on the risks of virus containment once the disease spreads in multiple locations (Nikolopoulos, Punia, Schaefer, & Tsinosopoulos, 2020; Pak, 2020). MNEs are motivated to locate global supply chains closer to home operations to avoid this risk. Questions arise about the ability of government policy in developing countries to contain the virus, as well as whether these countries will receive their fair share of the vaccines through global distribution channels (Curtis, 2020). According to the People's Vaccine Alliance, consisting of Amnesty International, Oxfam, Frontline AIDs, and Global Justice Now, in 70 developing countries around the world, only one in ten residents is expected to receive a COVID-19 vaccine during 2020-2021 (Oxfam International, 2020).

Supply chain management requires careful planning, particularly if global supply chains extend well beyond home country headquarters. With supply disruptions, accurate forecasting becomes especially important. However, forecasting the evolution of a pandemic, including government policy responses, is a complicated task, given the limited history of pandemic data and the multi-dimensional nature of the problem (Nikolopoulos et al., 2020).

MNE managers are faced with a dilemma. On the one hand, the pandemic has disrupted—and may continue to disrupt—supply chains to create uncertainty about the future and about the post-pandemic government policies that may emerge. To what extent will these policies be restrictive and overly nationalistic, reducing the freedom that MNEs have enjoyed historically in allocating corporate resources efficiently across international borders?

However, abandoning supply chain linkages globally will not be easy. Home country consumers will continue to demand low prices, an historical by-product of efficient global supply chain linkages. Charging high prices for goods produced in high-cost home country markets will not be popular or even competitively feasible (Shih, 2020).

LONG-TERM IMPACT OF THE PANDEMIC ON GLOBALIZATION AND FDI FLOWS

The short-term negative effects of COVID-19 on the global economy are apparent and have been so since the outbreak of the virus. Both global supply-side and demand-side shocks have been occurring since the early 2020s, and they could last at least through 2021-2022. Furthermore, the severity of the shocks has been exacerbated by anti-globalization trends that predated the outbreak, including the political growth of nationalism, populism, and isolationism.

Forecasting the long-term future based on the prevailing pandemic era is a much more formidable task. Policymakers at three key levels—national governments, public health

organizations, and MNEs—now operate in uncharted waters and must make difficult decisions without adequate historical data as guidance.

Faced with the challenge of the pandemic, national government policy planners must decide whether to move in the direction of more open or more closed national borders. Should the country in question risk the health of its population through the vulnerability of open borders to pursue economic gains? Should the country retreat further from permitting the free movement of goods, services, capital resources, and people across its borders, or should it placate isolationists by embracing the “populist” political movement? (Nikolopoulos et al., 2020).

A second major policy concern is the distribution of the COVID-19 vaccines. Major health organizations, pharmaceutical companies, and others involved in distribution channels must decide on the volume, timing, and direction of the distribution. Of key importance will be the ability of developing countries in poorer regions to attract their fair share of the vaccine(s).

Early evidence (in late 2020) indicates a problem in this regard. The Center for Global Development reveals that the most promising vaccines are largely covered by advance-purchase agreements, mostly for wealthy, industrialized nations. Poorer countries by the end of 2020 had extremely limited access to the most promising vaccines (Curtis, 2020). This is important because before the pandemic, MNEs had taken advantage of favorable labor market conditions in developing (complex yet profitable) vaccines—thus bestowing benefits both on the corporate bottom-line and on the growth and development of the poor nations.

With the serious supply chain disruptions of recent memory, perhaps the most important decision will be made by the MNEs themselves. The pandemic and its aftermath caused the typical MNE to move supply chain linkages closer to home, abandoning the advantages that favorable labor market conditions in poor countries provided. Will the retrenchment continue despite the competitive disadvantages of moving supply chain contracts out of low-cost markets to higher cost markets to take advantage of more political, commercial, and medical stability? The answer to this question will largely govern whether the disruptive effects of the pandemic will be long-term, or only short-term. In essence, the long-term disruptive effects of the pandemic will depend less on supply/demand conditions in global markets and more on boardroom decision-making in the MNEs, national governments, and in global health agencies.

RECOMMENDATIONS FOR FUTURE STUDY

Certainly, there is evidence that recent trends toward anti-globalization are traceable to the growing political propensity or commitment to populism and nationalism, particularly in the industrialized world. Studies are needed to identify the political, cultural, social, and economic conditions in these countries that promote these deleterious trends.

Industry case studies are also needed to examine the strategies that MNEs employ to establish supply chains on a global scale. Studies are also needed to examine the risks and returns of extending global supply chain linkages to developing countries. Furthermore, studies are needed to examine the benefits and costs of poor-country dependencies on capital inflows (particularly FDI inflows) from the industrialized world.

Finally, as the pandemic proceeds, it is necessary for global health organizations to examine not only the real cost of the extraordinary damages caused by the COVID-19 virus, but also what appears to be an inefficient and inequitable global vaccine distribution system.

CONCLUSION

It is clear from both the scholarly sources and the commercial press that globalization over the past three decades has bestowed benefits on both industrialized and developing countries. A major component of globalization has been the efficient transfer of foreign direct investment (FDI) from capital-rich countries to capital-poor countries. The COVID-19 pandemic has disrupted this efficient resource allocation by producing damaging demand-and-supply shocks globally, including the disruption of traditional supply chains used by MNEs in promoting profitability through cost control.

The pandemic did not create this problem; rather, it compounded the damage caused earlier in the decades of the 2000s through anti-globalization measures by national governments—particularly in the industrialized world—that are traceable to growing nationalism and protectionism. Although the disruptive effects of the pandemic are relatively easy to trace and measure in the short-run, long-run forecasting is much more difficult. Whether the pandemic has long-lasting effects or not depends on the policy responses of national governments, MNEs, and global health agencies.

A happy scenario would arise if (1) the national government policy became more supportive of the free movement of goods, services, people, and capital across international borders; (2) amended policies of MNEs reestablished efficient global supply chain linkages in capital-poor developing countries; and, (3) global health agencies instituted policies designed to assist poor countries to gain their fair share of the anti-virus vaccines to improve the investment climates in these developing regions.

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SMALL BUSINESS RESILIENCE AND CUSTOMER RETENTION IN TIMES OF CRISIS: LESSONS FROM THE COVID-19 PANDEMIC

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ABSTRACT

Over the past year, the world in which we live, work, and travel has dramatically changed because of the COVID-19 pandemic. While restrictions on certain business activities are understandable, the nature and length of some of these cautionary measures have challenged the success and survival of all businesses—with small businesses being particularly vulnerable. This article considers the impact that the current pandemic and other crises have on the small business community. It also looks at how these businesses can proactively position themselves with the necessary resilience to weather the storm of the present and future crises. It focuses on relevant lessons for small businesses, a segment that has been disproportionately impacted by the current pandemic. The article discusses how small businesses can enhance their resilience to serve their current customers and ideally attract new customers during these challenging times. In particular, small businesses are expected to effectively serve the needs of their communities and contribute to local economies. The experiences of small businesses and the lessons they have learned during the COVID-19 pandemic are discussed in the interest of preparing them to combat future crises successfully. Through proactive crisis management, small businesses can anticipate and prepare for crisis situations, prevent or minimize the impact of a crisis, manage and lead decisively through a crisis, and recover successfully from it. The roles of proactive crisis management and customer engagement before, during, and after a crisis are examined from the standpoint of enhancing organizational resilience. The continued ability of small businesses to meet crises, and ideally, to exceed the expectations of existing customers while finding innovative opportunities are examined to serve both present and new customers.

Keywords: COVID-19 pandemic, business resilience, customer retention, crisis management

INTRODUCTION

Over the past year, the COVID-19 pandemic has dramatically changed the way we live, work, and travel in ways that were previously unimaginable. The worldwide scope, severity, and impact of this crisis differentiate it from most prior crisis events, as does the uncertainty regarding when this virus will be successfully controlled and, ideally, eradicated (Klein, 2020). While this pandemic continues to spread around the world and inflict its devastating toll in terms of positive cases and fatalities, there is now cautious optimism based on the vaccines that have recently become available (Kesselheim, Darrow, Kulldorff, Brown, Mitra-Majumdar, Lee, Moneer & Avorn, 2021). This article considers the impact of the current pandemic and other crises from the standpoint of small businesses, a group that has disproportionately experienced the challenges and undesirable outcomes of this devastating crisis. The lingering business impact of this pandemic will unfortunately endure long after the health crisis is resolved, as each and every week additional businesses struggle to survive and the toll of business failures continues to mount. While most, if not all, businesses have faced a variety of operational and financial challenges throughout this pandemic, small businesses have been particularly vulnerable (Bartik, Bertrand, Cullen, Glaeser, Luca, & Stanton, 2020).

As we await being able to return to what has been called “the new normal,” the sad reality is that many of the small businesses that customers have counted on and patronized for years have already ceased to exist or may do so in the coming months. As unfortunate as this is from a consumer perspective, it is clearly devastating for the employees of these small businesses who have lost their jobs and the business owners who have invested their resources and lives in starting and growing their businesses.

While restrictions on certain businesses activities are obviously important in the interest of controlling the spread of the virus, these measures have challenged the success and survival of not only small businesses but also their larger counterparts. The critical importance of effective crisis management has been clearly and convincingly demonstrated throughout this crisis. Organizational leaders who had the foresight to anticipate and plan for potential crisis situations and events were better prepared to face the incredible challenges of this pandemic.

The proactive crisis management process discussed provides a framework that all business leaders can utilize in the interest of enhancing organizational resilience by anticipating and preparing for future crises; preventing or minimizing the impact of a crisis; managing and leading decisively throughout a crisis; and, recovering successfully from a crisis. While the mission-critical importance of a sound crisis management plan is recognized by the leaders of most successful larger businesses, small-business entrepreneurs unfortunately frequently fail to take the time to conscientiously consider and prepare for potential crises that could confront their businesses. The past year has clearly and convincingly demonstrated the crucial importance of a sound crisis management plan in ensuring the resilience of a small business to survive and prosper in the future.

Though the focus of this article is on small businesses, it is important to recognize that some of the insights shared are relevant to larger businesses as well, and some of these

observations in fact derive from the crisis management experience of larger business organizations. Similarly, although the focus is on lessons learned from the current pandemic, some lessons from other crisis situations and events are incorporated, given the role that they have played as small businesses chart their courses in navigating the challenges of this pandemic. The information shared is intended to provide the necessary understanding to prevent, prepare for, recognize, resolve, and recover from crisis situations and events. Proactive crisis management is a mission-critical strategy in enhancing organizational resilience and ensuring business continuity.

The reality is that the customers and communities that small businesses serve count on them to supply necessary products and services while contributing to their local economies and in other meaningful ways to their communities. The failure and loss of a small business is therefore personal, not only to that business's employees and owners, but also to its customers and its community. While the toll of small business failures has grown and likely will continue (Hawkins & Hoon, 2020), many small businesses have found creative ways to continue to serve their customers as well as attract new ones through innovatively rethinking how they do business, while envisioning and realizing new business opportunities.

The word "pivot" has been used to describe how visionary business leaders have enabled their organizations to respond successfully to the challenges of the COVID-19 pandemic (Shepherd, 2020). The hallmark of successful small business entrepreneurs has always been their agility in responding to the various challenges inherent in the small business arena (Shepherd, 2020). This agility and mindset have been instrumental in the resilience of many small businesses, enabling them to survive the unprecedented challenges of the pandemic.

SMALL BUSINESSES IN TIMES OF CRISIS

Small businesses play an important role within contemporary society. While their sizes can be misleading when compared to those of larger organizations, their numbers are impressive and have continued to grow in recent years. There were more than 31 million small businesses in the United States in 2020 because of steady growth of small businesses in the preceding years (U. S. Small Business Administration, 2020). The COVID-19 pandemic unfortunately has not only curtailed the growth of small businesses in the United States (and around the world) but has also resulted in both temporary and permanent closures of many small businesses. The magnitude of these closures is demonstrated by the fact that in just the first few months of this pandemic in 2020, permanent closures of small businesses were more than the normal annual closures in prior years (Fairlie, 2020).

The number and nature of small businesses make them essential elements of contemporary society and communities. Their customers have come to rely on them for necessary products and services. When small businesses must suspend their operations during a crisis, that impact is felt by their customers, employees, owners, and communities. While some small businesses have been able to adjust their normal business practices from a business continuity perspective, this is easier for a food service or retail business than for a personal services business such as a hair salon (Madeira, Palrão, & Mendes, 2021).

Small businesses are particularly vulnerable during crises based on their financial situation and resources (Bartik et al., 2020). This also considers the fact that they often have low profit margins, given the competitive environments in which they operate. While the financial consequences, including reductions in revenues and profits, are critical factors in determining whether a small business can survive a crisis, the loss of existing customers during a crisis presents a serious threat to these essential businesses within our communities, as well as local and national economies. While this article will focus on customer retention during times of crisis, it must be stated that the loss of small-business jobs must similarly be of significant concern.

THE COVID-19 PANDEMIC CRISIS

Crisis can be described as a time of great danger, difficulty, or confusion when problems must be solved or important decisions must be made (Hornby, 2010). Crisis situations and events that can challenge business continuity and survival include economic or financial crises, weather-related events, natural disasters, emergency incidents, organizational crises, and health crises. The impact of a particular crisis on a business is determined by its frequency, severity, scope, duration, and impact.

While over the years the success and survival of small businesses have been challenged by various crisis situations and events, the COVID-19 pandemic will go down as one of the most catastrophic in terms of its scope, severity, duration, and impact (Bailey & Breslin, 2021). The very nature of a pandemic in comparison to an epidemic attests to the significance of this current crisis. Merriam-Webster (2021) defines an epidemic as an outbreak of disease that spreads quickly and affects many individuals at the same time, such as the regional, seasonal influenza; whereas, a *pandemic* is an outbreak of a disease that occurs over a wide geographic area and affects an exceptionally high proportion of the population.

The COVID-19 pandemic has been characterized by its worldwide impact, severity, rapid spread, and highly contagious nature, particularly for vulnerable populations. Elected and appointed governmental officials around the world have recognized that this is a worldwide crisis requiring global cooperation, and that we are all in this together. Indeed, we must work together to address this unprecedented pandemic, recognizing that screening and contact tracing are essential, and that the “curve must be flattened” (Lee et al., 2020, p. 1; Khoo & Lantos, 2020). As individuals and business leaders, we have become intimately familiar with a new vocabulary used in relevant communication about the pandemic. This vocabulary includes such terms as asymptomatic, community spread, confirmed positive case, contact tracing, flattening the curve, personal protective equipment (PPE), presumptive positive case, screening, self-quarantine, social distancing, and vaccines.

A unique challenge of the COVID-19 pandemic is the uncertainty and unpredictability of its duration (Feldman, 2020). While the development and delivery of new vaccines and medical treatments are certainly encouraging, the advent of new variants of this virus is problematic. While the proactive restrictions that have been placed on businesses and other entities during the pandemic were intended to address this devastating catastrophe from a public health standpoint, these restrictions have further undermined the ability of many small businesses to continue to

operate and survive. Business continuity and business survival are two related and common interests shared by the various stakeholders of small businesses including their customers, employees, owners, suppliers, and communities. These small businesses want and need to get back in business, just as their employees want to get back to work and their customers desire the restoration of the business's ability to provide goods and services.

The business impact of the COVID-19 pandemic continues to escalate as the weeks and months pass, with no definitive end in sight (Fairlie, 2020). Inconsistencies in establishing and enforcing business restrictions based on jurisdiction have over time further complicated the challenges faced by small businesses. Restaurants illustrate these challenges in terms of being allowed to open for business with limitations on inside dining, outside dining, and takeout service. While a growing number of these establishments have found ways to comply with "good-intentioned" public health business restrictions, many small business owners, employees, and customers are starting to view some of these restrictions as overreaching and the final blow in the worthy fight of these businesses to survive (Madeira, Palrão, & Mendes, 2021).

The fact that many small businesses routinely operate with rather thin operating margins significantly contributes to their limited financial resilience during normal times and particularly during times of crisis. Business restrictions that in some cases prevent the transaction of in-person business as well as the impact of these restrictions in terms of reducing service capacity have resulted in revenue reductions. This has occurred at the same time as certain operating costs have not decreased proportionately, have remained stable, or in some cases have actually increased to correspond with new business models or practices. The capital costs of necessary facility renovations as well as technology upgrades to facilitate business transactions have also had a significant impact on total costs and consequently, on the financial bottom line of many small businesses through the pandemic.

Astute small-business owners have monitored and have taken advantage of any and all governmental programs designed to provide needed financial assistance to their businesses for loss of revenue and/or increased costs occurring as a result of the COVID-19 pandemic. Some programs, including the Coronavirus Aid, Relief, and Economic Security (CARES) economic stimulus package and the Paycheck Protection Program (PPP) provide for the conversion of a loan to a grant, based on the appropriate use of awarded funds (Feldman, 2020; Fisher, 2021).

Sound financial management has proven crucial as small businesses have faced the many operational and financial challenges associated with the current pandemic. The fact that some customers have out of necessity changed their consumption patterns during the pandemic is a reality that must be anticipated and successfully addressed. More will be said about this later with respect to customer engagement and retention.

CRISIS MANAGEMENT

Small businesses that had a crisis plan in place before experiencing a crisis event acknowledge the value of proactive crisis management in enabling them to weather the storm of a crisis more successfully (Spillan & Hough, 2003). It would therefore seem prudent that all

small businesses would have such a plan; unfortunately, many do not have a plan before a crisis situation presents itself, challenging organizational resilience, success, and, at times, survival.

This begs the question of why some small-business owners do not recognize the need to prepare proactively for the various crisis situations inherent in the contemporary world of business. The answer may be similar to that regarding why some small-business entrepreneurs do not take the time to properly develop a business plan before starting their business. Their reasoning is that they are just too busy getting their business started to develop a business plan, and later in running their business, to have the time to devote to developing a crisis management plan. Some small business owners feel that crisis management plans are for large organizations and that they will be able to deal with crisis situations as and when they present themselves.

As unfortunate as experiencing a crisis may be for a small business, failing to anticipate and prepare for crisis events proactively can significantly compromise the resilience of a small business to survive the crisis effectively and efficiently. While the current pandemic was beyond the control of businesses, both large and small, it has clearly and convincingly demonstrated the mission-critical importance of embracing the potential of crisis events and engaging in proactive planning, rather than addressing crisis situations in a reactive manner.

Proactive crisis management enables small businesses to anticipate and prepare for crises, prevent, or minimize the impact of crises and successfully recover from crisis situations or events. The Institute for Crisis Management explains that crisis management has three phases: before, during and following a crisis (Institute for Public Relations, 2007). A five-step process of crisis management activities before, during, and after the occurrence of a crisis, will contribute to organizational resilience and the ability to meet and, ideally, exceed the expectations of the stakeholders of a small business, including its employees, customers, and owners. The sequential steps in this process include: (1) crisis prevention; (2) crisis preparation; (3) crisis recognition; (4) crisis resolution; and (5) crisis recovery.

The first two steps in the crisis management process should be enacted before a crisis. *Crisis prevention* seeks to identify, evaluate, and prioritize potential crises that the business may face. It considers the likely frequency and severity of various crisis situations and events and seeks to determine the strategies necessary to enable the business to avoid crises. A crisis management plan is developed during *crisis preparation*. This plan builds on the understanding of potential crisis situations gained during the initial step. It is developed in the interest of enabling the organization to effectively and efficiently address crises that it was not able to prevent or avoid. Roles and responsibilities are delineated and necessary resources are allocated in support of the crisis management strategies.

Although *crisis recognition* seems obvious, it is sometimes overlooked either inadvertently or intentionally. It is therefore important to monitor internal and external developments that indicate that a crisis has occurred or is impending. Only once a crisis has been identified can a small business take the necessary actions to address that crisis. *Crisis resolution* involves developing and implementing the necessary strategies to address the crisis situation or event effectively and efficiently.

The desired outcome of *crisis recovery* is the continuation or resumption of business activities in a manner that contributes to business survival and future success. An essential

activity during this final step in crisis management is to take the time to learn from each crisis experience in the interest of being better prepared to address future crises (Kayes, 2015).

While the merit of proactive crisis management should be apparent, it is important to recognize that all organizations, including small businesses, will at times be confronted by external crises that they could have done little to prevent. The COVID-19 pandemic certainly falls in this category. That reality, however, should never discourage a small-business owner from engaging in proactive crisis management. While there will be times that a small business can do little to prevent a crisis, sound crisis management will always enable the business to enhance its resilience to navigate future crises successfully.

ORGANIZATIONAL RESILIENCE IN TIMES OF CRISIS

While proactive crisis management is essential in positioning a small business to triumph over the challenges of crises, the adoption and utilization of a comprehensive crisis management approach is only one of the building blocks of organizational resilience in times of crisis. The distinctive competencies, based on skillfully combining business resources and capabilities, that position a business to gain and sustain a competitive advantage also position small businesses to proactively respond to and survive crises.

The necessity and length of business closures during any crisis play an instrumental role in terms of business resilience, continuity, and survival (Bartik et al., 2020). Mandated business restrictions resulting in extended business closures and capacity limits during the current pandemic have in large part contributed to the staggering number of small business failures to date (Fairlie, 2020). Some small businesses that have survived thus far still face perhaps insurmountable operational and financial challenges that may eventually lead to closures. While any business fatality is tragic, the fact that many of the small business closures have involved longstanding establishments within their communities is a devastating consequence of the current pandemic.

Though financial resources are important in sustaining a small business during the challenges of a major crisis, the most important resource of any business, particularly those in market spaces typically filled by small businesses, is the organization's people. Passionate owners leading teams of motivated and empowered employees, in addition to contributing to the success of a small business in favorable times, play an essential role as their organizations face the often monumental challenges of crises (Chanana & Sangeeta, 2020). The existence of an inclusive organizational culture has been beneficial as small businesses have navigated the COVID-19 pandemic.

CUSTOMER ENGAGEMENT AND RETENTION IN TIMES OF CRISIS

Organizational stakeholders are individuals, groups, or organizations that have a vested interest in the success of an organization. Employees, customers, and owners are considered the most important stakeholders of any organization, including small businesses. Customer attraction and retention are essential factors in determining an organization's resilience at all times, but

particularly as small businesses are confronted by crisis situations and events (Hawkins & Hoon, 2020). To survive and succeed, small businesses continually seek to differentiate themselves from competitors in their quest to gain and sustain a competitive advantage.

The traditionally high failure rate of small businesses (Hawkins & Hoon, 2020) attests to the critical importance of building and retaining a loyal customer base. While developing a loyal customer following is always desirable, the value of customer loyalty has been demonstrated throughout the current pandemic. Devoted customers have engaged in commendable actions in the interest of enabling community small businesses to survive this devastating crisis. Dedicated customers have supported small businesses by changing their buying behavior to continue to support their favorite small businesses. Loyal customers have likewise endured the frustrations of new business practices involving business transactions and product or service delivery.

While many small businesses had developed sizeable followings of loyal customers before the current pandemic, others have been successful in cultivating customer loyalty and customer patronage during the pandemic (Herbert, 2020). Many small-business owners and employees have been amazed at the outpouring of community support designed to assist their businesses and their employees during the pandemic. Community support for small businesses has come in many forms, including the establishment of “GoFundMe” pages soliciting financial support for community small businesses.

Taking the time to understand the expectations of customers, both in advance of, and during a crisis, is important in positioning a small business to fully meet and, ideally, exceed customer expectations. Customer engagement throughout a crisis is extremely important and should incorporate information dissemination strategies that ensure that existing and potential new customers are kept informed regarding the current operations of the small business (Ndlela, 2019). Small businesses have benefited from “pushing” relevant information to customers through various means including email distributions and social media while also providing business websites that enable customers to “pull” desired information. It is imperative that accurate, complete, credible, and timely information is provided by the small business to its current and potential customers. Otherwise, these important stakeholders who may be ready, willing, and able to support a small business may have to rely on information from other sources that may be inaccurate, confusing, or misleading.

The same customer service and responsiveness that have always played a key role in positioning a small business for success, have demonstrated their merit as small businesses have faced the challenges of many crises including the current pandemic. These building blocks of competitive advantage similarly provide a stable foundation as small businesses partner with their loyal customers as together they seek to survive crisis situations and events.

RETHINKING AND REINVENTION

It has been said that “tough times call for tough decisions” (Doyle, Mieder & Shapiro, 2012). This adage is certainly true in times of major crisis, such as the COVID-19 pandemic. While in life and in business there is always a tendency to stay the course when things are going well, we all know that this unprecedented pandemic has radically changed the environment in which small businesses diligently strive to survive the many challenges of this devastating crisis. Astute small-business owners and their teams have embraced the necessity of rethinking their business practices, even if they have yielded desired business performance and results (Klein, 2020; Koronis & Ponis, 2018).

By rethinking their business practices, small businesses can determine appropriate ways to reinvent themselves and maintain their ability to meet or exceed the expectations of their customers while hopefully attracting new customers. By adjusting the ways in which they interact with their customers, many small businesses have been able to align their delivery of products and/or services with the expectations and comfort levels of their existing and potential new customers (Slotegraaf, 2021). Some small businesses have been successful in attracting new customers during the current pandemic—unfortunately in some cases, because of the closures of businesses.

Several small businesses have recognized the need for new product development. They have therefore successfully pursued new product and service opportunities resulting from the pandemic. While many such business opportunities have been pursued by existing businesses, others have resulted in new small business startups (Saxton & Saxton, 2021). While many small businesses already had in place the required resources to support their changing business models, others have found it necessary to secure these resources. Technology enhancements and facility renovations are illustrative examples of resource needs that many small businesses have addressed as they have reinvented themselves to function effectively and efficiently during and beyond the current pandemic (Kumar & Ayedee, 2021).

RESILIENT LEADERSHIP IN TIMES OF CRISIS

Effective leadership plays an instrumental role in the success of any business, particularly small businesses. While effective leadership is important during good business times, it is essential when a business is facing a crisis. While “transactional leadership” that focuses on simply keeping things running as normal may suffice at times, such a leadership approach is never prudent in times of crisis; instead, “transformational leadership,” (Bass, 1985; Bush, 2018) wherein business leaders enable and empower organizational members to identify, plan for, and implement necessary crisis-driven changes is a necessity.

The small-business success stories that have been reported during the current pandemic have routinely emanated from transformational leaders who not only embraced the need for change in response to both challenges and opportunities of the COVID-19 pandemic; they have also motivated and empowered their teams to work together in the interest of sustaining their organizations, saving their jobs, and continuing to serve their customers and communities

(Coldwell, Joosub, & Papageorgiou, 2012). An inclusive approach must be found that affords employees the opportunity to understand the issues their small business is experiencing during a crisis. Striving to be part of the solution to address these issues through inclusivity has demonstrated its value, as business owners and employees have worked together to confront the challenges of the current crisis.

Crisis management must not only be inclusive, but also proactive. This is because a proactive crisis management approach can be instrumental for success as small businesses can face the challenges of any crisis, including the seemingly insurmountable ones of the current pandemic. It all comes down to people. While there will be instances where a small business is doomed to failure because of a crisis, collaboration between the employees, customers, and owners of a small business can make the difference between business survival and failure. The resilience and passion of these three primary stakeholder groups—employees, customers, and owners—should never be underestimated to ensure successful crisis management.

CONCLUSION

Over the past year we have learned many essential lessons regarding the challenges that confront businesses in times of crisis. While many of these challenges also confront larger businesses, the nature and realities of the small-business market space often make small businesses particularly vulnerable in times of crisis. One of the most poignant lessons the current pandemic has taught us is the integral role that small businesses play within their communities and beyond, and that when a local small business is forced to close temporarily or permanently as a result of a crisis, it has a real and, at times, personal impact on its customers, employees, owners, suppliers, and the community that it serves. The COVID-19 pandemic has also demonstrated that significant challenges can be embraced and overcome through collaboration of these stakeholders. The same ingenuity, innovation, and agility that contributes to small business success in the good times underpins organizational resilience when these businesses and their stakeholders are confronted by crisis events or situations.

Through proactive crisis management, small businesses can position themselves to weather the storm of the unprecedented challenges of the COVID-19 pandemic, as well as be well-prepared for future crises situations. Through their commitment to inclusive customer service and customer engagement small businesses can meet—and ideally exceed—the expectations of present and new customers. For their continued survival, small businesses can also develop and nurture the enduring relationships and customer loyalty that have proved to be instrumental during the current pandemic environment. While there have been many lessons thus far, there will be many more insights that will reveal themselves as we continue to study the lessons of the current pandemic and incorporate these lessons in both theory and practice. The lessons learned, and those that we must purpose to learn in the coming days, will enable small business leaders and their teams to weather the current crisis successfully and prepare for the storms that may challenge their viability in the future. Thereby, they will enhance both the resilience and the sustainability of their own businesses and those of their ambient communities.

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THE ENTREPRENEURIAL LANDSCAPE AND IMPACTS OF COVID-19

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ABSTRACT

Numerous sources of data that are traditionally used by small businesses and entrepreneurship researchers, primarily from government entities, have not caught-up with actual conditions on the ground. COVID-19's impact on the social and economic picture around the globe has been like watching a train wreck taking place on "Main Street" in slow motion. Doomsday "preppers" and at least some of their prognostications and suggestions moved towards the mainstream, having greater acceptance than before. One of the more popular books on Amazon, covering the topic of canning and preserving foods, was on backorder for at least several weeks, and as of the time of this writing, it has been months since one could easily acquire canning supplies such as jar lids on retailers' shelves. There were shortages on major websites of sewing machines, elastic, and other materials—even those that are substitute goods such as coffee filters, when individuals and groups engaged in making their own masks. Panic buying also wiped out inventories of hand sanitizers, disinfecting aerosol sprays, bleach, toilet paper, and numerous other products that consumers felt they might need, including guns and ammunition. A vast majority of businesses have not fared well. Hospitality, tourism, and the restaurant industries have been hit hard, and there are also disparate impacts among certain demographic groups relative to small-business owners. Bad actors are also hard at work, launching scams. Many have essential items for resale on websites such as Craigslist and eBay. This research presents a systematic review of the impact of COVID-19 on small businesses. It further examines the phenomenon in a broader socioeconomic and cultural context.

Keywords: COVID-19, small business, entrepreneurship, innovation, global economy

INTRODUCTION¹

“COVID-19 constitutes both a health crisis and an economic crisis” (Stephens, Jahn, Fox, Charoensap-Kelly, Mitra, Sutton, & Meisenbach, 2020). Three key themes arise in connection with this study: Implications for economic development; public policy; and, the role of free enterprise in a pre- and post-COVID-19 economy. Gopinath (2020), writing on the International Monetary Fund’s blog, declared via a post title that: “The ‘great lockdown’ has been the ‘worst economic downturn’ since the Great Depression.” Impulse buying has created major fluctuations in the availability of certain goods (Ahmed, Streimikiene, Rolle, & Duc, 2020). Certain industries and jobs have been affected more than others (Brown, 2020). Travel, hospitality, restaurant, and other industries (which involve higher degrees of personal contact) have been among the hardest hit (Brown, 2020). Sports arenas, movie theaters, amusement parks and other venues that engage large gatherings have been closed, opened under restrictions, and might close again (Gunay & Kurtulmuş, 2021). Small-business owners have been threatened with the loss of business licenses, fines, forced closures, and jail time; individuals as well, have been subjected to stay-at-home directives (Knowles, Ettenson, Lynch, & Dollens, 2020) that often directly correspond with business operations (or the lack thereof). Education is in a state of upheaval (Goings, 2020) as well as government services (Bana, Benzell, & Solares, 2020) of all kinds. Another term, “non-essential” (Cowling, Brown, & Rocha, 2020), is also now in popular use. There are non-essential jobs and non-essential businesses, as well as some argument as to what constitutes the opposite of these, i.e., essential (the same logic is being applied relative to vaccine eligibility and distribution). “Governments have also imposed the forced closure of businesses and subsequently placed severe restrictions on how they do business. Not since the Second World War have governments assumed such a managerial role in capitalist economies” (Greene & Rosiello, 2020, p. 586).

At the same time, evidence of abundant ingenuity (and resolve) can be found on social media (as they are amplified by traditional media). DIY’ers organized in groups and shared information about how to make breathing masks and other personal protective gear. Policy mandates, lessened demand, health concerns and other considerations have resulted in the closing of stores, factories, and many other businesses (Fairlie, 2020). Toilet paper was wiped out from store shelves (Kirk & Rifkin, 2020). Terms such as “social distancing” (Bana et al., 2020; Gunay & Kurtulmuş, 2021) have become familiar. One company that has been affected in a positive way by social distancing is Zoom, which has gone from a relative niche player in business communication (i.e., videoconferencing) services to being a household name (Galgani, 2020). According to Kickul and Lyons (2012), social entrepreneurs and their efforts are directed toward a “social mission, using the processes, tools, and techniques of business entrepreneurship” (p. 19). The aforementioned anecdote about mask-making and community

¹This paper, while it is a unique work product, is connected to an ongoing research stream (including literature review databases) pertaining to the small business and gig economy.

organizing exemplifies social entrepreneurs' efforts well. Bad actors are also hard at work, launching scams (Federal Trade Commission, 2020; Consumer Action, 2020) and hoarding (Kirk & Rifkin, 2020) essential items (including for the purpose of resale on websites such as Craigslist and eBay). With the above as a brief sketch to depict some highlights of 2020, this research aims to more systematically review COVID-19 impacts and entrepreneurs' responses.

LITERATURE REVIEW

As previously noted (Footnote 1), the topic of interest outlined hereunder is part of a continuing research stream, the aim of which is to make meaningful contributions to the literature of the small business and entrepreneurship discipline (which in turn, is integral to the economy and well-being of a citizenry at large). Version 9.1 of the list entitled, "*Core publications in entrepreneurship and related fields: A guide to getting published*," compiled and maintained by Jerome Katz (2019), has been regarded as authoritative in determining coverage of the topics at hand in the scholarly literature that is associated with these disciplines. As an observation, scholarly research—often with a long publication cycle—has a limitation relative to exploring the impact of COVID-19 in terms of providing immediacy.

Other kindred go-to sources for small business and entrepreneurship researchers, also have demonstrated themselves to have a similar limitation. For example, the U.S. Small Business Administration's (SBA) Office of Advocacy publishes an oft-quoted FAQs document, updated annually (US Small Business Administration, 2020a). In reviewing the SBA's most recent release, which is dated October 2020, one would likely not even imagine that a global pandemic (crisis) existed until arriving at a footnote at the bottom of the first page and then headings on the second page of the document. The web page which hosts the SBA's *December Economic Bulletin* states [a rather apparent lament]: "the lack of recent data on business closures makes it difficult to assess the overall state of small business" (US Small Business Administration, 2020b). As observed by Fairlie (2020), "the early effects of COVID-19 on small business and entrepreneurs are not well-known because of the lack of timely business-level data released by the government" (p. 727).

A local computer database comprised of approximately 220 items associated with small business/entrepreneurship, freelance and gig economy (current through February 2020, but pre-COVID-19) has been a key resource for this present research, relative to benchmarking the state of the entrepreneurial landscape before the disruptions of a global pandemic inserted themselves. This earlier database has been combined with results from post-COVID-19 searches using library databases current through mid-January 2021. Library database collections including those from *ABI/INFORM*, *Ebsco*, and *ProQuest* have been consulted. Filters have been applied to these library database searches, setting limits as follows: scholarly sources and full text available. A filter was also applied to limit results to business disciplines. Most importantly, for the benefit of other future researchers who may wish to discern a breadcrumb trail, the reasons for narrowing results to business disciplines are two-fold. First, across disciplines and around the globe, there are millions of results relative to scholarship pertaining to all aspects of COVID-19 (medical/health care disciplines being a prime example, as one might easily guess). Secondly, as

stated, this present research is focused on contributing directly to the literature that is associated with small business and entrepreneurship (for the benefit of future scholars whose work is focused in these areas).

Cross-referencing the aforementioned core publications list by Katz (2019), in the mid- to latter part of 2020, articles addressing aspects of COVID-19 included: (one) article in *Entrepreneurship Theory and Practice* (Audretsch & Moog, 2020); six appeared in the *International Small Business Journal* (Cowling et al., 2020; Greene & Rosiello, 2020; Manolova, Brush, Edelman, & Elam, 2020; Morgan, Anokhin, Ofstein, & Friske, 2020; Nummela, Paavilainen-Mäntymäki, Harikkala-Laihin, & Raitis, 2020); and one article was published in the *Strategic Entrepreneurship Journal* (Alvarez & Barney, 2020). Both of the latter two journals are in the UK; no slight is intended in any context—this is merely to support the observation that the literature that is specific to small business and entrepreneurship still has some catching-up to do.

The software used for the resulting main database for this paper as a whole—approximately 375 artifacts/records—allows for attachments (e.g., PDF, Excel, and images) in connection with individual bibliography items (or if one prefers: database record). Additional local databases, in support of research on topics such as social entrepreneurship, innovation, and new product development, comprised of hundreds of artifacts have served to further inform this present research on the periphery (it is assumed under a qualitative framework that the relevance of an item might come to the attention of the researcher as analysis ensues). Multiple search strategies have been used to develop databases like the ones mentioned above, as an ongoing stream of research has been pursued over a period of several years.

Finally, and relative to the grand total and description of artifacts available to inform this research, items of interest have also been collected from numerous other sources beyond well-known library databases such as those indicated above. As examples, reports from research organizations such as the NFIB Research Foundation; documents produced by government agencies, e.g., Congressional testimony from hearings (typically captured as transcripts and publicly available video content); and content from popular press sources have been captured. As is well known to scholarly researchers, one would normally prefer to avoid popular press sources. However, it has been necessary to include these under the circumstances, given scholarly research (and traditional sources of data as discussed above) are slowly emerging. Even if such popular press sources such as the business press and blogs may be lacking in rigor and regarded with some suspicion, they do at least recognize that conditions on the ground for small businesses and millions of others, such as individuals who are now displaced and unemployed, have drastically changed; they can also sometimes point to original source materials that are more authoritative.

METHODOLOGY

Under a qualitative researcher's framework, the role of the researcher is to ask questions, collect data, and to identify patterns and themes under a qualitative paradigm; the researcher's concurrent objectives are to interpret meaning(s) and report findings. Attachments, as discussed

above, are identified as artifacts (besides attachments as described, other types are allowable in qualitative studies of a different nature: pictures, film, sketches, ethnographers' field notes, as examples). All artifacts may be regarded as sources of data, and these may in-turn be analyzed under a qualitative research paradigm (Creswell, 1994; Hodder, 1994; Strauss & Corbin, 1994). Where similar or the same patterns may present themselves through multiple forms or sources of data, confidence in researchers' findings may be increased through triangulation (Caporaso, 1995; Maxwell, 1992). On the other hand, data that is lacking in credibility (or fitment relative to the study of a given phenomenon) may be discounted or dismissed (Caporaso, 1995). From patterns in data, the qualitative researcher seeks to establish theoretical frameworks while using a constructivist approach (Barry, 1996; Schwandt, 1994). Such frameworks are not intended to be or presented as being generalizable. Rather, where little is known about a phenomenon due to a lack of prior scholarly research or other foundational resources, such qualitative research approaches may be deemed necessary.

DISCUSSION

Overview

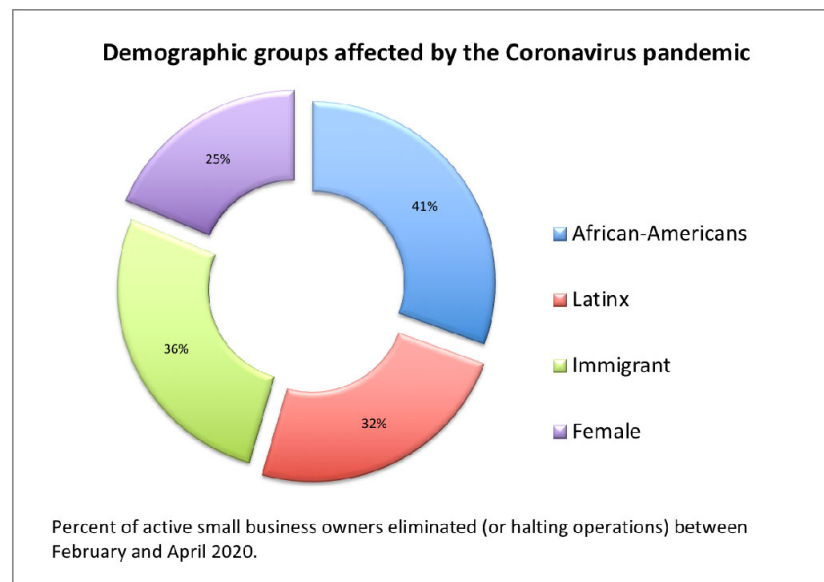
Freelancing, home-based business pursuits, self-employment, and the gig economy had been trending upward (Lahm, 2020), at least, prior to the insertion of COVID-19 into the global social and economic picture. For instance, Dourado and Koopman (2015) utilized IRS 1099-MISC form data and concluded: "The shift toward more contract work is a real and dramatic change in the labor market." Following the Great Recession (Katz & Krueger, 2016; Larrimore, Durante, Kreiss, Park, & Sahm, 2018), small business start-ups have also been rebounding. The U.S. Small Business Administration's (SBA) Office of Advocacy defines what constitutes a small business based on size: businesses with fewer than 500 employees.

According to the SBA's latest FAQ document ("Frequently asked questions about small business," 2020), there were 31.7 million such small businesses in 2017, according to the most recent published data as of October 2020. In fact, 99.9 percent of all firms in the U.S. fall under this employees-size-based threshold. Just over eight out of ten (81 percent or 25.7 million) small businesses do not have any employees (labeled non-employers); the other 19 percent (6 million), do have paid employees. However, as suggested, now we are just not completely sure exactly where small businesses stand (researchers are extrapolating as best they can). Post-COVID-19, data are coming in. What we do know, is that many small businesses and industries, government entities, and economies—in fact the entire global economy—has been hit hard; individuals in all walks of life have tried to adapt; some have failed to do so altogether, and others have demonstrated resiliency to some degree or another. We also know that history has demonstrated that there is often opportunity in times of adversity (Bacq, Geoghegan, Josefy, Stevenson, & Williams, 2020; Dobson, Nieto, Dobson, & Ochoa, 2019; Greene & Rosiello, 2020).

Hardest-Hit Businesses

Fairlie (2020), extrapolating from CPS (Current Population Survey) data from the Bureau of Labor Statistics, found demographic patterns among small-business owners who have been hit the hardest as shown below in Figure 1:

FIGURE 1
Small businesses that have been eliminated or have halted operations².

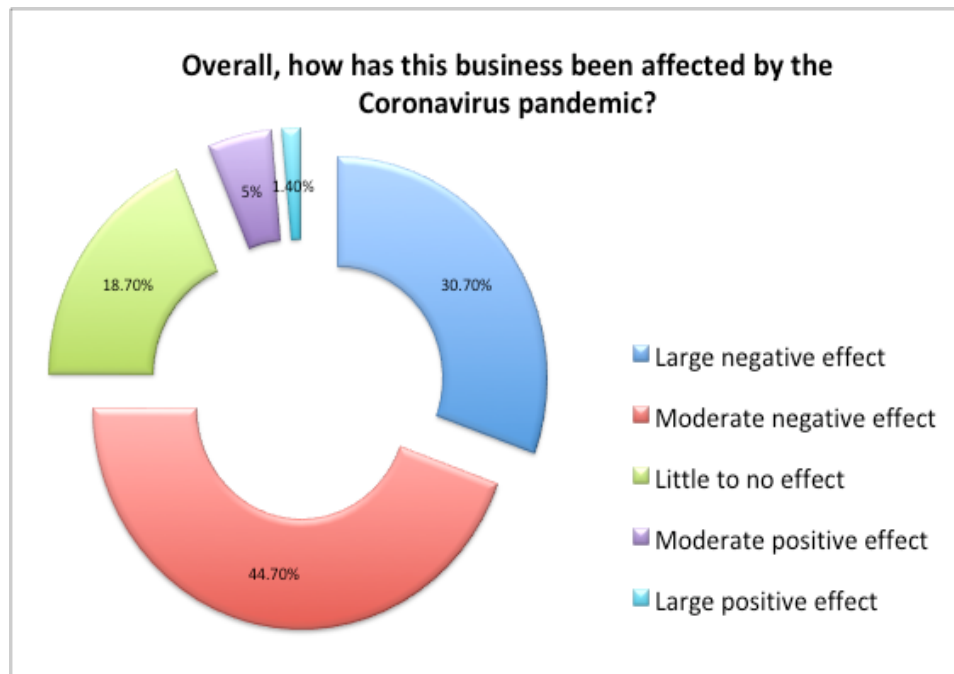


Fairlie (2020) characterized findings relative to patterns that were discernable across gender, race, and immigrant status as “alarming” (p. 728). Figure 1 illustrates that between February and April 2020, 41% of active African-American business owners experienced the largest losses, i.e., were eliminated; 32% of Latinx business owners halted activity; 36% of immigrant business owners, and 25% of female business owners, suffered drops in business activity as well. Although to a somewhat lesser degree, impacts from COVID-19 along demographic lines were found to persist through May and June 2020 (with June marking the end of the data set/period employed, included in Fairlie’s research).

The U.S. Census Bureau’s *Small Business Pulse Survey* (US Census Bureau, 2021), is shedding some light on business owners’ perceptions of the impact as illustrated in Figure 2:

²Figure developed from analysis in Fairlie (2020). The impact of COVID-19 on small business owners: Evidence from the first 3 months after widespread social-distancing restrictions. *Journal of Economics & Management Strategy*. doi:10.1111/jems.12400; “Patterns across gender, race, and immigrant status reveal alarming findings” (p.728).

FIGURE 2
Coronavirus pandemic's effect on small businesses (national averages)³.



As shown in Figure 2, at the end of 2020 and the beginning of 2021, just over 30% of businesses reported a “large negative effect.” This percentage is down from that in 2020, when just over half of businesses reported significant distress (Brown, 2020). On the other end of the spectrum, only about one-and-a-half percent reported a “large positive effect.”

COVID-19: An Evolving Story

Table 1 below presents a collage of fifty subject lines collected between February 2020 and January 2021 in a researcher's email account (in order of newest first, to oldest last). Since some email account search tools vary in robustness, it may be helpful to know that the account provider is Google's Gmail service, using the search term “COVID-19.” Numerous email subject lines are not included as they were similar, along the lines of “what we are doing to help” from banks, insurance companies, consumer organizations, etc. Many are articles forwarded from news organizations' websites. Being regarded as data—which they are under a qualitative frame—such subject lines could be useful as one means of documenting an evolving story.

³Figure developed from data published by The U.S. Census Bureau's *Small Business Pulse Survey* [extracted using pull-down menus; survey data collected from 12/28/2020 to 1-3-2021]. Percentages in the chart presented are rounded. Retrieved January 15, 2021, from <https://portal.census.gov/pulse/data/>

TABLE 1
COVID-19: Subject Line Collage

Unemployment claims jump to highest level since August amid COVID-19 surge
UC San Diego places COVID-19 test kits in vending machines throughout campus
COVID-19 restrictions force military veteran to close candy shop
CEO of BrewDog offering bars as COVID-19 vaccination venues: 'We have waiting areas, huge refrigerators'
COVID-19 vaccine outlook prompts businesses to dust off return-to-office plans
COVID-19 upended Americans' finances, just not in the ways we expected
SimpliSafe's holiday 'Social Distancing Sweater' sells out, supports COVID-19 charity
Celebrity chef José Andrés transforms shuttered restaurants to feed the hungry amid COVID-19 pandemic
COVID-19 pandemic puts squeeze on pension plans
Coronavirus tracking apps having 'modest' impact amid pandemic, expert says
Coronavirus breathalyzer test is a 'game changer' for economy
'Very dark couple of weeks': Morgues and hospitals overflow
Coronavirus passports with vaccination info in development: Report
Nail salons fear for survival during COVID-19's latest spike
NYC bar in COVID-19 hotspot refuses to shut down after state yanks liquor license
Macy's Thanksgiving Day Parade will go on with no audience due to COVID-19
Coronavirus sickens nearly 1,000 Cleveland Clinic health care workers
Rich New Yorkers are hiring line-waiters to sit in COVID-19 testing queues
Retailers brace as COVID-19 bears down on consumers and economy
Airport COVID-19 symptom screening 'ineffective,' CDC report says
Coronavirus tests delivered by drone pilot project in Texas
Chipotle faces employee shortages as COVID-19 cases spike
American shoppers panic-buying as coronavirus spike aggravates year of upheaval
Home is where Americans feel safest amid coronavirus pandemic, survey finds
WHO warns against COVID-19 lockdowns due to economic damage
Grocery stores, food producers beef up inventory for potential second wave of COVID-19, holiday shopping rush
Small business leaders urge Congress to pass standalone COVID-19 relief package
Hard ball: COVID-19 slams Cleveland's baseball bars, clubs
Maine inn linked to coronavirus outbreak from wedding gets license reinstated
Friday night takeout is keeping U.S. restaurants afloat during economic, COVID-19 crises
We need to take care of long-term COVID-19 patients
Safely reopening schools and providing students with quality education
This COVID-19 "long-hauler" has had symptoms for 120 days
Which hand sanitizers are toxic or ineffective?
Scam Gram: Saving you from COVIDiocy
Temporary emergency video notarization
Communicating on social media during COVID-19
Harvard prof calls homeschooling 'dangerous,' says it gives parents 'authoritarian control' over kids
Apple, Google announce joint COVID-19 contact tracing tech
Las Vegas doctor explains how 'proning' COVID-19 patients can be 'difference between life and death'
Coronavirus: Was your flight cancelled?
Coronavirus: Financial help ahead; more left to do!
Professors: Tips during COVID-19
Tax deadline extended to July 15
GOP senator told donors about COVID19...but no one else

An important update on coronavirus
Coronavirus update: Operation Purple
Coronavirus can remain in air for 3 hours, live on plastic for days, new study says
Complementary software offering for organizations transitioning to remote environments
Scam gram: Inoculate against coronavirus cons

Societal Responses: Pivot (or Else)

Consumer reactions to COVID-19 have included panic buying and severe shortages; some of the hoarding behaviors of consumers were likely exacerbated by their actual witnessing of empty store shelves and the heightened credibility of extreme survivalists, a.k.a. doomsday “preppers” (Kirk & Rifkin, 2020, p. 125). “The COVID-19 pandemic paralyzed the world and revealed the critical importance of supply chain management—perhaps more so than any other event in modern history—in navigating crises” (Craighead, Ketchen, & Darby, 2020, p. 838). Sales of Consumer-Packaged Goods (CPG) in numerous categories, especially of goods related to basic hygiene and personal protective gear spiked. Consumers caused widespread shortages when they spent more on toilet paper in mid-March (2020) than on any other category (340 of these are tracked) in grocery stores; toilet paper sales spiked again to 5th place in November (NC Solutions, 2020). There were hand sanitizer shortages; also, masks, gloves, face shields, and similar gear was depleted (Güntner, Magro, van den Broek, & Pratsinis, 2021; Thomson & Bullied, 2020). Small breweries, liquor distilleries, and larger businesses in the cosmetics industry such as L'Oréal, LVMH and Nivea, realized that they could pivot and stepped-in to use their facilities for making hand sanitizers (Obrenovic, Du, Godinic, Tsoy, Khan, & Jakhongirov, 2020; Thomson & Bullied, 2020; Von Krogh, Kucukkeles, & Ben-Menahem, 2020).

Pivoting on the part of small businesses may occur at any time; the motivation to alter a business model could be exogenous shocks (Cowling et al., 2020; Morgan et al., 2020), such as the pandemic, or opportunism in circumstances that are less dire. However, some would argue that “all businesses must pivot their business models in times of tumultuous change, simultaneously reducing risk and seizing new opportunities” (Manolova et al., 2020, p. 481). There are numerous accounts in the popular business press of creative responses on the part of entrepreneurs, many of which are off-the-beaten-track. For instance, a \$1.5 million face masks, widely publicized as the world’s most expensive, was commissioned by an unidentified buyer from an Israeli-luxury jewelry brand, Yvel. Proceeds were used to provide back pay for the firm’s employees, who had endured shortages for several months (Davis, 2020).

Pivoting is not limited to small business. Organizations of all kinds shifted operations, at least in part, to workers’ homes, with some inconclusive results in terms of impacts on productivity (Bolisani, Scarso, Ipsen, Kirchner, & Hansen, 2020). Working from home created both hardships and opportunities for products and services to arise (Bana et al., 2020; Bolisani et al., 2020; Obrenovic et al., 2020). “The pandemic has also drastically increased the presence of digital technology in our personal lives” (Gunay & Kurtulmuş, 2021, p. 2). Collado-Borrell, Escudero-Vilaplana, Villanueva-Bueno, Herranz-Alonso, and Sanjurjo-Saez (2020) conducted a descriptive study of smartphone apps associated with COVID-19. Their method included systematic searches in Apple’s app store (iOS platform) and the Google Play Store (Android

platform); searches were conducted between April 27 and May 2, 2020. They identified at that time 114 apps, and categorized these by their primary use(s), concluding that “the most common purposes of the apps are providing information on the numbers of infected, recovered, and deceased patients, recording of symptoms, and contact tracing” (p. 1). According to their analysis, about half of the apps studied were developed by government agencies; origins were global in scope. One limitation is that their findings were tied to medically-oriented applications.

Many other types of apps have been emerging. In an article addressed to an audience of mobile app developers, Agrawal (2020) outlined opportunities in light of new conditions brought about by COVID-19. These included E-commerce apps—which would be inclusive of myriad mobile shopping apps for grocery and food delivery, pharmacy apps and others that would facilitate consumers’ access to shopping goods while they may be in lockdown or restricted access situations; fitness apps—these may serve to aid consumers in the absence of complete access to gyms and fitness centers; proper diet apps; recreational activities apps; video calling apps; mobile payment gateway apps; learning apps, and cooking apps. The author noted that the list provided was just the tip of the iceberg relative to needs and development opportunities.

Morgan et al. (2020) described instances of small businesses pivoting while focusing on social value. Healthcare workers and other employees who were deemed essential, for example, received donated meals from locally-owned restaurants when shelter-in-place orders were issued by government authorities. Mandatory shutdowns, however, were more difficult for some types of businesses to contend with via pivoting. It is one thing for a restaurant to be partially open with outdoor dining and take-out services, but another to cease operations entirely.

Innovation

There are some key differences relative to COVID-19, as compared to the last major pandemic, which took place approximately 100 years ago: the Spanish flu of 1918–1920 (Greene & Rosiello, 2020; Smith, 2020). While we still do not know the full impact of COVID-19, and additional strains appear to be emerging, technologies have evolved such that “ultrafast innovation” (Von Krogh et al., 2020, p. 9) has been made possible in a variety of fields. Among the newer technologies making a difference are artificial intelligence (AI), cloud computing, and data analytics (Taylor & Francis Online, 2020; McCausland, 2020b; Von Krogh et al., 2020). McCausland (2020b) provided several examples of AI applications in use which “helped fill the gap when COVID-19 strained medical staff and healthcare systems around the world” (p. 2). One such AI example was a hospital in Florida which was attempting to identify and separate visitors who might have been infected from its personnel and other patients using screening at entrances to identify signs of infection using thermal scans, sweating, or facial discoloration.

As observed by Gunay and Kurtuluş (2021), “Through acceleration of the digital transformation, remote work, e-learning, and even remote health services have become practicable” (p. 2). Related to this transformation, digital manufacturing, e.g., 3D printing, had been arising as a game changer prior to COVID-19; but in response to the pandemic and shortages of Personal Protective Equipment (PPE) “companies big and small began manufacturing face masks, face shields, swabs, and parts for ventilators to help solve the

shortage” (McCausland, 2020a, p. 62). Larger businesses such as Ford Motor Company, 3M, and General Electric, partnered to produce protective medical equipment (Obrenovic et al., 2020); Dyson, known for its innovative vacuum cleaners, is using air compression technologies for medical patient ventilators (Von Krogh et al., 2020).

The above authors also discussed repurposing in the pharmaceutical industry. This generally refers to finding new uses for existing drugs for cures, preventive interventions, and to accelerate the development of treatments to retard the progression of a given adverse condition, namely, a COVID-19 vaccine (Gopinath, 2020; Smith, 2020). The notion of repurposing is not limited to pharmaceuticals; “Jeff Bezos and Elon Musk repurposed manufacturing capacity and expertise from their respective rocket enterprises, Blue Origin and SpaceX, and to 3D-print face shields for health care workers” (Von Krogh et al., 2020, p. 9).

CONCLUSION

The intent of this research has been to develop a greater understanding of where we are going from here in the pandemic era. The COVID-19 pandemic has “afflicted the health, economy, politics, culture, and psychology of almost the whole global system” (Tuncer, 2020, p. 1). Cowling, Brown and Rocha (2020) studied the savings patterns of SMEs, while acknowledging a limitation to their findings in that they were specific to the United Kingdom. Nevertheless, the above authors suggested that SMEs shared similar overall savings patterns globally (i.e., they typically have very limited access to capital regardless of location): “If hundreds of thousands of smaller businesses are at risk of running out of cash, given a lengthy period of time when sales incomes are either falling, or have stopped completely, this represents a systemic risk to most economies given the predominance of SMEs in the economic landscape” (p. 594). Before COVID-19, small businesses had their challenges. With some unfortunate irony, access to affordable health care was at the top of the list for decades, according to NFIB (National Federation of Independent Businesses) research (Wade, 2016).

Glimpses of entrepreneurs’ reactions and innovations have emerged, along with hope for recovery. Smith (2020) has declared the beginnings of a “COVID Renaissance”:

From the destruction of the COVID-19 pandemic will spring thousands of innovations, large and small. Hundreds of new businesses already offer goods and services—like simple face masks and Plexiglas shields—designed to protect healthcare and service workers and customers in accordance with new regulations and social norms. Companies are developing new sanitation products, new designs for airline seats, and new restaurant layouts. Business office layouts and fitness center designs are changing, and new software is being developed to assist with selling event tickets for entertainment venues. Online grocery shopping and telemedicine have exploded from a tiny niche to a major business trend (p. 60).

Now, small business and citizenries at large continue in their struggle to address a far more complex problem that looms ahead: How to rebuild and sustain a beleaguered economy in a world that is being ravaged by a global pandemic?

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LEVERAGING STRATEGIC AGILITY IN THE PANDEMIC ENVIRONMENT

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ABSTRACT

Strategic agility is defined as the firm's capability to dynamically change its plan for achieving competitive advantage. Research on strategic agility has blossomed with over a dozen journal articles published during the last three years. Recent empirical research suggests young firms benefit more than older firms from strategic agility, especially when facing environmental turbulence. That is, firm age and environmental turbulence jointly moderate the relationship between strategic agility and firm performance. If the pandemic climate of 2020 represents a high degree of turbulence, then strategic agility may be highly beneficial for young firms struggling to survive if not prosper during pandemic conditions. This applied research article first reviews theory and prior research on strategic agility and environmental turbulence. It is argued the coronavirus pandemic ranks highly on the five components of the environmental turbulence construct, namely, the complexity, rapidity, novelty, visibility, and frequency of environmental change (Ansoff, 1984, 2019). Doz and Kosonen's (2010) strategic agility framework and Reed's (2020, 2021) empirical findings operationalizing the framework are reviewed, focusing on the unique value of strategic agility for young firms. A sensitivity analysis is conducted to identify six subfactors of the framework which most influence firm performance in high environmental turbulence. These are, in order, multiple business models, flexible organizational structures, probing the future, reflecting on past/future trajectory, modular systems and processes, and leadership empathy. The article concludes with a discussion of how these strategic agility subfactors may be leveraged by entrepreneurs and small firms during pandemic and other turbulent environments, and directions for future research.

Keywords: Strategic agility, environmental turbulence, firm-age, pandemic, sensitivity analysis

INTRODUCTION

The coronavirus-induced economic downturn of 2020 abruptly upended the strategic plans of companies worldwide. From Boeing's cancellation of their diversification and innovation plan through joint venture with Embraer, to the shift by Eclipse International (a small New Jersey manufacturer) from mattress making to medical masks, many companies large and small were forced to adapt their strategies to the pandemic environment to survive (Insider NJ, 2020; Liao, 2020). However, not all companies were negatively affected by the pandemic. Established companies like Clorox and Zoom benefited from new-found demand, scaling their production, and accelerating their growth plans. Entrepreneurs like Phil Libin at mmhmm (remote presentation technology) and Prashant Fuloria at Fundbox (PPP loan origination) saw opportunity in the pandemic and launched new businesses or products to meet new needs (Konrad, 2020; Roll Call, 2020).

Whether positively or negatively impacted, firms capable of changing strategy quickly in turbulent environments appear to have a competitive advantage. In the field of strategic management, this capability is known as *strategic agility*. The term strategic agility was coined by Roth (1996) in an agile manufacturing sense—the ability to create the right products at the right place at the right time at the right price. Long (2000) generalized the construct as the ability to maintain the flexibility to quickly respond to changing circumstances and emerging opportunities while still concentrating on a clear strategic purpose. Research on strategic agility accelerated in 2008 based on the work of Doz and Kosonen (2008a, 2008b) who developed a three-dimensional framework for the construct involving strategic sensitivity, leadership unity, and resource fluidity. Doz and Kosonen (2010) subsequently elaborated their framework by identifying 15 underlying determinants or subfactors.

While their work was qualitative in nature, the Doz and Kosonen (2010) framework has been increasingly used by empirical researchers interested in the relationship between strategic agility and firm performance (Al-Azzam, Irtameh, & Khaddam, 2017; Chan & Muthuveloo, 2020; Clauss, Abebe, Tangpong, & Hock, 2019; Debellis, De Massis, Petruzzelli, Frattini, & Giudice, 2020; Junni, Sarala, Tarba, & Weber, 2015; Nurjaman, Rahayu, Wibowo, & Widjajani, 2021; Ofoegbu & Akanbi, 2012; Xing, Liu, Boojihawon, & Tarba, 2020). Unfortunately, the results have been mixed due in part to different operationalizations. Reed (2020) operationalized Doz and Kosonen's (2010) framework using the 15 determinants and tested the relationship between strategic agility and performance under several contingencies. The relationship was found to be jointly moderated by firm-age and environmental turbulence, potentially explaining the earlier mixed results. Specifically, Reed (2020) found that in high turbulence environments, young firms appear to benefit from strategic agility while older firms appear to be harmed by it.

This article builds on this research stream by investigating how strategic agility may be leveraged for improved performance in the turbulence of a pandemic environment. In the theory section, both environmental turbulence and strategic agility are examined more closely. The five-factor model of environmental turbulence propounded by Ansoff, Kipley, Lewis, Helm-Stevens, and Ansoff (2019) is used to assess the degree of turbulence represented by the pandemic climate

of 2020. Doz and Kosonen's (2010) 15-subfactor model of strategic agility and Reed's (2020, 2021) empirical findings are used to show young firms are uniquely positioned to benefit from strategic agility in high turbulence. But which of the 15 subfactors matter most? In the methods and results sections, a sensitivity analysis is presented which identifies six subfactors which have the greatest effect on the significance of the agility-performance relationship. The discussion section addresses how these subfactors may be leveraged by entrepreneurs and small firms. The article concludes by summarizing the findings and presenting several avenues for future research on strategic agility during times of crisis.

LITERATURE REVIEW

Environmental Turbulence

Environmental turbulence is a long-standing construct in strategic management research, often utilized as an antecedent or moderator of other constructs and relationships (Ansoff et al., 2019; Jaworski & Kohli, 1993; Khandwalla, 1977; Lichtenhaler, 2009; March, 1991; Mintzberg, 1979). Indeed, strategy itself is widely considered more important in dynamic, hypercompetitive, and high-velocity markets than in times of stability (D'Aveni, 1994; Eisenhardt & Martin, 2000; Teece, 2009). Khandwalla (1977) defines environmental turbulence as follows:

A dynamic, unpredictable, expanding, fluctuating environment is a turbulent environment. It is an environment marked by changes. It is an environment in which the information received by the organization is often contradictory. The best estimates that management can make of the future are only "guestimates" and get obsolete fairly quickly since the environment often takes unpredictable turns. It is an environment in which the ability to take calculated risks in the face of uncertainty is vital. It is an environment that attracts entrepreneurs.

Ansoff et al. (2019) defines environmental turbulence more precisely as a combined measure of the changeability and predictability of the firm's environment and offers a turbulence scale which is based on five factors as shown in Table 1.

TABLE 1
Ansoff 's Environmental Turbulence Scale

Factors	1	2	3	4	5
<i>Complexity of Environment</i>	National competitors		Regional or global competitors with technology effects		Global competitors with social and political effects
<i>Novelty of Change</i>	No change	Change is slow and incremental	Change occurs faster but still incremental	Change is discontinuous but expected	Change is discontinuous and completely unexpected
<i>Rapidity of Change</i>	No change	Change occurs slower than the firm can respond	Change occurs equal to the firm's ability to respond	Change occurs more rapidly than the firm can respond	Change occurs catching the firm completely by surprise
<i>Visibility of Future Events</i>	Complete visibility of future change events	Future change events are easy to extrapolate	Future change events are predictable	Future change events become less predictable	Future change events are completely unpredictable
<i>Frequency of Turbulence Level Shifts</i>	No shifts due to no change	Low	Moderate	High	Multiple shifts per year

Adapted from: Ansoff et al. (2019), Table 6.1, p. 80.

Given the scale's detail at each level of turbulence from 1 (low) to 5 (high), the degree of turbulence created by the coronavirus pandemic is readily assessed. On complexity, the pandemic impacted firms across the globe with technological, social, and political effects, meeting the criteria for level 5 on the scale. On novelty, pandemics may not be new, but they are discontinuous, seemingly appearing randomly everyone to three decades, with the most recent being the "swine flu" (H1N1) in 2009-2010. However, a pandemic as global and severe as COVID-19 has not been seen since the "Spanish flu" of 1918-1919 which killed tens of millions. It is fair to say a pandemic of this magnitude was completely unexpected, ranking level 5 on this factor also. On rapidity, since the onset of the pandemic in early 2020, environmental change was frequent and faster than most firms could respond. Firms were surprised by continually changing infection rates, CDC guidance, medical treatments, levels of economic shutdown, supply chain instability, government loan programs, direct payments to households, and vaccine availability. All these factors support level 5 on rapidity. Likewise, on visibility, future changes due to the pandemic were completely unpredictable. Will the infection rate subside or resurge? Will the lockdown be eased or tightened? Will an effective vaccine be found or not? Visibility therefore ranks a level of 5. Finally, on frequency, the level of turbulence shifted several times during 2020 as each of at least three surges of the virus led to a roller coaster ride between emergency and semi-normalcy. This meets the criteria for level 5 also.

Overall, it appears the coronavirus pandemic of 2020-2021 qualifies at the highest level of Ansoff et al.'s (2019) environmental turbulence scale. Note, however, environmental

turbulence is not inherently bad. None of the five factors presume a negative impact to financial performance or other firm outcomes. Change from equilibrium provides both hazard and opportunity, a condition well appreciated by entrepreneurs (Kirzner, 1997). This observation is important for understanding the complex interaction between environmental turbulence and strategic agility.

Strategic Agility

Doz and Kosonen (2010) and their colleagues have developed a substantial body of research on strategic agility (Doz & Kosonen, 2020; Doz & Kosonen, 2007, 2008a, 2008b, 2010, 2011; Hamalainen, Kosonen, & Doz, 2012). Originally based on a longitudinal case study of Nokia and then applied to other companies, the researchers identified three dimensions of the construct of strategic agility as follows.

- *Strategic sensitivity*—An intense awareness of external trends combined with an open and participative strategy process.
- *Leadership unity* (also called collective commitment)—Alignment and transparency within the top leadership team, enabling bold decisions to be made fast.
- *Resource fluidity*—The capability to reconfigure business systems and redeploy resources rapidly.

According to Doz and Kosonen (2008b), all three dimensions are required for a firm to be strategically agile, as explicated below:

The three meta-capabilities underlying strategic agility operate in a multiplicative interaction over time. If leadership unity is not fully in place - as at Nokia in the early 2000s—the full benefits of agility cannot be achieved even if the other two are present to a relatively strong extent. In short, the formulation is: Agility = Sensitivity x Unity x Fluidity (p. 111).

Doz and Kosonen (2010) identified five underlying determinants for each dimension representing leadership actions that can be taken to enable the dimension. For example, *experimenting*, described as gaining insight by probing the future through experiments and in-market tests, underlies the strategic sensitivity dimension. *Revealing*, making personal motives and aspirations explicit, underlies leadership unity. And *dissociating*, separating resource use from resource ownership to allow for resource access and allocation, underlies resource fluidity. Doz and Kosonen's (2010) most recent work explored strategic agility in the public policy and human resources domains (Doz & Kosonen, 2020; Hamalainen, Kosonen, & Doz, 2012).

Based on Doz and Kosonen's (2010) framework, Reed (2020) defines strategic agility as the firm's capability to dynamically change its plan for achieving competitive advantage through its strategic sensitivity, leadership unity, and resource fluidity. Using the 15 determinants as subfactors, he operationalized strategic agility as shown in Table 2. All items were rated from 1 (strongly disagree) to 7 (strongly agree) and strategic agility was computed as the product of the means of the three dimensions (SENSE x UNITY x FLUID) following Doz and Kosonen's

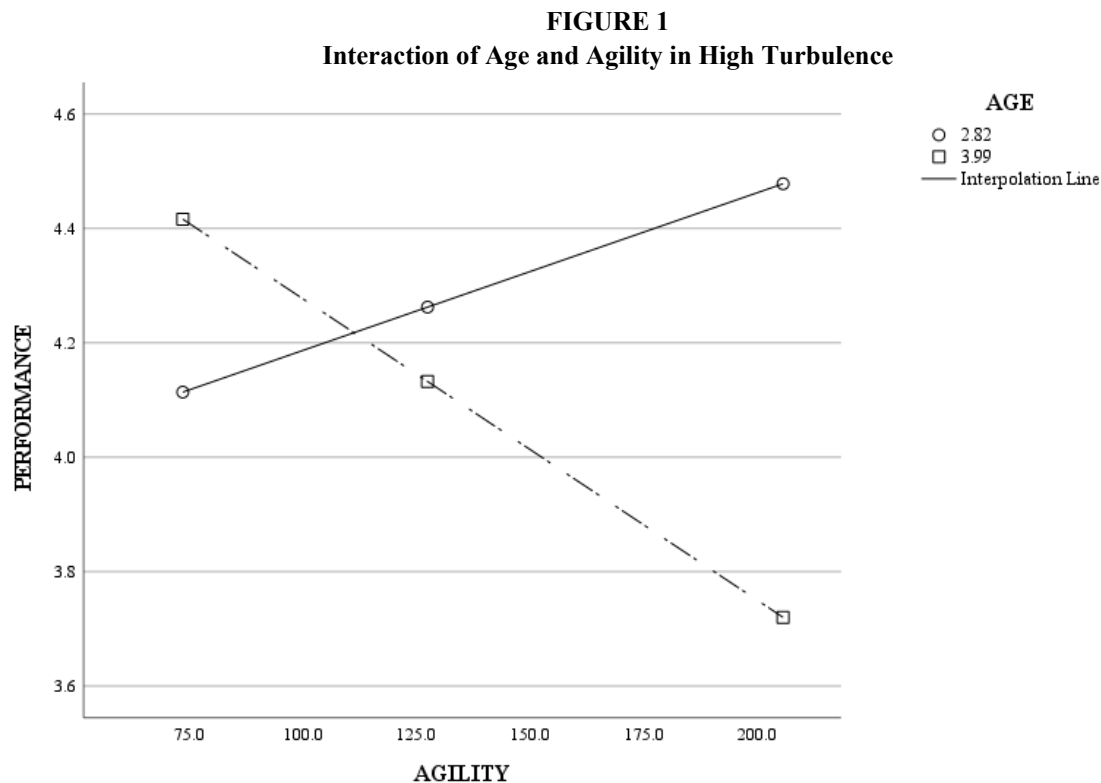
(2010) prescription. Using this scale, Reed (2021) found the strategic agility construct to be valid through factor analysis and convergence with similar constructs. Using multiple regression, he tested the relationship between strategic agility and firm performance and found it to be jointly moderated by firm-age and environmental turbulence. That is, age and turbulence independently interact with strategic agility, but when both interactions are introduced to the regression, it can be seen that the combined effect is greater than the sum of the individual effects (Cohen, Cohen, West, & Aiken, 2015).

TABLE 2
Reed's Strategic Agility Scale

Variable	Subfactor	Survey Item
Strategic Sensitivity (SENSE)		
Sense1	Anticipating	My organization anticipates future customer needs.
Sense2	Experimenting	My organization uses experimenting (e.g., prototypes, pilots, in-market tests) to probe the future.
Sense3	Distancing	My organization reflects on the company's past evolution and future trajectory.
Sense4	Abstracting	My organization considers a wide range of potential products and services by viewing our business in abstract terms.
Sense5	Reframing	My organization recognizes the need to try new business models.
Sense6	Grafting	My organization adopts new ways of doing business from other companies.
Leadership Unity (UNITY)		
Unity1	Dialoguing	The leaders of my organization engage in open dialogue and welcome differences of opinion.
Unity2	Revealing	The leaders of my organization reveal their underlying motives including aspirations, biases, and fears.
Unity3	Integrating	The leaders of my organization operate as an integrated, interdependent, value-creating team.
Unity4	Aligning	The leaders of my organization are aligned around a common interest through a compelling mission, aspirational vision, shared values, and emotion.
Unity5	Caring	The leaders of my organization are caring and demonstrate empathy and compassion for others.
Resource Fluidity (FLUID)		
Fluid1	Decoupling	The elements of my organization (e.g., departments, lines of business) are loosely coupled and flexible.
Fluid2	Modularizing	My organization's underlying business systems and processes are modular and easily changed.
Fluid3	Dissociating	Resources in my organization are easily accessed across organizational boundaries.
Fluid4	Switching	My organization uses multiple business models for different market segments or products.

Adapted from: Reed (2021), Appendix 1.

Figure 1 graphically depicts the joint interaction when environmental turbulence is high (4.0 on Ansoff's scale). In this case, strategic agility is positively related to performance for young firms (average age 2.82 or 16.8 years) while negatively related to performance for older firms (average age 3.99 or 54.0 years).



This crossed or disordinal interaction is striking in the context of the pandemic. It suggests strategic agility is not just more beneficial for young firms than older firms, but that older firm performance actually decreases with strategic agility in high turbulence. Reed (2021) interpreted this paradoxical finding as a “dithering effect” in which older firms may dither between strategies too much, incurring greater change costs than young firms due to their greater asset stocks and path dependencies (Ermoliev, Arthur, & Kaniovski, 1987; Dierickx & Cool, 1989). In this case, older firms may perform better by staying the course and riding out the inevitable uncertainties of the turbulence.

Doz and Kosonen's (2010) theory coupled with Reed's (2020, 2021) empirical findings suggest young firms are uniquely positioned to leverage strategic agility to limit the impact or even improve performance in the pandemic environment. But how? All 15 items in the strategic agility scale are candidates for leadership action to improve strategic agility. Which subfactors should the entrepreneur or small business address? Sensitivity analysis is needed to answer this.

METHODOLOGY

Sensitivity analysis is a statistical technique used to determine how uncertainty in the output of a model can be apportioned to different sources of uncertainty in the model input (Saltelli, Ratto, Andres, Campolongo, Cariboni, Gatelli, Saisana, & Tarantola, 2008). With respect to regression models, we may examine how changing the values of specific independent variables affects a dependent variable under a given set of circumstances (Maddala & Lahiri, 2009). By independently increasing and decreasing (or alternatively, omitting and including) each independent variable, the difference between the revised model and a baseline model may be measured to determine the degree to which the model is sensitive to the variable.

This study uses an existing data set and regression model as the baseline (Reed, 2020). The data set consists of 73 for-profit companies randomly sampled in the State of Florida. Florida was originally selected due to its large economy (GDP) and high industry diversity but represents a convenience sample here. The companies are in the manufacturing, professional services, and construction industry sectors, and range widely in age (2 to 124 years), size (5 to 21,000 employees), and revenue (less than \$1 million to over \$1 billion annually).

The data was collected from CEO-level leaders in mid-2019 prior to the coronavirus pandemic. The regression model of interest is the joint interaction model previously described, wherein it was found that the relationship between strategic agility and firm performance was jointly moderated by firm-age and environmental turbulence. The strategic agility and environmental turbulence constructs were measured as discussed in the prior section. Firm-age was taken as the natural logarithm of the number of years since founding. Firm performance was operationalized as a combined measure of revenue growth, profitability, and meeting of company objectives following Powell (1992). Industry sector and business entity type (e.g., C-corporation) were used as controls. The regression model reported a multiple correlation coefficient (R) of .4859, proportion of variance explained (R^2) of .2361, and significance (p) of .0367. These are the baseline values of interest.

The sensitivity analysis is conducted by increasing and decreasing the values of each of the 15 strategic agility subfactors in the data set by 50% while holding all other values the same. Each adjustment produces a slightly modified data set to which the same regression model is applied. The new R , R^2 , and p values for each model are then compared to the baseline values to determine sensitivity. For R and R^2 , the comparison consists of subtracting the baseline values from the new model values, as a higher R is considered favorable (greater correlation) and results in a positive number. For p , the new model value is subtracted from the baseline value as a lower p is considered favorable (greater statistical significance) resulting in a positive number.

RESULTS

Table 3 provides the results of the sensitivity analysis. For each strategic agility subfactor, the new R , R^2 , and p values are shown for the -50% and +50% adjustments. These values are compared to the baseline regression model to find the ΔR^2 and Δp . The range of variation from the -50% level to the +50% level of either ΔR^2 or Δp may be considered to

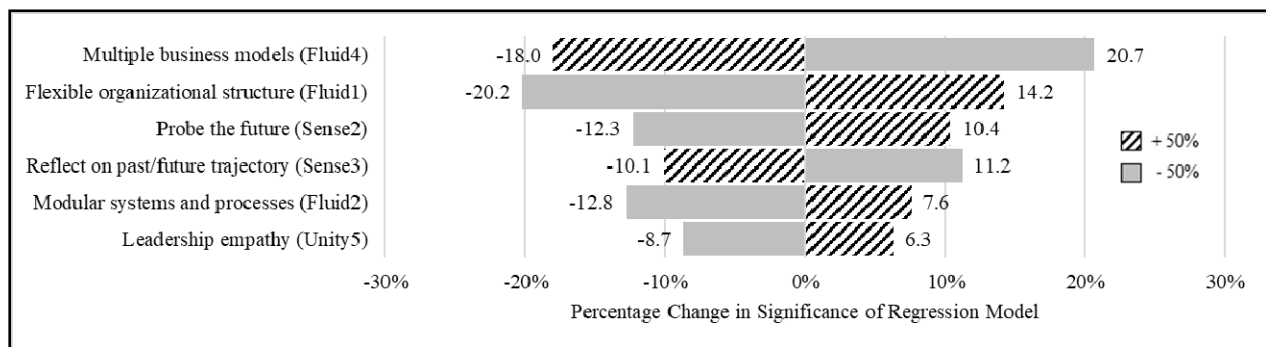
represent the sensitivity of the model to the subfactor. For example, when Unity1 is changed +/- 50%, the resulting percentage change in R^2 is -0.7% to +0.5% (a 1.2% range) and the percentage change in p is -4.6% to +3.3% (a 7.9% range). In general, the sensitivity column of Table 3 indicates the model is more sensitive to subfactor values in statistical significance (p) than in coefficient of determination (R^2). However, the ranges of the two measures track closely together as can be seen in Table 3 below.

TABLE 3
Sensitivity of Model to Changes in Subfactors

		Regression Model			Sensitivity	
Subfactor		R	R^2	p	ΔR^2	Δp
Unity1	- 50%	.4870	.2372	.0355	0.5%	3.3%
	+ 50%	.4842	.2345	.0384	-0.7%	-4.6%
Unity2	- 50%	.4883	.2385	.0342	1.0%	6.8%
	+ 50%	.4838	.2340	.0388	-0.9%	-5.7%
Unity3	- 50%	.4849	.2351	.0377	-0.4%	-2.7%
	+ 50%	.4867	.2368	.0359	0.3%	2.2%
Unity4	- 50%	.4855	.2358	.0370	-0.1%	-0.8%
	+ 50%	.4860	.2362	.0366	0.0%	0.3%
Unity5	- 50%	.4828	.2331	.0399	-1.3%	-8.7%
	+ 50%	.4882	.2383	.0344	0.9%	6.3%
Sense1	- 50%	.4856	.2358	.0369	-0.1%	-0.5%
	+ 50%	.4860	.2362	.0365	0.0%	0.5%
Sense2	- 50%	.4816	.2320	.0412	-1.7%	-12.3%
	+ 50%	.4897	.2398	.0329	1.6%	10.4%
Sense3	- 50%	.4901	.2402	.0326	1.7%	11.2%
	+ 50%	.4824	.2327	.0404	-1.4%	-10.1%
Sense4	- 50%	.4869	.2371	.0357	0.4%	2.7%
	+ 50%	.4849	.2351	.0377	-0.4%	-2.7%
Sense5	- 50%	.4853	.2355	.0373	-0.3%	-1.6%
	+ 50%	.4863	.2365	.0362	0.2%	1.4%
Sense6	- 50%	.4857	.2359	.0368	-0.1%	-0.3%
	+ 50%	.4860	.2362	.0366	0.0%	0.3%
Fluid1	- 50%	.4791	.2295	.0441	-2.8%	-20.2%
	+ 50%	.4912	.2413	.0315	2.2%	14.2%
Fluid2	- 50%	.4814	.2318	.0414	-1.8%	-12.8%
	+ 50%	.4887	.2388	.0339	1.1%	7.6%
Fluid3	- 50%	.4886	.2387	.0340	1.1%	7.4%
	+ 50%	.4835	.2338	.0391	-1.0%	-6.5%
Fluid4	- 50%	.4940	.2440	.0291	3.3%	20.7%
	+ 50%	.4798	.2302	.0433	-2.5%	-18.0%

Figure 2 depicts the results of the sensitivity analysis (based on Δp) in the form of a tornado diagram. The six subfactors with an influence range of 15% or more on the regression model are shown in rank order. For example, the model is most sensitive to Fluid4 where the 50% changes in value led to a -18.0% to +20.7% change in statistical significance of the model. It is also evident that increasing a subfactor value does not always increase model significance. For example, the +50% change in Fluid4 leads to a -18.0% change in statistical significance while the +50% change in Fluid1 leads to a +14.2% change in statistical significance. The direction of the influence of a subfactor on the model is discussed in the following section.

FIGURE 2
Top 6 Subfactors Influencing Regression Model



A final regression was calculated using the top six subfactors together. That is, all six of Fluid4, Fluid1, Sense2, Sense3, Fluid2, and Unity5 were adjusted by 50% in whichever direction provided the positive impact on R^2 and p (the cross-hatched bars in Figure 2). This grouped sensitivity analysis represents the model gain if companies were to improve by 50% on all six subfactors. The regression results in an R of .5101, R^2 of .2602, and p of .0179, improving the proportion of variance explained by 10% (.2361 to .2602) and the statistical significance further explained by 51% (.0367 to .0179).

DISCUSSION

Using Reed's (2021) baseline regression model, the sensitivity analysis identified six subfactors from Doz and Kosonen's (2010) framework which appear to most influence the relationship between strategic agility and firm performance. However, it is important to note this does not necessarily mean a firm's improvement on these input subfactors leads to improved output performance. The sensitivity analysis measured the effect of the subfactors on the strength of the model (R^2 and p) and not the dependent variable. This means the model is more reliable and likely to apply when the identified subfactors are improved. Next, the six subfactors are considered individually to determine how they might be leveraged effectively and efficiently in the turbulent, pandemic environment.

Fluid4 (*switching*) was defined as using multiple business models for different market segments and products. At first blush, multiple business models might be considered beneficial

during the pandemic by providing more flexibility and resiliency to impacts in one segment (e.g., sit-down restaurants) than another (e.g., home meal delivery). However, increasing this subfactor was found to decrease the strength of the regression model. Why would this be the case? One possible explanation is cash flow and margins may be preserved by “hunkering down” during the pandemic to fewer core markets and products. Another explanation is that it is older firms which are more likely to operate multiple business models, and as we know from Figure 1 above, their performance decreases with strategic agility in high turbulence. The negative effect of this subfactor may therefore be limited to older firms.

Fluid1 (*decoupling*), defined as loosely coupled and flexible organizational elements, was positively related to improvement to the baseline model. This ability to adapt organizational structures to the pandemic environment, whether through downsizing, reconfiguration, or expansion, would seem to make sense for all aged firms whether struggling to survive or seeking to exploit new opportunities.

Sense2 (*experimenting*) was defined as probing the future through prototyping, pilots, and in-market tests. While this subfactor is aimed at foreseeing market trends and product needs, any attempts to peer into the future may increase the likelihood of recognizing turbulent events early and dealing with their effects proactively. The subfactor could be leveraged by seeking out relevant news and other media, testing potential pandemic responses with customers (e.g., mask wearing, seating capacity, vaccinations), and proactively developing pandemic (and other similar disaster) response plans.

Sense3 (*distancing*), defined as reflecting on the company’ past evolution and future trajectory, was also found to be better reduced than increased in a turbulent environment. This finding may be explained by recognizing pandemics as discontinuous and unforeseen events. Past evolution may provide little insight and no bearing on future trajectory. It may therefore be better to “live in the moment” in terms of firm survival.

Fluid2 (*modularizing*) was defined as having modular and easily changed underlying business systems and processes. Increasing this capability makes sense as the ability to adapt systems and processes to the impacts and opportunities of the pandemic would likely improve performance. This could be accomplished by streamlining processes, prioritizing business system deployments and upgrades, and other operational improvement activities.

Unity5 (*caring*), the only subfactor drawn from the leadership unity dimension of strategic agility, was defined as caring, empathy, and compassion for others by the leadership team. This leadership quality seems beneficial considering the hardships of the pandemic on clients, employees, and communities. Empathy may lead to improved customer retention, employee morale and motivation, and community support, all contributing to firm performance.

Note three of the six subfactors are components of the resource fluidity dimension of strategic agility. This suggests the ability to adapt resources quickly during the rapid change and unpredictability of the pandemic is the most important overall capability to have or improve on.

FUTURE RESEARCH

Several avenues for future research are recommended. First, the existing data set was taken in mid-2019 prior to the pandemic. New data collection during the pandemic may provide a better window into the effects of strategic agility under high turbulence. Better yet, a longitudinal study of firms before, during, and after a pandemic event may provide better insight into how strategic agility is leveraged and causally related to firm performance. Third, the characterization of the pandemic as high turbulence could be examined empirically rather than conceptually through survey or analysis of archival economic data. This may strengthen the findings and recommendations. Finally, much work remains to be done on strategic agility in general. Reed's (2021) operationalization of the Doz and Kosonen (2010) framework calls for further testing in other contexts including other regions and nations. The relationship between strategic agility and similar constructs such as organizational ambidexterity (Raisch & Birkinshaw, 2008), organizational agility (Harraf, Wanasika, Tate, & Talbott, 2015), and strategic responsiveness (Andersen, Torp, & Linder, 2019) should also be further explored.⁴

CONCLUSION

This research applied strategic agility theory to the high-turbulence environment of the coronavirus pandemic. It was conceptually shown that the pandemic represents a high level of turbulence. It was empirically shown that under high turbulence, young firms appear to benefit from strategic agility while older firms appear to be harmed by it. While the relationship is not causal, it suggests that on the continuum of age, young firms are uniquely positioned to leverage strategic agility not only for survival but for entrepreneurial opportunity in the pandemic environment. A sensitivity analysis was conducted using an existing data set to determine which strategic agility subfactors have the greatest influence on the agility-performance relationship. Six subfactors were found and recommendations were provided for their leverage by both younger and smaller firms.

⁴ Reed (2020) noted similarities and differences between these constructs, but only tested the correlation between strategic agility and organizational alignment.

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CAN THE POSITIVE TRAITS OF ENTREPRENEURS WITH PSYCHOLOGICAL DISORDERS ENABLE THEM TO SUCCEED THROUGH THE PANDEMIC?

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ABSTRACT

Entrepreneurs possess both human strengths and weaknesses. Many of them come with their own personality traits and often quirky behaviors. Some of them are also challenged by psychological conditions and disorders that could impact constructive actions in their daily lives. In this paper, the researchers have selected three conditions to address in this context: ADHD, NPD, and Dyslexia. We demonstrate that while these three conditions may provide challenges to such entrepreneurs, they also allow them to overcome the associated negative aspects by focusing on complementary positive traits to succeed in their entrepreneurship. Under normal economic conditions, entrepreneurs frequently face stress, whether from competitive pressures, financial issues, or everyday problems. With the prevailing COVID-19 pandemic and resulting issues, many small-business owners are facing the highest levels of stress they have experienced as entrepreneurs, coupled with additional costs associated with COVID-19 compliance as critical stressors. Therefore, entrepreneurs with psychological conditions need to be aware of how they can leverage their positive traits to mitigate the added COVID-19 stress to significantly promote successful outcomes.

Keywords: Entrepreneurship, psychological disorders, COVID-19, ADHD, NPD, dyslexia, stress

INTRODUCTION

“Obstacles don’t have to stop you. If you run into a wall, don’t turn around and give up. Figure out how to climb it, go through it, or work around it.”

–Michael Jordan

Despite showing positive entrepreneurial efforts in the community, entrepreneurs need to be cognizant of their mental state (Uribe-Toril, Ruiz-Real, Ceresia, & de Pablo Valenciano, 2019; Leung, Franken, & Thurik, 2020). Leung et al. (2020) noted that both the researchers and members of the media recently started to explore the link between entrepreneurship and symptoms of various psychological disorders. Consequently, researchers reviewed a variety of investigations which showed that entrepreneurs with specific mental health issues should be approached differently (Uribe-Toril et al., 2019). Uribe-Toril et al. (2019) also specified that some research may show specific mental health challenges, but the issues may not negatively affect entrepreneurial performance. In fact, positive traits of Attention Deficit Hyperactivity Disorder (ADHD), Narcissistic Personality Disorder (NPD), and Dyslexia could constructively promote entrepreneurial success despite mental health challenges triggered by the negative traits.

DISCUSSION

Table 1 below lists some key psychological traits that challenge individuals with three specific psychological disorders: Attention Deficit Hyperactivity Disorder (ADHD), Narcissistic Personality Disorder (NPD), and Dyslexia. It identifies both negative and positive traits associated with these disabilities. It is suggested that these entrepreneurs could overcome the identified negative traits they are challenged with by supplanting them with the countervailing positive traits toward becoming successful entrepreneurs.

TABLE 1
Positive and Negative Psychological Traits and Their Effects on Entrepreneurship

Disorder	Negative Traits	Positive Traits
Attention Deficit Hyperactivity Disorder (ADHD)	Easily distracted, potential for substance abuse, subject to other mental health disorders; sometimes hasty, thoughtless, impulsive	Willingness to take risks, creative, imaginative, high-energy, self-motivated, driven, resilient, determined, courageous, potential for strong intelligence, innovative, inventive
Narcissistic Personality Disorder (NPD)	Conceited, grandiose attitude, lacks sympathy, misjudges personal abilities, pretentious, manipulative, feels superior to others.	Strong, self-confident, desire to improve society, accepts positive feedback, possible innate ability to lead, self-motivated, driven, pioneering, innovative, self-starter
Dyslexia	Low self-esteem, challenges with spelling and reading, possible poor literacy, disdain of a structured environment, inferior ability to process knowledge	Innovative, creative, possible solid mechanical ability, strong spatial ability, can be original, can observe issues others cannot see, utilizes alternate effective paths to success, sometimes ingenious

Source: Lerner, Hunt, & Verheul (2018); Lerner, Verheul, & Thurik (2019); Yu, Wiklund, & Perez-Luno (2018)

Attention Deficit Hyperactivity Disorder (ADHD)

Lerner, Verheul, & Thurik (2019) indicated that Attention Deficit Hyperactivity Disorder (ADHD) can be considered a common clinical condition among entrepreneurs. Moreover, their condition can affect various individuals in the population (Lerner et al., 2019). For a diagnosis of ADHD to exist, thoughtlessness, as well as hyperactive and distracted behavior must be measured against age-appropriateness (Lerner et al., 2019). Additionally, an impairment of typical functioning such as occupational or social functioning should be present.

ADHD, like other mental health disorders, can be diagnosed by the following licensed professionals: a clinical psychologist, psychiatrist, or a licensed social worker (e.g.: MSW degree-holder). A differential diagnosis must also be considered that involves the clinician mediating the impairment, and behavior that does not result from another source or disorder (Lerner et al., 2019). Sources of the disorder may include substance abuse and/or other deleterious practices. Similarly, Lerner et al. (2019) noted that clinicians also suggested that no single test or psychometric measure could determine a clear and complete diagnosis of ADHD.

Persons with ADHD can demonstrate hyperactive and distracted behaviors. ADHD may involve showing impulsive behavior, and could often result in criminal activity, social isolation, poor performance, and substance abuse (Wiklund, Patzelt, & Dimov, 2016). Consequently, such impulsive actions can negatively impact entrepreneurial pursuits that result in ill-conceived and thoughtless decisions (Wiklund et al., 2016).

Social and occupational consequences of ADHD disorder may affect a person's work performance and networking abilities (Lerner, Hunt, & Verheul, 2018). Fortunately,

entrepreneurs with ADHD can show positive traits such as self-efficacy, motivation, gains, and achievement—and thus be significantly successful. A positive outcome for the entrepreneur with ADHD can involve making swift decisions in complicated and ambiguous situations. Additionally, Yu, Wiklund, and Perez-Luno (2018) indicate that entrepreneurship may provide an environment where people could demonstrate positive aspects through innovation and self-sufficiency. Furthermore, entrepreneurs with ADHD may also show positive qualities such as creativity, proactiveness, and willingness to take risks to be successful.

ADHD can be considered one of the most fundamental and characteristic disorders among entrepreneurs. Research also shows that an increased interest with ADHD symptoms and entrepreneurship may be evident (Yu et al., 2018). Entrepreneurship can thus involve complex, groundbreaking, and risk-taking behavior which can attract people diagnosed with ADHD. Notable entrepreneurs such as David Neelman, Richard Branson, and Ingvar Kamprad claimed to have succeeded as entrepreneurs despite having ADHD (Wiklund et al., 2016). Past studies made significant progress in showing a positive correlation between ADHD and celebrities as featured in the major media (Lerner, Verheul, & Thurik, 2019).

Unfortunately, Lerner, Verheul, and Thurik (2019) indicated that numerous studies did not yet empirically scrutinize ADHD among its classifications and origin. Entrepreneurs conduct effective planning and execution which can adversely provoke ADHD symptoms. Consequently, some entrepreneurs with ADHD may not always consider the consequences of their actions. Recent studies did not show any concrete evidence that ADHD can increase or decrease the likelihood of one becoming an entrepreneur (Lerner et al., 2018). Interestingly, Lerner et al. (2019) found by using regression analysis that people in their study with an ADHD diagnosis demonstrated especially elevated entrepreneurial intentions.

Individuals with ADHD were found to be 1.7 times more likely to possess entrepreneurial goals (Lerner, Verhei, & Thurik, 2019). They also showed significant correlations between hyperactivity and entrepreneurial intention ($r = <0.20$) including narcissism and ADHD ($r = 0.23$) which is a significant positive relationship between entrepreneurial action and an ADHD diagnosis (Leung et al., 2020). Further research shows that there is a positive relationship between hyperactivity and entrepreneurship ($b = 0.42$, $p < .01$). However, a significant relationship between entrepreneurial intention and inattention did not exist ($b = -0.07$, $p = 0.36$). Therefore, research supports the notion that people with ADHD can successfully manage their own business. Apart from ADHD, other personality disorders can be present among entrepreneurs, such as Narcissistic Personality Disorder (NPD) as described below.

Narcissistic Personality Disorder (NPD)

Yu, Wang, Zeng & Shi (2020) noted that beginning more than one hundred years ago, narcissistic traits began to be recognized. Narcissists may perceive themselves as more intelligent than others and possess significant self-confidence in their skills (Yu et al., 2020). In general, narcissism can be considered an attribute that involves an inflated interpretation of oneself, a feeling of grandiosity, and substantial self-love (Leung et al., 2020).

Narcissistic Personality Disorder (NPD) might include traits such as conceited behavior and a belief of self-importance. Narcissists may exhibit an expectation of awards, lack sympathy, and misjudge their skills (Leonelli, Ceci, & Masciarelli, 2018). Also, other components can include manipulation, dominant behavior, and the need for power and superiority (Wu, Wang, Lee, Yu, & Guo, 2019). Therefore, key components of NPD involve a feeling of grandiosity, love of self, and an inflated self-image (Wu et al., 2019). On the other hand, NPD may also include positive attributes such as wanting to improve society and taking risks to make a company successful. Considering the positive aspects, we can opine that a relationship exists between narcissism and entrepreneurship. In this regard, culture may play a part and should be taken into account. In a recent study, Leung et al. (2020) revealed that a negative relationship apparently exists between narcissism and entrepreneurial intention among Chinese university students. It is therefore necessary to factor culture into entrepreneurial environments when narcissism is studied.

Not surprisingly, narcissists can be attracted to leadership positions and can significantly impact their businesses (Blair, Palmieri, & Paz-Aparicio, 2018). Personality characteristics such as narcissism can strongly influence intentions and motives. These areas can negatively or positively impact the organizational structure and the organizational culture of a business (Baldegger & Furtner, 2017). Those with high levels of narcissism might be motivated to seek attention or to manipulate people. However, narcissistic people may also demonstrate distinctly positive traits such as finding potential opportunities and having the drive to accomplish goals to improve themselves. Furthermore, narcissists tend to believe that they will outperform others and establish self-efficacy for personal reasons (Baldegger & Furtner, 2017).

According to Leonelli, Cedi, and Masciarelli (2018), narcissistic traits might be significant among some entrepreneurs. Entrepreneurs with NPD could overstep boundaries, and yet may develop into successful leaders. Leonelli et al. (2018) found that the relationship between narcissism and innovation showed nonlinear results in their research. Hence, high amounts of narcissism negatively impacted innovation in the organization; however moderate levels of narcissism also include increased levels of innovation (Leonelli et al., 2018).

Minimal research exists to show relationships between narcissism and leader development outcomes (Blair, Palmieri, & Paz-Aparicio, 2018). However, narcissism can also negatively impact the effectiveness of growth, and the Narcissistic Personality Inventory (NPI) is negatively related to overall leader development that is consonant with negative interaction with peers (Blair et al., 2018). The researchers also linked communication among peers to identify narcissistic propensities. Narcissists could thus negatively impact the organization indirectly by not engaging effectively with peers. Therefore, narcissists may want to reflect on their negative behaviors including rash decision-making and accept feedback from their consequences.

Narcissism can be known for its cognitive and motivational traits. However, Liu, Yong, Li, Hao, and Zeng, (2019) noted that motivation, rather than cognition, could be emphasized more in the organization. Thus, narcissists may be more motivated to maintaining their superiority. Fortunately, narcissists can possess positive qualities such as affirmations and accepting positive feedback. Consequently, narcissists show high self-esteem but can also demonstrate fragile self-esteem (Liu et al., 2019). The authors specified that based on their

research, narcissists tend to struggle with restarting a failed business when social costs may be involved. However, constructive social support might bolster their success in their entrepreneurial endeavors (Liu et al., 2019).

Dyslexia

Limited research can be found that discuss entrepreneurs with dyslexia personality disorders. Dyslexia is perhaps one of the most well-known childhood mental illnesses. Franks and Fredrick (2013) noted that dyslexia reduced mental processing and included an inferior capacity to process knowledge. An individual with dyslexia may experience challenges with spelling and reading which can impact executive processing of the brain. Yet people with dyslexia can also exhibit various talents and demonstrate an average-to-above average intellect. Strengths may include the following: innovation, increased creativity, a solid mechanical ability, and spatial ability (see Table 1 above).

Dyslexia was first discovered during the 1890s and can be hereditarily inherited and therefore seen as genetic blindness (Franks & Fredrick, 2013). The disorder may be considered unfavorable by some people, but dyslexic individuals might also show strengths in business startups. Reasons for this might include both negative and positive skills for dyslexics starting their own business. The negative motivation for dyslexics building a company may include their struggle to find support to succeed, thus drawing empathy (Logan, 2013). However, dyslexics can develop significant stress and burnout from working under a demanding supervisor.

Interestingly, many dyslexics choose entrepreneurship due to their effective coping skills and strengths (Logan, 2013). Additionally, small-business owners show strengths in forming a business such as originality, allocation, and communication. Firstly, dyslexics with originality can observe matters others cannot see. Secondly, dyslexics may be able to delegate effectively. Lastly, dyslexics might possess excellent communication skills and team development, and produce creative solutions for organizational success. Their interest might involve alternative skills utilized in their childhood for applying entrepreneurial efforts (Bowers, 2007). Subsequently, dyslexics can be motivated to pursue potential entrepreneurship opportunities.

Consequently, people who struggle with reading and writing seem to apply other strengths developed in their lifetime. Careers in engineering, fine arts, and the medical field could be considered prime examples (Halfpenny & Halfpenny, 2012). Dyslexics are also often found in the field of entrepreneurship in the United Kingdom. Halfpenny and Halfpenny (2012) indicated that 300,000 dyslexics exist in the United Kingdom alone and tend to create their own businesses more frequently than business owners without dyslexia.

Logan (2013) noted that dyslexics tend to display right-brain skills which generate our levels of creativity. This study found that 35% of entrepreneurs in the United States experience dyslexia, while only 20% of entrepreneurs across the Atlantic in the United Kingdom exhibit this challenge. The research findings accounted for this anomaly due to the differences in the educational systems in the respective countries. Some famous people with dyslexia include the following: Muhammad Ali, Albert Einstein, Jim Hendrix, and Steven Spielberg (Halfpenny & Halfpenny, 2012). Additional examples can be found below in Table 2. Weaknesses may include

areas such as low self-esteem, poor literacy skills, and a disdain for a structured environment. Unfortunately, not all dyslexics will be successful entrepreneurs and may need to find an alternative occupation. (Logan, 2013). Bowers (2007) noted that dyslexics can be fascinated about starting their own company and indicated that dyslexics who overcome difficulties in life developed compensatory expertise.

THE IMPACT OF THE COVID-19 PANDEMIC

As if entrepreneurs do not have enough stress to contend with, COVID-19 has created hyper-stress for many entrepreneurs as some of the usual stressors have become even more challenging, while additional new stressors have changed “business as usual” into day-to-day survival for many small-business owners. Just how many small businesses have closed due to COVID-19 is uncertain, but a survey conducted in early April 2020 by Main Street America and reported by CNBC estimated that as many as 7.5 million small businesses could close if the disease is not stopped (Iacurci, 2020).

With so many instances of small-business closures, determining an accurate estimate is challenging. For example, a widely reported Yelp study found 163,735 businesses that were reported to be open in April 2020 closed by September 2020 (Kvue.com, 2020). Another study conducted by the University of California-Santa Cruz found 317,000 businesses closed between February and September 2020, which is an estimated 1,500 closures of small businesses per day (kvue.com, 2020). However, neither study indicates whether these business closures were temporary or permanent, nor do they account for typical year closures (Kvue.com, 2020).

Current pandemic stressors include keeping employees and customers safe from COVID-19, complying with constantly changing state emergency regulations (such as outdoor dining, indoor dining, wearing masks, cleaning and sanitizing, and social distancing), financial pressures, and ultimately, being able to keep the small business from permanent closure. Business owners also face the challenge of having customers comply with safety measures while some customers strongly object to compliance. This sometimes results in an employee being asked to play “traffic cop” when customers choose to ignore one or more of the emergency regulations. Violent conduct has also occurred as widely reported in news media. This puts the employee in an unfair situation and may require the business owner to step in to enforce the COVID-19 compliance requirements.

Table 1 above listed the positive traits associated with dyslexia, Narcissistic Personality Disorder (NPD), and Attention Deficit Hyperactivity Disorder (ADHD) that can provide coping skills for the small-business owner who is stressed and afflicted by them. These traits include the willingness to take risks, resilience, innovativeness, a driven attitude, and the ability to observe issues from perspectives most others might not experience.

As evidence of positive traits in people with psychological disorders, Table 2 below highlights some of the better-known entrepreneurs and successful corporate CEOs who cope with one of the three identified disorders—dyslexia. With small-business owners significantly impacted by the COVID-19 pandemic, these beleaguered entrepreneurs must take advantage of

every skill, ability, and positive psychological trait in their arsenal to help them guide their small businesses through this global challenge of the COVID-19 pandemic.

TABLE 2
Entrepreneurs with Dyslexia

John Chambers	CEO, Cisco Systems
Paul Orfalea	Kinkos Founder
Alan Meckler	CEO, Jupiter Media
Charles Schwab	Founder, Charles Schwab Financial Services
Richard Branson	The Virgin Group (400 companies)
Ingvar Kamprad	Founder, IKEA
Barbara Corcoran	Founder, The Corcoran Group Real Estate
Daymond John	Founder, FUBU

Source: Halfpenney & Halfpenney (2012).

FUTURE RESEARCH

Future research could examine whether persons with the psychological disorders identified consistently exhibit the positive traits inherent in these maladies through cross-sectional, and even longitudinal studies. These positive traits could then be fostered and further developed even beyond the pandemic. Society could thus benefit from a larger pool of successful entrepreneurs. Significantly, these persons could be enabled and channeled to develop career opportunities as entrepreneurs, leaders, and role-models. They could thus overcome their adverse experiences as employees in organizations where their peers tend to focus on the negative aspects of their perceived—and often hereditarily derived—psychological disorders.

CONCLUSION

As the adage goes, “when life gives you lemons, make lemonade!”. Certain psychological conditions in individuals may be perceived negatively, or as glaring weaknesses. However, many entrepreneurs with these conditions need not be saddled with negativity. Rather, they could develop a positive attitude and marshal creative means to overcome these conditions by invoking and applying the often-latent positive traits of these maladies. In fact, many such entrepreneurially minded, psychologically challenged individuals are often found to be creative problem-solvers as they consistently apply their positive attributes. This paper demonstrates that some psychological disorders typically considered negatively—perhaps even as debilitating—can be channeled successfully to produce positive results. Aspiring and practicing small-business owners with psychological disorders such as Attention Deficit Hyperactivity Disorder (ADHD), Narcissistic Personality Disorder (NPD), and Dyslexia can apply compensatory positive traits to overcome the drawbacks. Studies show that many positive traits associated with these psychological disorders can help small-business owners to succeed through operationalizing these compensatory traits. This may even equip them to navigate the added stress and challenges through the COVID-19 pandemic.

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SMALL BUSINESS COMMERCIAL LEASE RENEGOTIATION STRATEGIES FOR POST-PANDEMIC CASH FLOW SUSTAINABILITY AND RISK MITIGATION

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ABSTRACT

The COVID-19 pandemic-induced global lockdowns of populations and businesses have resulted in significant declines in in-store consumer spending. This has created an impairment of net cash inflows for many retail businesses, especially small businesses and entrepreneurial ventures where net margins are thin. These lockdowns likewise have adversely impacted small business cash flows throughout local and global supply chains. Many of these companies have been able to reduce variable costs, but fixed costs remain. In an October 2020, Alignable Pulse Poll of 7,726 tenant small-business owners, 34% of the respondents indicated that they may be unable to pay their rents, representing one of their primary, contractual, and long-term fixed costs. State and local governments in 32 out of 50 states have provided eviction protections for commercial tenants, as have the governments in the U.K., Germany, Canada, and Mexico, among others, but those protections are limited and short-term. Small business owners are no longer able to ignore low-likelihood, high-risk events. They now need to implement financial management best practices that are critical to business resilience and sustainability, considering the COVID-19 re-shaping of the issues they will face in the near- and long-term future. This paper presents small business tenants' risk-mitigation negotiating strategies in renegotiating existing commercial space leases, focusing on lease-based cash management. Using an integrative-collaborative negotiating approach, small business owners, often finding themselves at a leverage disadvantage, can utilize key negotiating skills in developing an effective strategy in renegotiating lease terms with landlords. This study provides win-win, integrative strategies for commercial lease provisions related to the following: rent scheduling; use, assignment, and subletting clauses; relocation and cancellation clauses; payment currency; percentage rent provisions; and the leverage implications of the use of the legal doctrines of force majeure, impossibility, and frustration of purpose in negotiating commercial leases.

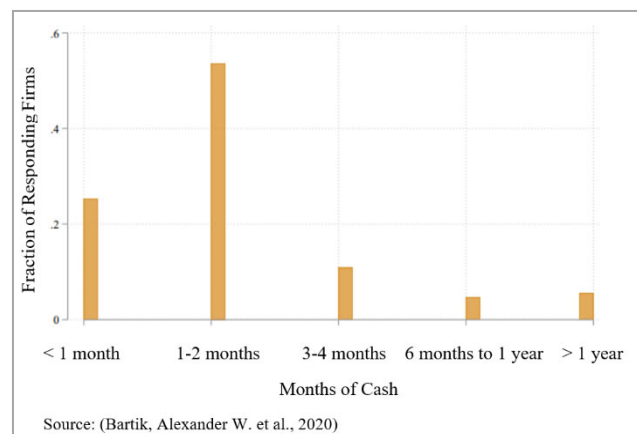
Keywords: COVID-19 pandemic, commercial lease, valuation, negotiation, cashflow

INTRODUCTION

Global population and business lockdowns to control and ultimately curb the Coronavirus (COVID-19) pandemic have significantly and adversely impacted in-store consumer spending, creating an impairment of net cash inflows for retail businesses, especially small businesses where net profit margins are thin. Similar cash flow pressures exist in small businesses throughout local and global supply chains (Juergensen, Guimón, & Narula, 2020).

A survey conducted by the National Bureau of Economic Research between March 28 and April 4, 2020, showed the fragility of U.S. small business cash positions in the early stages of the Covid-19 pandemic health crisis. From a sample size of more than 5,800 small businesses surveyed, with over 82% having less than 9 employees (and all having less than 500 employees), nearly one-fourth had a cash balance covering less than one month of expenses, with one-half having just enough cash to meet one-to-two months of expenses (Figure 1).

FIGURE 1
Histogram of Approximate Months of Cash Available (N=4,184)



Source: Bartik et al. (2020).

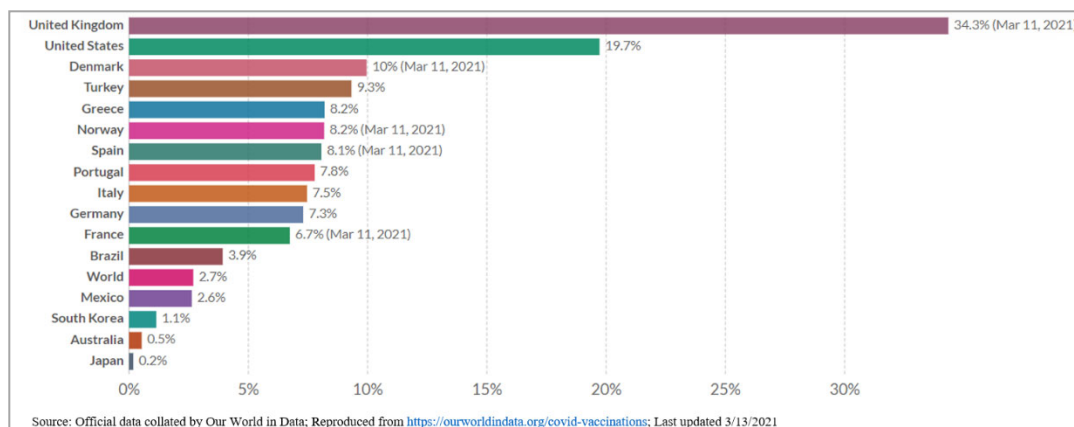
In an October 2020 Alignable Pulse Poll (Alignable Research Center, 2020) of 7,726 U.S. tenant small business owners, 34% of the respondents indicated that they may be unable to pay their rent, one of their primary, contractual, and long-term fixed costs. State and local governments in 32 of 50 states have provided eviction protections for commercial tenants, as have the governments in the U.K., Germany, Canada, and Mexico, among others, but they are short-term and limited.

Research shows that small business owners and founder-manager entrepreneurs (Brown, 2017), especially nascent entrepreneurs (Forbes, 2005), tend to be more optimistic than either non-founder managers or those employed by small- and medium-sized enterprises (SMEs) and entrepreneurial ventures. This optimism may lead to the expectation of a short-term economic impact from the pandemic.

However, counterbalancing this optimism are three areas of uncertainty for small businesses: delayed and uneven Covid-19 vaccinations, the continued emergence of Covid-19

virus variants, and an uncertain post-pandemic consumer psychology. Regarding vaccinations, the first dose of the Covid-19 vaccine was administered in the U.S. on December 14, 2020. As shown in Figure 2, most of the world is slow to vaccinate due to shortages, especially in Europe, and due to resistance to belief in the efficacy and/or relatively harmless side-effects of the vaccine. Most health experts believe that a return to economic normalcy will occur only when herd immunity is reached. Yet, to date, the World Health Organization (WHO) has not released the percentage of the population that needs to be vaccinated to achieve herd immunity. The global management consulting firm, McKinsey & Company (2021), has identified six possible risks challenging a rapid global delivery of Covid-19 vaccines: raw-material constraints in production scaling; quality-assurance challenges in manufacturing; cold-chain logistics and storage-management challenges; increased labor requirements; wastage at points of care; and IT challenges (Agrawal, Azmi, Heller, Kumar, Mysore, Patel, Sabow, Singhal, & Truesdale, 2021).

FIGURE 2
Share of Total Country Population That Received At Least One Vaccine Dose



Source: Our World in Data (2021).

Note: May not be fully vaccinated if multiple doses required; 2/12/2021 data unless otherwise noted.

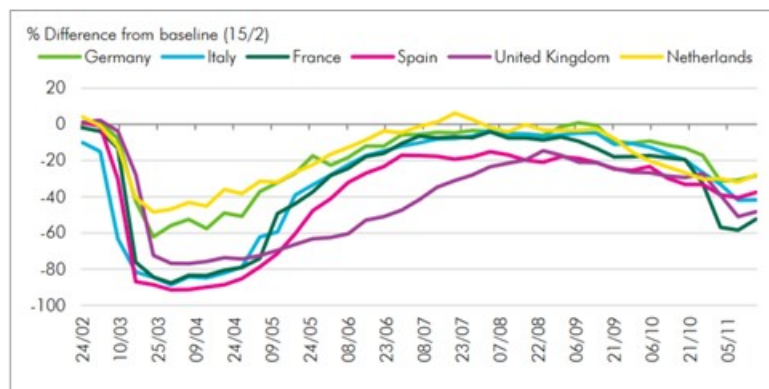
Even if the pace of global vaccinations accelerates, concern exists that the economic impact of the Covid-19 health crisis may persist long-term. In their 2021 annual letter, Bill and Melinda Gates predicted that within the coming year, only one in five people in low- and middle-income countries will be able to receive Covid-19 vaccinations (Gates, 2021). This forebodes a long-term pandemic-induced economic impact. A recent study by the International Chamber of Commerce shows that uneven global concentrations of vaccinations will disrupt international supply chains to result in global losses in the \$1.5 to \$9 billion range--half of which will occur in the world's richest countries (ICC-International Chamber of Commerce, 2021).

Another uncertainty complicating a short-term economic disruption is whether existing vaccines can immunize against emerging virus variants and, if not, whether researchers are able to keep pace by creating new or booster vaccines (Su, Wang, & Jiang, 2021). In the early stages of the pandemic, researchers detected signs of Covid-19 virus mutations (Vankadari, 2020), with unclear implications. But vaccine developers focused on the initial form of the Covid-19 virus as its target, with Pfizer-BioNTech, Moderna, and Johnson & Johnson having vaccine-development

successes in early 2021 after a year of R&D efforts. Soon after the vaccine approvals, scientists continued to find Covid-19 virus variants (Chen, Li, Wu, Geng, & Mao, 2021). Keeping pace with the discovery of these variants has been challenging (Williams & Burgers, 2021), with some applying advanced technologies, including artificial intelligence techniques (Garvin, Prates, Pavicic, Jones, Amos, Geiger, Shah, Streich, Gazolla, & Kainer, 2020).

The third uncertainty facing small business owners is whether the pandemic-related change in consumer psychology will be temporary or have impactful permanency. During the pandemic, state and local governments in 92 countries ordered lockdowns to control population behavior, resulting in a dramatic consumer shift from in-store to online buying. Many of those lockdowns lasted months, with some countries having multiple lockdowns. CBRE EMEA research (CBRE, 2021) shows the cyclical impact of government-mandated lockdowns on retail and leisure mobility in selected European countries (see Figure 3). The consequences are revealed in the CBRE EMEA forecasts: commercial vacancy rates in Europe are expected to continue to rise to a high in Q2 2022, with commercial rents declining to a low in Q1 2022 and returning to pre-pandemic levels only in 2025. Permanent shifts to continued remote work environments may delay recoveries.

FIGURE 3
Retail and Leisure Mobility: Select European Countries



Source: CBRE (2021).

Although the lockdowns have been a factor in modifying consumer behavior and will have both short- and long-term consequences, research is revealing that the major impact on consumer demand is on consumer psychology, with one study showing that out of an overall 60% drop in consumer traffic, only seven percentage points of that drop was a result of legal restrictions (Goolsbee & Syverson, 2020). Fear of infection was the major factor driving the decline in consumer traffic, and it started before lockdowns were mandated.

The following sections provide insights and strategies for small business owners to mitigate lease-based cash flow impairment risks.

ADDRESSING THE BURDEN OF FIXED CASH FLOWS

Many small business owners facing the adverse economic conditions brought by the Covid-19 pandemic are in positive cash balance survival mode. To address the in-store consumer spending disruption, small-business owners have been able to reduce variable costs, mostly through reductions in product-related purchases, limited employee hours, or outright layoffs. Yet, fixed cash flows, normally large and contractual, remain. The legal and financial implications of not meeting those fixed cash flow obligations are significant. For many small business owners, lease rent is their major, contractual fixed cost, with leases committing lessees to a commercial space for multiple years.

For the analysis that follows, it is assumed that the lessor and lessee are gain-seeking and risk averse, that their commercial leases are legally binding contracts that define the terms of space occupancy, and that the lease was signed without the existence of enforceable breach-of-contract defenses by either party, such as agreement under fraud, mistake, misrepresentation, duress, undue influence, incapacity, unconscionability, or incapacity (Perillo & Calamari, 2009).

The following sections explore three potential sources of lease contract relief: common law doctrines, existing contract clauses, and renegotiation of the terms of the existing lease contract. The following question is at the core of these areas of relief: Could small business owners have anticipated the possibility of a Covid-19-type pandemic and its global impact at the macroeconomic and microeconomic levels and have negotiated sufficient risk mitigation clauses into their leases?

It is worth considering that since the H1N1 virus (February 1918 to April 1920) infected a third of the world's population, causing between 20 and 50 million virus-related deaths, there have been six pandemics: H2N2 (1957-58), H3N2 (1968), SARS-CoV-1 (2002-2004), A/H1N1 (2009), Western African Ebola (2013–2016), MERS-CoV (2014). Only the H2N2 and H3N3 pandemics resulted in more than 100,000 deaths worldwide and none brought the high level of death rates, global lockdowns, and economic disruptions as did the Covid-19 pandemic.

At the time of the negotiation leading to the original lease terms, assuming that the commercial lease negotiation and agreement took place prior to the Covid-19 pandemic, a small business owner's construal of their business environment, current and future, likely included their consideration of unanticipated and normal course-of-business conditions and risks. However, it is unlikely that the lessor and lessee anticipated a Covid-19-like pandemic and its impact, even considering the seven pandemics that occurred in the last 103 years, with only one of them being a serious killer.

Not anticipating and mitigating the risks of a pandemic with once-in-a-hundred-years impact is both reasonable and aligned with Simon's bounded rationality theory (Simon, 1955, 1990) that the reliance, by economic and management theories, on a perfectly rational human being (*homo economicus*) having access to perfect information that always leads to an optimal decision is misleading in its depiction of real-world decision-making. The information a small business owner/lessee accesses as relevant in preparing for, and engaging in, a lease negotiation is bounded by that decision-maker's perceived environment at the time of the decision (Cristofaro, 2017).

Elevating the challenge facing small business owners/lessees in their lease negotiations is the likelihood that their respective bounded information sets may be asymmetric (Bazerman & Chugh, 2006), possibly due to differences in willingness or ability to expend time and resources in acquiring information (Kreps, 1990). Asymmetric information sets are likely to result from the commercial space market being the primary market in which lessors apply their business model, while lessees deal in that market only sporadically and on an as-needed basis. Lessees and lessors might also use different heuristics—cognitive (Bazerman & Moore, 2012) and/or judgmental—that would lead to less-than-optimal decisions by either or both parties.

RELIEF THROUGH COMMON LAW DOCTRINES

Globally, common law doctrines support the obligation of all parties to a contract to honor the promised performance specified in the terms of a contract. This is a key leverage point for either party, as there is a strong legal standard for courts to enforce performance or secure restitution for damages from non-performance. In the United States, this standard is not codified as a specific law, but implied as a good faith performance obligation (Markovits, 2014).

Internationally, good faith performance on contracts is enforced under a more formal *pacta sunt servanda* doctrine (Latin: agreements must be kept) originating in the 13th century CE (Gamer, 2004; Hyland, 1993). For example, the current German Civil Law Code (2020), *Bürgerliches Gesetzbuch* (Gesetzbuch, 2020), provides the guidance: “By virtue of the debt relationship, the obligee is entitled to demand performance from the debtor,” with debt being used in a generalized context meaning any legal obligation of contract performance. Other countries, e.g., Brazil (Filho, 2013), France (Article 1134), and Portugal (Article 227), have followed the good faith concept embodied in the *pacta sunt servanda* doctrine found in the civil code of Germany (Section 241). The Chinese Civil Code (CCL, Article 8) also addresses good faith as a binding duty to perform on a contract and its implication of honesty and trustworthiness extends through pre-contract negotiations, the formation of the contract, and performance according to the terms of the contract (Hsu, 2007).

Although the common law doctrine of good faith binds parties to performance, common law also allows legal modifications or total relief from performance on contracts without either party having to rely on one or more clauses therein. Attaining relief, however, creates legal costs, and the legal standards required to prove that the conditions allowing relief are high.

The common law doctrine of impossibility allows relief on proof that, because of changed circumstances such as a force majeure event or new legislation, performance on the contract becomes objectively impossible (Benoliel, 2020). Force majeure, often found cited specifically in commercial leases, refers to an extraordinary event, characterized as an Act of God, that is unforeseeable and unavoidable, and that frees the parties to the contract from their duty to perform. Impracticability is a related and somewhat relaxed version of the doctrine of impossibility in that it requires only that the difficulty of performance be significant enough to render that performance impractical, although not impossible (Wright, 2004). The doctrine of frustration of purpose relates to an event occurring such that, if the parties to the contract had known of the event prior to the signing of the contract, both parties would have deemed the

purpose of the contract unrealistic. These U.S. common law doctrines, with some differences at the state level, require that the events justifying the relief were unforeseeable and beyond the parties' control at the time of signing the contract.

RELIEF THROUGH CONTRACT CLAUSES

Lease contracts may include clauses that parties to the contract can exercise for relief. Although most commercial leases will have a force majeure clause, because of the lack of sustained and adverse economic impacts resulting from pandemics after that of 1918, the clause will likely not include a viral pandemic as a force majeure event. However, it may include the adverse economic impact resulting from government mandates, such as lockdowns. Force majeure clauses typically apply to relief of actions by the parties to the contract but not to the financial obligations of each party created by the terms of the contract.

Lease downsizing clauses offer some cashflow remedy to the small business owner, but these clauses have minimum space limitations. Moreover, downsizing may not be the objective of the small-business owner navigating through the pandemic, as the eventual upsizing space to get back to normal may not be available at the same or another preferred location.

Lease cancellation clauses (or contract break options for the lessee) allow either party, under limiting conditions, to be relieved of contract performance. These clauses typically come with an earliest termination date prior to the end of the lease term that may not be aligned with the timing of the small business owner ceasing operations and waiting out the pandemic without a cashflow burden.

These relief clauses come with a cost. Lessors will charge higher base rents for taking on the risk of the inclusion of downsizing and lessor-friendly cancellation clauses in a lease (Vimpari, 2018), so these clauses may be expensive for the small-business owner.

RELIEF THROUGH RENEGOTIATION (REGEARING)

The small-business owner will likely face lessor resistance in attempting to renegotiate a lease, especially to lower rent. Renegotiating (also called regearing) the terms of an existing lease contract brings into play the power and leverage dynamics of the lessor and lessee.

The Process Frame

Negotiating style, or process frame, has an impact on negotiating outcome. Although there are variations, most professional negotiators have an integrative-collaborative process frame or a distributive-competitive process frame (Griessmair & Druckman, 2018).

A distributive-competitive process frame, also called a win-lose, zero-sum, or claiming value style, is one in which the negotiator sees a fixed "pie" of value and sets out to get as much of that pie as possible. For some small-business owners, this process frame is easy to adopt as their continued viability in their marketplace is based upon fierce win/lose sales competition. This competitive mind-set can carry over into all deal-making, including a lease negotiation and,

potentially, a lease renegotiation. For a small-businessperson, an “I need to win to survive, therefore, you need to lose” mindset and strategic approach to each negotiation is a misplaced survival-mentality frame.

An integrative-collaborative process frame is most often associated with what is also called “win/win bargaining” or “interest-based bargaining.” Integrative bargaining, with its potential for expansion of that “pie” of value in a negotiation, is most powerful in multi-issue negotiations, where strategic concession trade-offs are possible. This process frame typically leads to win/win agreements of value for all parties (Bazerman, Maglioni, & Neale, 1985).

The Internal Frame

Frames can take other forms during a negotiation, and the ability to create and articulate frames within a negotiation is an effective and powerful skill. Frames can be internal or external. Internal frames are characterized as a negotiator’s *frames of mind*, for example, the mental representations of the issues at stake in the negotiation, the objectives set for the negotiation, the positions taken during the negotiation, and the consideration of the interests of the other parties in the negotiation.

An important internal frame is the perception by the small-business owner of the leverage they bring to a negotiation. Leverage has been categorized as positive, negative, and normative (Shell, 2006) and, among many definitions in the literature, defined as “power rooted in consequences” (Kirgis, 2014). Positive leverage exists when each party has something the other party wants, such as space to rent by the lessor, and a high-quality tenant by the lessee. Negative leverage is harm-based, where one party can harm the other party and the focus of the negotiation is to prevent that harm. Normative leverage relies on standards or norms, e.g., market data or laws, to support negotiating positions.

Power dynamics in complex negotiations are especially challenging for entrepreneurs and small-business owners, where skills in managing financial, human, and information resources rather than negotiating are most critical to day-to-day small business and entrepreneurial problem-solving and, ultimately, survival (Aikens & Peterson, 2017).

The power of leverage brought to a negotiation is as much perception as reality. Small business owners and entrepreneurs often underestimate their leverage, especially when negotiating with larger organizations. They identify with small professional and social groups (Powell & Baker, 2014). They often interact with much larger customers, customer groups, and supply chain counterparts, with relative size often measured as number of employees, sales and profits, and financial resources, among others. Size differentials are often conflated with status, further reinforcing small business power inferiority (Castellucci & Ertug, 2010). This self-perception of disadvantageous relative size and power is subjective, based more on psychological experience than the real business dynamics in play in any business negotiation (Vignoles, Regalia, Manzi, Golledge, & Scabini, 2006).

Self-perception is dynamic and based on the spectrum of the routine and often stressful activities within the organization (Coupland & Brown, 2012). It evolves through the experience of leading a company through its life-stage events--these include achieving profitability,

acquiring key customers, R&D successes, and securing professional funding (Tripathi, Zhu, Jacob, Frese, & Gielnik, 2020). Small-business owners can use these positive events to evoke the self-identity confidence (Cardon, Gregoire, Stevens, & Patel, 2013) that will drive success in renegotiating their leases.

The External Frame and Norm of Reciprocity

External frames are how negotiators present their mental frames and positions on issues, verbally, in writing, and with body language, to their counterparts in the negotiation (Carnevale, 2008). These frames have a powerful influence on acceptances of positions and willingness to make concessions.

Framing is the central thesis of Prospect Theory, the seminal research of Kahneman and Tversky (1979) on the behavioral psychology of how individuals make choices based on whether those choices are framed as a prospective gain or loss. In developing prospect theory, Kahneman and Tversky (1979) found that the critical value drivers for decision-makers are changes in utility rather than final outcomes, that individuals have an asymmetric value perspective on gains and losses (“losses loom larger than gains”), and that an individual’s utility from their choice is based on their expectation of gain or loss from a reference point.

Insights drawn from Prospect Theory provide guidance to small-business owners in developing a flexible lease renegotiation strategy as well as a sustainable strategy for future negotiations. The small-business owner will likely be negotiating with a lessor who is subject to some degree of status quo bias toward the current terms of an existing legally-binding lease, their reference point. Any change in those terms will be perceived by the lessor as creating the risk that the revised terms will result in a loss to the lessor relative to the original terms. The small-business owner can frame the renegotiated terms of the lease as a long-term gain for the lessee, as represented by an increase in their property value through an exchange of concessions.

The integrative-collaborative negotiating process moves forward, relying on the norm of reciprocity as it relates to concession-making (Mislin, Boumgarden, Jang, & Bottom, 2015). One party offering a concession on one issue expects a reciprocal concession offer from their negotiating counterpart on another issue. These exchanges can create value. For example, on Issue X, Negotiator A gives a concession that is of low cost to them but of high value to Negotiator B, while on Issue Y, Negotiator B gives a concession that is low cost to them but of high value to Negotiator A. That exchange creates value that would not have been created without the reciprocal concessions.

If a lessor offers a concession to the lessee on a short-term reduction in rent to sustain the lessee’s business during pandemic-related business disruption, the lessor will expect a reciprocal concession of value from the lessee. Areas of reciprocal lessee concession-making comprise more restrictive terms of the lease cancellation clause, the use, subletting, and assignment clause, the relocation clause, and the tenant improvement allowance, with the lessor agreeing to refund to the lessor a portion of that allowance at the end of the lease term. None of these concessions would adversely impact lessee short-term cashflow. If the lessor/lessee relationship is international in nature and the rent payment is in the lessee’s national currency, cash payments

from the lessee to the lessor can be shifted to the lessor's national currency to alleviate the lessor's exchange rate risk.

Rent increases during the lease are contractual and are an important element in forecasting the lessor cash flows that are used in leased property valuation models (covered below). Slight increases in these growth rates can provide a value-based concession for lessors.

Percentage rent clauses are often included in retail space leases and can be a critical lessor-valued concession by lessees. With this clause, a percent rent is added to the lease base rent after an annual revenue breakpoint is reached. For example, if a lease base rent is \$1,000 per month and the percentage rent is set at 6%, then the natural breakpoint above which the percent rent is added to the base rent is calculated as $(\$1,000 \times 12) / 0.06 = \$200,000$. During each annual term of the lease, if the lessee's revenue exceeds \$200,000, a percent rent of 6% of the excess revenue will be added to the annual base rent.

Small business owners, focused on conserving cash during the pandemic-related business disruption, during which time revenues likely will have remained or dropped below that natural breakpoint, could offer a percentage rate concession to, say, 6.5%. This would lower the natural breakpoint to \$184, 615 $[(\$1,000 \times 12)/0.065]$ with the percent rent at 6.5% of the annual excess. The small business owner may be willing to accept higher percent rents in the future in exchange for lower short-term rents during its pandemic-related survival stage.

Commercial Lease Valuation Models

A critical interest of the landlord is to increase, or at least maintain, the value of the leased property. That value is embodied in the discounted net cash flows to the lessor which includes the base rent net of any expenses paid by the lessor depending on the type of lease: gross, modified gross, or net. Incentives provided by the lessor to the lessee also provide value (Jefferies, 1994). They could include the initial month's free of rent, a tenant improvement allowance, rent capping, and a put option on additional space. Those values are reflected in upward adjustments by the lessor in base rents.

Each individual lease has its own risk-and-return characteristics, as does the lease portfolios of multi-tenant properties. Those values are represented by the conventional discounted cashflow (DCF) valuation model which can be used by both tenants and landlords. Various lease and lease property DCF valuation models have emerged over the years with varying perspectives on how to represent return and risk in the model: Real Value (Wood, 1986); Equated Yield (Marshall, 1976); Real Value Hybrid (Crosby, 1986a; Crosby, 1986b); Rational (McIntosh & Sykes, 1983); and Modified Rational (Baum & Shi Ming, 1985a; Baum & Shi Ming, 1985b).

Mandell (2002) uses a discounted perpetual cash payments approach in valuing the property asset, with the assumption that net cash inflows will exist in perpetuity (Equation 1). Mandell noted that the model was first introduced by Brown in an unpublished case and then applied by Brown (1995) to rental market incentives.

$$V_0^{LP} = \left(R_0^{LP} \frac{1-(1+r_{LP})^{-p}}{r_{LP}} \right) + \frac{R_0^{LP} (1+g_1^{LP})^p}{(1+r_{LP})^p} \left(\frac{1-(1+r_{LP})^{-p}}{r_{LP}} \right) + \frac{R_0^{LP} (1+g_2^{LP})^{2p}}{(1+r_{LP})^{2p}} \left(\frac{1-(1+r_{LP})^{-p}}{r_{LP}} \right) + \dots \rightarrow \infty \quad (1)$$

subject to (1) both $r_{LP} > g_n^{LP}$ for all lease portfolios and all lease periods and (2) the information set available at $t = 0$, and where

V_0^{LP} = current value to lessor of lease portfolio, LP,

R_0^{LP} = rent-based net cash flow in the current time period 0 for lease portfolio, LP,

p = period (number of years) of fixed rent,

g_t^{LP} = expected property value-based growth rate of rent from p_n to p_{n+1} ,

n = number of leases in the lessor's lease portfolio,

r_{LP} = is the rate of return (capitalization rate), which includes the lessor's weighted average cost of capital and a diversified lessees-related risk premium that is expected to be generated on the property's lease portfolio

This “ground rent” model can easily be modified to value a specific lease of a finite period, as shown in Equation 2.

$$V_0^L = \left(R_0^L \frac{1-(1+r_L)^{-p}}{r_L} \right) + \frac{R_0^L (1+g_1^L)^p}{(1+r_L)^p} \left(\frac{1-(1+r_L)^{-p}}{r_L} \right) + \frac{R_0^L (1+g_2^L)^{2p}}{(1+r_L)^{2p}} \left(\frac{1-(1+r_L)^{-p}}{r_L} \right) + \dots + \frac{R_0^L (1+g_n^L)^{np}}{(1+r_L)^{np}} \left(\frac{1-(1+r_L)^{-p}}{r_L} \right) \quad (2)$$

where

V_0^L = current value to lessor of lease, L,

R_0^L = tenant rent in the current time period 0 for lease L,

p = period (number of years) of fixed rent,

g_t^L = expected growth rate of rent from p_n to p_{n+1} ,

n = period number in which the expected rent growth rate is applied,

r_L = is the rate of return (capitalization rate), which includes a lessee-related risk premium

As both valuation equations show, a renegotiation that results in a short-term reduction in rent with a capitalized (compounded) recovery in the years following the reduction will have a slight adverse impact on the value of the lease to the lessor, but clearly not as much as a permanent rent reduction with its associated perfect value elasticity. Although a permanent rent reduction would be preferable for the lessee, that resolution would not be aligned with the purpose of the reduction, which is riding out the (hopefully) short-term pandemic-induced cashflow impairment for the small business lessor.

A permanent rent reduction would also be clearly at odds with the value-based interests of the lessor unless the lessor receives some concessions on other lease provisions that would reduce the risk of the lease to the lessor, as noted above. A reduction of the risk would result in a lower discount rate used in the lease valuation, thereby potentially offsetting the decline in—or possibly even increasing—the property value from the short-term deferral of rent. Small-business owners could negotiate, as part of the short-term rent reduction, a gradual or immediate return to full base rent based on a CDC or state or local government mandate reopening retail businesses for 100% occupancy. This would allow the small-business lessee to emerge from the economic disruption sustainably, which benefits the small-business owner/lessee and the lessor.

Elasticities of Lease Value

To analyze the sensitivities of leased property value to changes in rent terms, the following presents rent growth rate and required rate of return elasticities of lease value. Equation 2 individual lease version is used of the Mandell (2002) model for 6-, 9-, and 12-year terms. The fixed-rent periods or non-review periods are three years, so the 9-year lease would have three fixed-rent periods, with the rent during the first three-year fixed rent period being the initial rent R_0 , and the rents during the next two fixed-rent periods being $R_0(1+g)$ and $R_0(1+g)^2$, respectively. Rent growth rates are assumed to be constant throughout the lease, but the model can easily be used for non-constant growth rates, matching then-current market conditions.

An OLS estimation of value elasticities is used here after natural log conversions of both independent and dependent variables. The general form of the estimated equation, using lease value, V , as the Y value, and rent growth rate, g , as the X value, is:

$$\ln V = a + b \ln g, \quad (3)$$

where 'a' is the intercept of the characteristic line and 'b' is the slope or, in the context of this analysis, the elasticity coefficient, which can be directly estimated, as demonstrated by differentiating the estimation equation as follows:

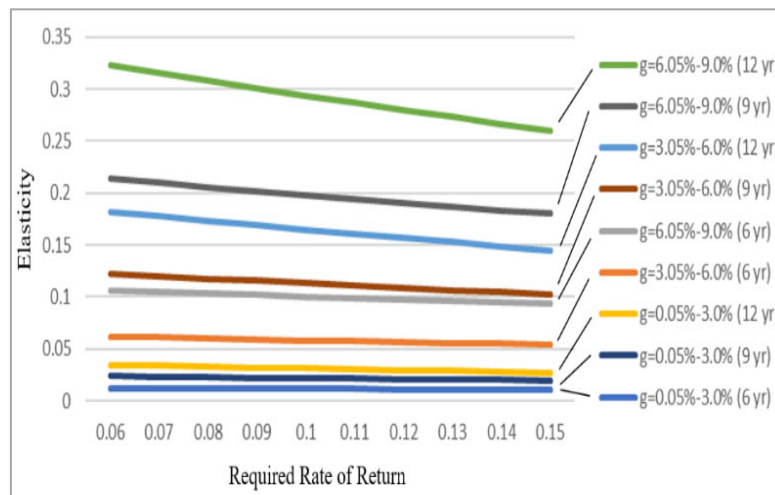
$$d(\ln V) = b d(\ln g) \rightarrow \frac{1}{V} dV = b \frac{1}{g} dg \rightarrow \frac{dV}{V} = b \frac{dg}{g} \rightarrow b = \frac{dV}{dg} \frac{g}{V} \quad (4)$$

A one percent (1%) change in 'g' results in a 'b' percent (b%) change in V. From the last equality in Eq. 4, the coefficient of elasticity depends on the relationship of the g and V variable. In the context of an OLS estimation, the elasticity varies along the linear characteristic line.

Using Mandell's (2002) lease valuation equation, the results of the rent growth rate elasticity calculations show the expected positive linear relationships, with low inelasticities ($0 < e < 1$) across all estimations (Figure 4). Low rent growth rates show low value elasticities regardless of the lease term. Rent growth rate elasticities of lease value at higher rent growth rates are more responsive to lease term as well as the required rates of return that are used as cashflow discount rates, with rent growth rate elasticities declining slightly at higher required

rates of return for given rent growth ranges. Yet, for all estimations, rent growth rate elasticities of lease value were low and in narrow ranges across all variables. A small-business owner renegotiating rent growth rates in a current or upcoming review period can use this information-based leverage: although a reduction in the rent-increase percent will have some adverse impact on the lessor's cash flow, the overall impact on the lease value would be small.

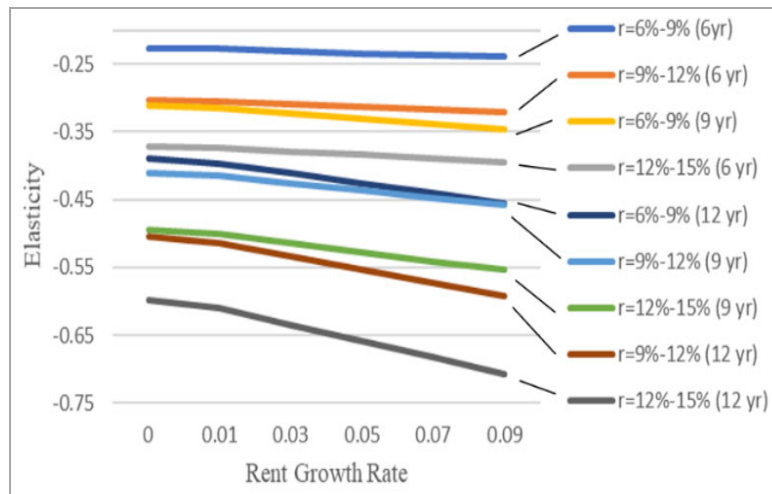
FIGURE 4
Rent Growth Rate Elasticities of Lease Value



[This derivation is based on Mandell's (2002) Lease Valuation Equation.]

Again, using Mandell's (2002) lease valuation equation, Figure 5 shows the required rate of return elasticities of lease value for different ranges of the lessor's required rate of return. The results show that longer-term leases at higher required rates of return have greater negative inelasticities, with sharp increases in those elasticities at higher rent growth rates. Conversely, short-term leases with lower required rates of return, possibly during periods of low interest rates, show low negative inelasticities with elasticity changes occurring only in narrow bands across all rent growth rates.

FIGURE 5
Required Rate of Return Elasticities of Lease Value



[This derivation is based on Mandell's (2002) Lease Valuation Equation.]

Knowing these elasticity patterns provide small-business owners and their landlords with a clearer understanding of the impact on property valuations when renegotiations occur in the context of current interest-rate levels. During periods of low interest rates, as exist currently during the Covid-19 pandemic, small-business owners can frame their temporary rent-reduction position in the context of it having a relatively minor impact on property valuation.

CONCLUSION

The 2020-21 Coronavirus (Covid-19) pandemic has provided ample proof that pandemic diseases are real, recurring, and a constant threat to the survival of small and entrepreneurial businesses. They can be severe enough to cause serious business disruptions with the real potential to inexorably take all businesses, especially small and entrepreneurial businesses, to the very brink of insolvency.

Many small-business owners facing the adverse economic conditions brought on by the Covid-19 pandemic have been in positive cash-balance survival mode. They have managed their variable cash-based costs by downsizing their workforce and reducing expenditures. Managing their fixed, contractual cash rent payments is more challenging. A clear understanding is necessary of common law doctrines guiding performance on lease contracts, with the knowledge and skills required to renegotiate the lease to relieve the lessee's cash flow pressures.

Even on a short-term basis, this will increase the likelihood that small businesses will emerge from the economic disruptions intact. They also will allow small and entrepreneurial companies to craft future leases that are more flexible in addressing the cash flow implications of the *new normal* uncertainties regarding the efficacy of vaccines against virus variants and the pandemic-related changes in consumer spending behavior. This will result in a more sustainable and resilient small business in a more challenging business world.

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PRESERVING INNOVATION AND PROMOTING WORKPLACE COLLISIONS IN THE AGE OF COVID-19

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ABSTRACT

Spontaneous and informal opportunities for workplace communication and collaboration result from intellectual ‘collisions’ in the innovation process that are well-documented. Responsive companies redesigned workplaces to foster and encourage these chance encounters that are critical to the production and nurturing of new ideas which in turn fuel innovation and entrepreneurship. In the wake of the COVID-19 pandemic, the presence of infected people presents the greatest risk to one’s health, and avoidance of that risk creates social distance—thus creating barriers to collisions. As these conditions persist, small businesses that initially responded well to remote work requirements and limited personal contact among employees are recognizing the long-term implications of such social distancing. How will we continue to create and encourage the interactions and conversations (“collisions”) necessary for innovation and entrepreneurial pursuits when faced with working from home, reduction in travel, and fewer face-to-face meetings—all of which naturally hinder informal yet valuable communication and sharing of ideas? We examine how workplaces thus impacted by the COVID-19 pandemic have hindered critical collisions of creative thought to spark innovation. We also discuss examples of how small businesses can overcome this problem through alternative means of supporting and encouraging creativity and innovation.

Keywords: Collisions, COVID-19, small businesses, workplace, creativity, innovation

INTRODUCTION

The effects of the COVID-19 pandemic on the American marketplace and business sector are difficult to overstate. In January of 2020, the United States was the largest economy in the world with a nominal GDP of \$21.44 trillion, representing one quarter of the entire world's economic production (Bajpai, 2020). Then came the pandemic and its impact on almost all facets of the economy, resulting in a second quarter 2020 GDP decrease of a stunning 31.4%. Despite some improvements over subsequent quarters, it is expected that U.S. Real GDP for 2020 will have declined 3.5% from 2019 (Bureau of Economic Analysis, 2021).

Small businesses, in particular, represent the backbone of the U.S. economy and have been heavily impacted by COVID-19. While full impacts are still unknown, the Small Business Administration reports that the largest drop in employment because of this pandemic occurred among businesses with 20 to 49 employees (U.S. Small Business Administration, 2020). Initial research on the impact of the pandemic on U.S. small businesses paints a grim picture. A U.S. Census Bureau Small Business Pulse Report found that 89.9% of surveyed small businesses had negative effects from COVID-19, with 51.4% reporting "large effects" (US Census Bureau, 2020). The number of working small business owners declined from 15 million in February of 2020 to 11.7 million in April of the same year (Fairlie, 2020). Not fully captured by these numbers are the many ways small businesses have been challenged with significant changes to operations as well as employee communication, interaction, and contributions, which are critical to small business innovation.

In this paper, we will examine the long-term, structural impacts to small business innovation exacerbated by limitations imposed by the pandemic. We will first report the effects of the pandemic on small businesses, assessing how these effects impact the important elements necessary for innovation and workplace collisions. We will then offer examples of tools and approaches that may be used to mitigate those impacts and nurture the innovation process.

SMALL-BUSINESS IMPACTS

As defined by the U.S. Small Business Administration, a "small business" can generally be considered as "an independent business with fewer than 500 employees." (U.S. Small Business Administration, 2020). There are 31.7 million small businesses in the U.S., 19% of which have paid employees: equating to 99.7% of all firms with paid employees. U.S. small businesses account for 32% of known export value and for 65% of net new jobs (U.S. Small Business Administration, 2020). It is not surprising therefore that small businesses have been called the "lifblood of the U.S. economy" and accounted for 44% of all economic activity prior to the pandemic (U.S. Small Business Administration, 2019). The fact that small businesses have a higher percentage of vulnerable jobs during this pandemic is especially relevant, given that they provide nearly half of all private-sector jobs in the United States (Dua, Elingrud, Mahajan, & Silberg, 2020a).

By grouping all small businesses into one category, we could miss important differences among them that might be exposed through a finer lens. In terms of owner goals, operations, and impact, small businesses can vary significantly. While a few small businesses may be classified as “lifestyle” businesses—not intended for growth, but for a comfortable living for its owners—other small businesses are oriented towards growth and the creation of innovative contributions to society. In fact, small businesses represent over 98% of all employers in high-tech industries (U.S. Small Business Administration, 2020). Kirchhoff’s typology is widely used to classify small firms by growth and innovation objectives; thus, low-growth and low-innovation firms are deemed “Core,” while high-growth and high-innovation firms are labeled “Glamorous” (Kirchhoff, 1994). Multiple studies have been conducted indicating that these Glamorous small firms create even greater returns and contributions than large firms and that the employee growth of these small firms leads to greater innovation (Breitzman & Hicks, 2008; Isom & Jarczyk, 2009; Spencer & Kirchhoff, 2006).

Lahart (2020) noted that a reduction in the number of small businesses amounts to a reduction in competition for larger firms. This could reduce big companies’ need to innovate to maintain market share, ultimately dampening the dynamism of the U.S. economy. Dua, Elingrud, Mahajan, and Silberg (2020b) recognized small businesses as “entrepreneurship engines,” that “...create unique entrepreneurial opportunities, particularly for women, minorities, and immigrants” (p. 7). As a significant contributor to U.S. growth and productivity, it is valuable to explore more deeply the impact of COVID-19 on these innovative small businesses.

KEYS TO SMALL-BUSINESS INNOVATION

Innovation is the “development and implementation of new ideas by people who over time engage in transactions with others within an institutional context” (Van de Ven, 1986, p. 591). Innovations change the world and the way we live in it. They can include products, services, or processes, and extend beyond the business world to encompass social change and advances in the sciences (Deloitte, 2015; Meissner, Polt & Vonortas, 2017). Engaging in innovation activities, whether oriented towards new products, services, or markets of internal processes, is a top priority of CEOs (BCG, 2020).

Amazon, Apple, HP, and Microsoft are all companies that make the BCG list of ‘Most Innovative’ each year (BCG, 2020), but are also examples of companies that started small, innovated, and grew. By analogy, we can say that for every Edison Menlo Park creating or perfecting inventions on a large scale, there are two brothers with a passion for entertainment creating an empire that will become the next Disney. Small firms may create, build, and develop the innovation themselves; or, they may sell the innovation to larger businesses to exploit (Teece, 1986). In a study of “green technologies and industries” sponsored by the SBA, it was found that small, innovative firms were 16 times more productive than large firms in terms of patents per employee; further, these patents were cited 79 percent more often and outperformed the large firms in originality, generality, and growth (Breitzman & Thomas, 2011).

Small businesses are not merely small versions of big businesses; according to Richard Branson, “small businesses are nimble and bold and can often teach much larger companies a

thing or two about innovations that can change entire industries” (NASDAQ, 2017). Innovations from small- to medium-sized firms often result from new technologies or market demands. Daily activities and external connections with customers or suppliers are more likely to be the pool from which creative information is collected (Hirsch-Kreinsen, 2008). Empowering employees and acknowledging the importance of learning from their connections has been found to lead to greater small-business innovation (García-Morales, Lloréns-Montes, & Verdú-Jover, 2007).

Small-business leaders can overcome the scale advantages of large firms by focusing on the drivers of small-business innovation success. Common themes emerge when examining the literature on small-business innovation. These advantages center around the following elements, and represent distinctive competencies of small businesses in the innovation process:

- Ability to execute ideas more quickly;
- Pivot faster to avoid dead-ends and seize new opportunities;
- Less bureaucracy to quickly deploy resources;
- Proximity to customers and suppliers; and,
- Team environment.

Innovation requires a champion to guide its journey from creation to final acceptance. There is a social and political process through which these offered ideas and concepts are potentially embraced by the organization if they are to be fostered, embedded, and finally integrated into the organization’s offerings. As such, ideas do not stand on their own; one cannot ignore the socio-political dynamics that have to be managed for innovation to be embraced and institutionalized (Van de Ven, 1986). As an inherently social process, the creation, adoption, and deployment of innovation becomes problematic in a disconnected society. Connections and collaboration in the workplace become pivotal. As a competitive as well as societal priority, how are these connections important to the process of innovation? While many small businesses have shown that they can creatively adapt to survive COVID-19 by utilizing new technologies in their operations (Gurchiek, 2020), other informal, yet critical, processes have become challenging.

THE ROLE OF COLLISIONS

The role of ‘collisions’ in the innovation process—those spontaneous and informal opportunities for workplace communication and collaboration—is well-documented. ‘Eureka’ moments from the lone entrepreneurial genius certainly happen, but to move from idea to reality it more often takes diverse perspectives to perfect innovation offerings. The standard approaches to control the spread of COVID-19 in the workplace—curtailing travel, working remotely, and maintaining social distance—create barriers to spontaneous collaboration. In particular, many startups are grappling with the effects of inefficiencies in problem-solving and lack of spontaneous employee interactions. Examples abound of the cumbersome nature of collaborative problem-solving when participants cannot interact face-to-face, particularly in entrepreneurial settings, while the benefits of ideas sparked by spontaneous workplace interactions were never more apparent (Cutter, 2020).

Although technologies and policies have had to rapidly evolve to meet immediate business needs, questions remain as to the long-term destructive impact of this global crisis. How will we continue to create and encourage the interactions and conversations necessary for innovation and entrepreneurial pursuits when faced with working from home, reduction in travel, fewer face-to-face meetings, and more streaming interactions? All these naturally hinder informal yet valuable communication and sharing of ideas. Firms that have most of their employees working from home account for nearly 75% of small businesses in ‘Glamorous,’ knowledge-based industries, and the majority of those firms plan to continue to allow remote work (Gurchiek, 2020). As many small businesses make the difficult decision to remain remote in 2021, what will be the new normal and how can the new normal be as innovative as possible?

RE-CRAFTING SMALL BUSINESS COLLISIONS

Research indicates that companies that focus on the long-term improvement of culture, technology and physical environments create organizations that are not only more attractive to employees, but four times more profitable and more innovative (Morgan, 2017). The key here, however, is an integrated, holistic approach. While the long-term ramifications of COVID-19 are still unfolding, it does appear that trends such as distributed offices and electronic communications must be considered when designing the small business environments of the immediate future. How can ‘Glamorous’, innovative small businesses integrate the business settings of tomorrow in a way that acts as a substitute for the physical collisions of yesterday? And how can we integrate these tools into differentiating drivers?

Small businesses have learned that the initial responses to COVID-19 are not optimal or sustainable. Despite the initial, perceived success of technology adaptation to accommodate remote work (i.e., employees working from home and primarily communicating via email and video meetings), small businesses are recognizing its limitations. Research has found that employees feel overworked and stressed with regular participation in video meetings, as well as fatigued from the need to continuously focus on a screen (Spataro, 2020). While such meetings (Zoom, MS Teams, etc.) allowed for the rapid adaptation of small businesses to the restrictions of the pandemic, going forward, primary reliance on such tools for collaboration is not ideal.

New ideas will need to be considered to stimulate innovation within the realities of industry, workplace, and employee limitations. As discussed, small businesses have been observed to possess unique innovation capabilities that are difficult for large businesses to replicate. We suggest focusing on these elements, each being a key success factor that small business decision-makers must redesign to rebuild resilience and maximize a holistic firm environment in terms of culture, technology, and physical environment. All of these elements benefit from contact, collaboration, and communication—and ultimately, *collisions*. Going forward, how can contemporary workplaces adapt in ways that can optimize these opportunities? What are examples of ideas that might be cultivated to enhance these elements in small businesses under the realities of COVID-19?

1. Ability to execute ideas more quickly

Today's complex innovative environment requires a move away from a focus on individual productivity, to that of cross-pollination (Waber, Magnolfi, & Lindsay, 2014). With concentrated decision-making, newly minted valuable ideas can gain the resources—financial, political, and human—that are necessary to implement them. Alexander, De Smet, Kleinman, and Mugayar-Baldocchi (2020) recommend launching a network of teams: “In a crisis of uncertainty, the network spurs experimentation, innovation, and learning simultaneously among many teams, much like a neural network in which the whole ‘brain’ is vastly smarter than the sum of its parts (p. 78). This approach includes a “hub and spoke” arrangement, whereby new teams are quickly formed and spun off to rapidly address new challenges.

2. Pivot faster to avoid dead-ends, and to seize new opportunities

The keys here are to encourage learning with feedback loops (scanning and connections), sense-making and absorption, and having support to engage in emergent strategic directions (Ancona, 2011; Argyris & Schön, 1978; Weick, 1995; Winter, 2003). According to research, early entrance can be associated with increased educational costs and inefficiencies, timely pivots based upon organizational learning can also be associated with reduced time to exit and an ability to de-escalate poor prior decisions and commitments (Kirtley & O'Mahony, 2020; Lieberman & Montgomery, 1998).

3. Reduce bureaucracy to quickly deploy resources

Remote-based employment in the COVID-19 pandemic environment may hinder nimbleness and responsiveness of employees—whereas physical proximity and chance meetings may have led to faster navigation through bureaucratic systems. Deloitte (2020) recommends that small-business leaders prioritize being visible and checking-in frequently with employees to counter perceptions of virtual distance that reduce trust and innovativeness. It also suggests empowering self-leadership among remote employees and teams to take initiative.

4. Proximity to customers and suppliers

It is advisable to build connections and bonds with customers and suppliers. Including them as resources and sources of inspiration for new and improved ideas would be beneficial. Including customers and suppliers in organizational decision-making boundaries helps to increase the diversity of people with whom employees come into contact—this is certainly a key to building effective collisions (Cohen, 2019). Moreover, engaging customers and suppliers enhances the firm's continued learning capabilities (Selnes & Sallis, 2003).

5. Team environment

In 2017, Vivek Murthy wrote about the epidemic of loneliness, in which people feel a lack of social connection (Murthy, 2017). It has been estimated that 20% of Americans feel lonely or socially isolated. In terms of health impact, loneliness is as damaging as smoking 15 cigarettes a day (HRSA, 2019). With shutdowns and moves to work at home, COVID-19 has only made the situation worse. One study showed that almost 50% of American adults are lonelier since the pandemic began (Ducharme, 2020). From a business (and psychological) perspective, the lonely employee suffers impairment of reasoning and decision-making, while limiting their creativity (Achor, Kellerman, Reece, & Robichaux, 2018; Murthy, 2017).

To improve employee health and innovation skills, small businesses must take steps to reinforce connections among employees, customers, and suppliers. These connections, including reimagined collisions, are necessary for team success. Borrowing from the start-up and educational space, practical tools like Thoughtexchange (2021) and Pear Deck (2021) may be used to encourage employee engagement. Thoughtexchange (2021) distributes prompts on various topics by email to crowdsource ideas and thoughts; employees respond anonymously, and rate others' free responses so that those favored rise to the top—akin to a social media platform (Thoughtexchange, 2021). Pear Deck creates interactive slide presentations that allow for feedback and contributions from an audience, as well as analysis of those contributions for the presenter (Pear Deck, 2021). A new audio-only and invitation-only social media app called Clubhouse may provide low-stress opportunities for employees to share and discuss ideas without screen fatigue (Fischer & Kokalitcheva, 2021). Such informal, spontaneous opportunities for colleagues' input which are less sterile, and which encourage human interaction, can be invaluable in mimicking the value of pre-COVID-19 collisions.

FUTURE RESEARCH

In this paper we suggest that COVID-19 has accelerated the distancing within small businesses, potentially turning collisions into misses. However, with change comes opportunity. COVID-19 has imposed social distancing, but at the same time has increased and accelerated learning and innovation in the ways we use technology in the workplace. Programs and systems such as Zoom, Google Meets, and Microsoft Teams have experienced rapidly accelerated adoption. Further research is needed for measuring, assessing, and ensuring successful collaboration. Here, we suggest studying new analytical tools in data and qualitative systems analysis in the context of small-business leadership. These tools are often beyond the current skill sets of small-business leadership; if these leaders cannot allow greater investments of time, we look toward academic researchers to work with small businesses on systems that better identify, track, and improve collaboration efforts. Studies should aim to focus on ensuring that new systems to evaluate and improve collaboration include both customers and suppliers, as

these are crucial stakeholders for small-business owners, as well as sources of customer discovery and value creation.

Once the COVID-19 impacts have subsided, we suggest continued investigations into innovation productivity at different size levels. Have small businesses maintained their innovation outcome advantages? If not, why? We recommend deeper, ethnographic analyses at the firm level to determine more fully what operational changes have occurred that impact innovation. Often, real drivers of innovation are hidden behind causal ambiguity and social complexity. Researchers must spend time in these firms to add clarity to changes that may have occurred and offer clear guidance as to how innovation systems can be repaired.

CONCLUSION

Our current reality is that the hurdles associated with COVID-19 are not going away anytime soon. We do not yet know when, or if, the population of the United States or of the world will reach a point of herd immunity. Estimates project that it may be late summer or fall 2021 before most of the American population is vaccinated, and with variants emerging, any timeline for return to normalcy would be premature (Zhang, 2021). Many well-known large companies such as Google, Microsoft, American Express, have extended their remote work policies well into 2021. Indeed, more than half of Americans want to continue working remotely (Hadden, Casado, Sonnemaker, & Borden, 2020). Small businesses, especially those with better-educated workforces, seem to be following suit (Senz, 2020). Small business survival and success will hinge on adapting to these challenges with a more sustainable, long-term horizon.

Despite the many challenges created by the COVID-19 pandemic, we are seeing small-business resilience in action: 20% of small businesses now reportedly plan to grow their workforce (Business Wire, 2020). To be viable and to continue their growth, they will undoubtedly need to harness employee creativity and innovation under these new circumstances. Preserving those elements that differentiate small-business innovation from the rest—and nurturing the collisions that contribute naturally to creativity and innovation—will indeed be critical for small-business resilience through the COVID-19 era and beyond.

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THE SMALL BUSINESS CONTINUITY TEMPLATE: A STRATEGIC DESIGN TOOL TO SUSTAIN RECURRING REVENUE DURING TIMES OF CRISIS

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ABSTRACT

The COVID-19 pandemic has disrupted the continuity of small, for-profit businesses. These businesses have experienced several negative impacts involving employees, customers, finances, operations, and supply chain disruptions. Since pandemics are a type of external threat that is nonpreventable, small-business owners must find ways to survive or permanently close. This paper offers a design tool called the Small Business Continuity Template (SBCT), which small businesses can use to develop strategies to survive, adapt, and in some cases, grow. It offers a simplified way for small business owners to generate new or changing value propositions that address key customers' changing problems and needs. Meeting their needs helps ensure recurring revenue, which is the lifeblood of any small business. In times of crisis, small businesses must leverage all sources of capital, including economic, human, social, and psychological. The SBCT is very beneficial for the current situation surrounding the COVID-19 pandemic. Small business owners can also utilize it for any future external threat that might negatively impact their businesses.

Keywords: Small Business Continuity Template, strategic design, recurring revenue, COVID-19

INTRODUCTION

Business continuity management is a form of acute crisis management that responds to operational risks and interruptions caused by external threats such as the COVID-19 pandemic. During times of crisis, small businesses are particularly vulnerable to challenges such as maintaining regular revenue streams, operations, employee management, supply chain management, and complying with new regulations. The current pandemic is an example of an external threat that no business could have prevented but which all companies must respond to through acute crisis management or by permanent closure. One index found the majority (84%) of small-to-mid-sized businesses were negatively impacted by the pandemic and corresponding economic slowdown (McKenzie, 2020), with over 43% reporting a significant-to-severe impact. Some of the main concerns centered on revenue loss (68%), maintaining a prolonged sales cycle (32%), and staff reduction (27%). Another survey (Pilon, 2020) found that most small businesses (66%) did not return a profit in 2020. However, these figures are now trending in the right direction as most states are easing restrictions, and consumers are feeling safer about leaving their homes and getting back to regular settings, both at work and socially (Sophy, 2020). It is now critical for all small-business owners to discover what strategies and best practices surviving small businesses have used to sustain and grow.

The Small Business Continuity Template (SBCT) is a practical strategic design tool that small-business owners can use to develop innovative ways to continue operations and sustain recurring revenue, which is the income generated regularly from key customers. In times of crisis, it is vital to safeguard the things that are most predictable and stable. The SBCT is akin to Business Model Canvas (Osterwalder & Pigneur, 2010), which is a lean start-up template used to generate new business models by linking internal and external factors to identify possible value propositions for potential customer segments. The SBCT differs from BMC by focusing on external factors that already exist, such as current key customers, and internal factors that stem from various capital sources that an existing small business already has available. Specifically, the SBCT operationalizes the Expanding Capital for Competitive Advantage model presented by F. Luthans, K. Luthans, and B. Luthans (2004), which provides four capital sources:

1. Economic Capital – *What you have*: tangible resources such as facilities, equipment, information, and patents along with financial working capital and growth capital.
2. Human Capital – *What you know/can do*: intangible collective resources that include knowledge, abilities, skills, and experience.
3. Social Capital – *Who you know*: any person or other organization that can help and support your business, such as family, friends, business networks, and the local community through business legitimacy.
4. Psychological Capital – *Who you are*: the psychological states that help ensure business success, which are hope, efficacy, resilience, and optimism.

Small business owners can use the SBCT in times of crisis to develop strategies that operationalize and leverage all their capital sources to safeguard recurring revenue, key customer relationships, and other assets. More specifically, the SBCT helps small business owners generate solutions and value propositions for key customers who most likely have new and changing pains and problems. In times of crisis, it is critical for small businesses to maintain and develop those relationships. The SBCT can also help small business owners identify necessary operational shifts, human resource changes, and supply chain alterations.

LITERATURE REVIEW

The word ‘capital’ refers to the value of assets and resources available for a specific need. Quite often, financial capital is the main idea that comes to mind when thinking about business. However, other types of capital are just as important to consider. These include human, social, and psychological capital, all of which incorporate intangible assets and resources supplied by people involved in a small business, most notably the top management team (Luthans et al., 2004; Envick, 2005). Since Luthans et al. (2004) introduced the Expanding Capital for Competitive Advantage Model, it has been cited almost 2,000 times. However, to date, this model's components have not been operationalized as a planning tool that small-business owners can use to ensure sustainability or to identify growth opportunities.

Economic Capital

The traditional types of capital people think of when considering business ownership are economic sources such as money, facilities, and equipment. Small business owners must have enough financial capital for current operations and growth, which most often comes from profits, investment funds, cash-on-hand, and the owner’s personal wealth. Additional financial capital may be acquired through debt and equity sources. Research indicates that a person’s financial assets are linked to self-employment and have a statistically significant impact on starting a business (Evans & Jovanovic, 1989; Leighton, 1989; Marshall & Oliver, 2005; Montgomery, Johnson, & Faisal, 2005). Aside from financial capital, economic capital includes facilities, equipment, information, and patents needed to operate a business.

Small-business owners must determine all economic capital sources they can utilize to innovate in times of crisis to propose new and changing value propositions to key customers who provide recurring revenue to the business. For example, during the COVID-19 pandemic many small liquor distilleries transformed their facilities and equipment to manufacture hand-sanitizers instead of spirits (Distilled Spirits Council, 2021). Other small business owners leveraged their financial capital by tapping into personal savings and investments (Rosenberg, 2020).

Human Capital

Human capital refers to the collective knowledge, abilities, skills, and experience of all the business members. Stewart (1999) refers to it as organized knowledge that can produce

wealth and contends that it is the most critical resource in organizations. Human capital is linked to innovation (Dakhli & De Clercq, 2004) and entrepreneurial performance (Hayton, 2004). When considering investment decisions, venture capitalists place a heavy emphasis on the firm's human capital (Baum & Silverman, 2004). Likewise, human capital is linked to an entrepreneur's success in equity crowdfunding (Piva & Rossi-Lamastra, 2018). Moreover, it provides a competitive advantage for firms, and is essential for innovation. One empirical study by McGuirk, Lenihan, & Hart (2015) revealed that innovative human capital is more valuable to small businesses than larger firms.

Small-business owners must leverage human capital during a crisis to innovate and provide critical, and possibly new and altered, value propositions to key customers who provide the business with recurring revenue. For example, Moriarty's Gem Art was forced to close its retail store when the pandemic prompted a city mandate requiring all nonessential businesses to close. But they came up with different strategies to keep their businesses going—and engaged with customers—by creating live-streamed gem-shows that proved to be very popular with these home-bound customers (Gurchiek, 2020).

Social Capital

Social capital refers to the value of existing or potential assets and resources a person may be able to acquire based on who they know, what networks they are associated with, and their reputation in specific communities. This is known as business legitimacy. Social capital does not constitute the resources or assets themselves; rather, it is the individual's ability to attain and mobilize them (Portes, 1995). Empirical evidence shows that social capital provides business owners with an important credential that can be directly converted into financial and tangible assets (Shane & Cable, 1999; Baron & Markman, 2000). If one prepares a business plan with others, social capital is being built, and with each successful transaction, that social capital is being reinforced and used toward productive ends. Katz and Green (2021) state that social capital is a critical resource from the external environment, with which small-business owners need to build their businesses.

In general, social capital is an essential asset to leverage in times of crisis. Georgescu (2020) contends that the value of social capital is subject to expectations about the future, and it is critical to have during bad times such as the pandemic. Small-business owners even collaborated with each other to navigate the COVID-19 pandemic crisis, both within and across industries (Fallon, 2020).

Psychological Capital

Psychological capital is reflected in a person's self-view or sense of self-esteem (Goldsmith, Veum, & Darity, 1997). In a small business, it is the owner's view of their ability to successfully utilize the collective economic, human, and social capital available in an innovative and productive way (Envick, 2005). Research shows that psychological capital influences productivity, especially in business (Goldsmith, Veum & Darity, 1997; Luthans et al., 2004;

Schultz, 1994). It is also a key determinant in entrepreneurial success in small- and medium-sized businesses (Hall & Chandler, 2005; Hmieleski & Carr, 2011; Peterson, Luthans, Avolio, Walumbwa, & Zhang, 2011).

More specifically, *hope* is a desire accompanied by an expectation of fulfillment. It is a positive motivational state with two crucial components, the physical and mental energy to meet goals, and having identified avenues to meet those goals. *Efficacy* refers to a person's confidence and conviction about his or her abilities to successfully execute a given task within a specified context. *Resilience* is the process of adapting well in the face of adversity, trauma, tragedy, threats—or even significant sources of stress, such as potential business failure. *Optimism* is defined as the positive aspect of an emotional state, applied positively to explain good and bad events (Luthans et al., 2004).

Deshmukh (2020) contends that positive psychological capital is the key for small-business owners to come out of the pandemic crisis stronger, wiser, and healthier. One study found that maintaining a positive state of mind—specifically optimism—during the pandemic enhanced the intentions of college students to become future small-business owners (Hernandez-Sanchez, Cardella, & Sanchez-Garcia, 2020).

HOW TO UTILIZE THE SMALL-BUSINESS CONTINUITY TEMPLATE

The SBCT is a strategic design tool that small-business owners can use to develop innovative strategies to survive and even grow during crisis times. Figure 1 depicts the model with descriptors, and Figure 2 is a blank version that can be used as a planning tool.

FIGURE 1
SBCT with Descriptors

SMALL BUSINESS CONTINUITY TEMPLATE: A PLANNING TOOL IN TIMES OF CRISIS

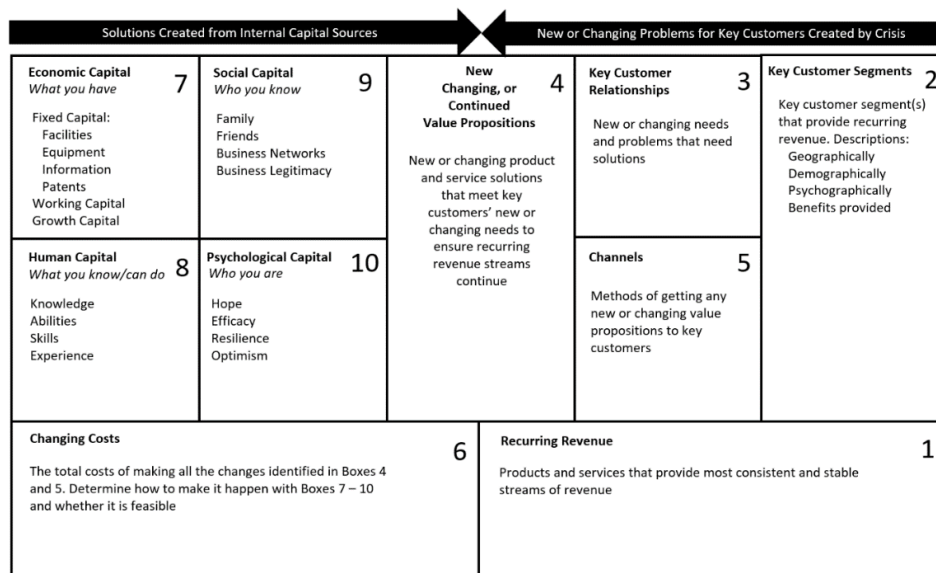
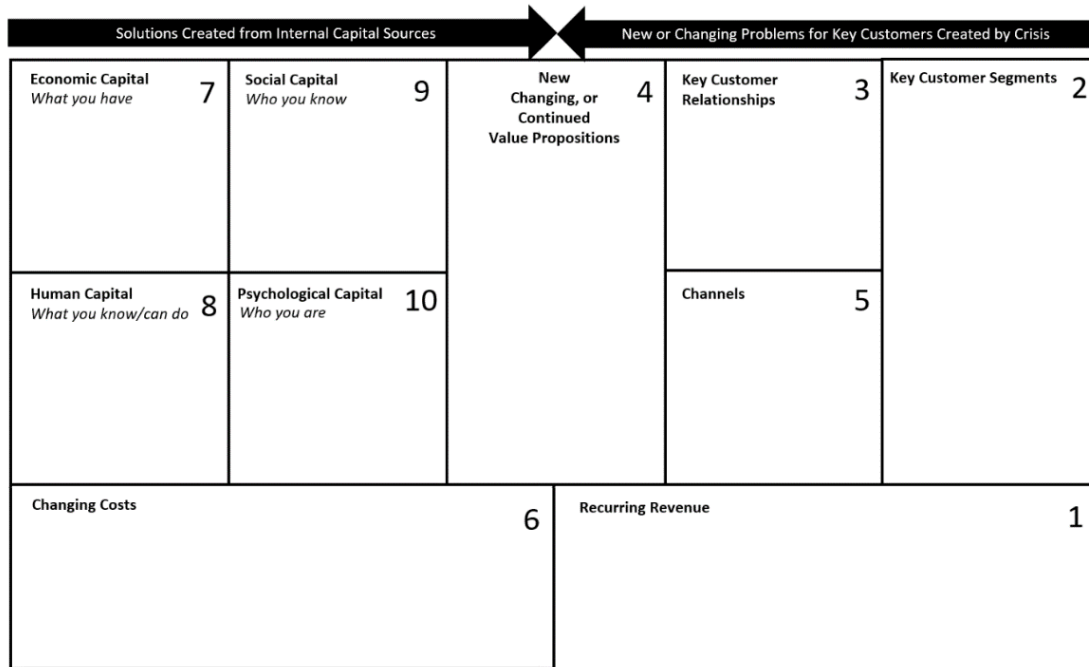


FIGURE 2
SBCT without Descriptors

SMALL BUSINESS CONTINUITY TEMPLATE: A PLANNING TOOL IN TIMES OF CRISIS

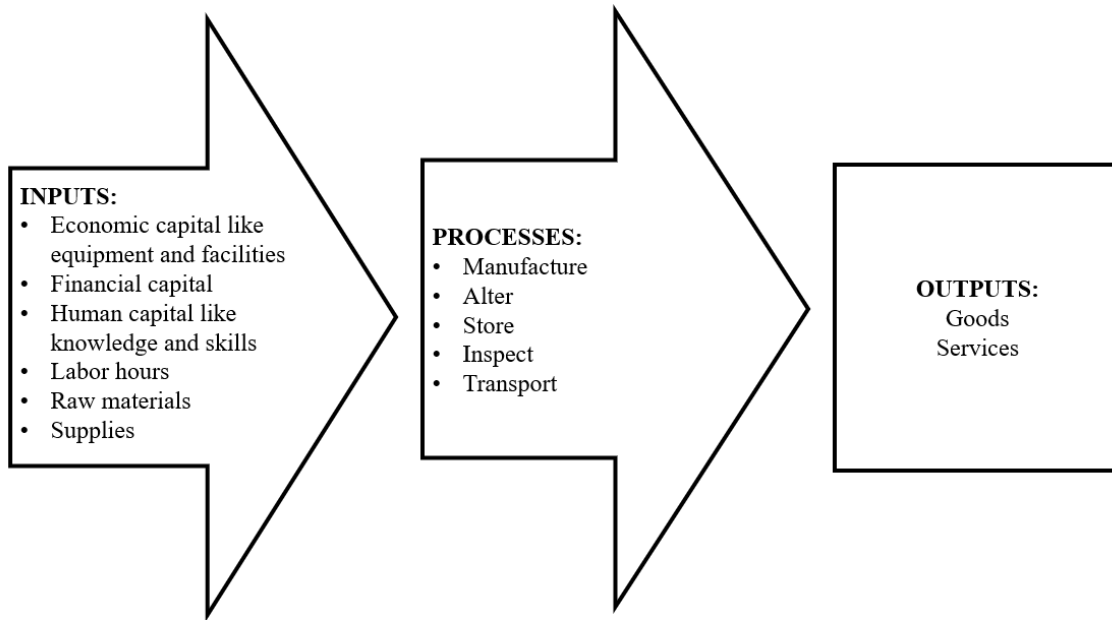


The SBCT contains ten boxes to address in sequential order. A description of each box, and how to address them, are described below:

1. **Recurring revenue** is the most predictable and stable income source, which provides the small business with the best opportunity to ensure sustainability during times of crisis. It is important to determine which products and services are providing the business with recurring revenue. After these are identified and quantified, it is necessary to determine who (key customers) is providing these revenue streams. This leads to Box 2: Key Customer Segments.
2. A customer segment is a group or subgroup of purchasers that a business can approach methodically to solve problems providing product and service offerings with solid value propositions that strengthen their connections to the business. During times of crisis, it is important to identify **key customer segment(s)**, which are those customers who provide the business with recurring revenue streams. Since these revenues are the most stable and predictable, it is critical to sustain them throughout the crisis. Key customer segments can be described geographically, demographically, psychographically, or by the benefits the business provides them. Once the key customer segment(s) are identified and described, then the methods to maintain and further develop those relationships must be determined. This leads to Box 3: Key Customer Relationships.

3. Developing **key customer relationships** is the best way to ensure that recurring revenue streams continue. Before the crisis, key customers were regularly purchasing the business's products and services because the business provided value propositions that met their needs and solved their problems. However, since the onset of the pandemic crisis, these key customers' pains and problems have most likely changed. It is critical to determine what has changed, how they changed, and by how much they changed. This knowledge provides the information needed to develop new or altered value propositions that meet those needs and solve those problems. This leads to Box 4: New or Changing Value Propositions.
4. Addressing the **new or changing value propositions** offered is critical to maintaining and developing key customer relationships to ensure recurring revenue streams, not only during a crisis, but also for the long-term. It is important to remember that value propositions distinguish the business from competitors and provide competitive advantages. When addressing this box in the SBCT, the small business should determine what must change and what must not change with the current product and/or service offerings. Some may stay the same, while others may need to be altered or further developed. The business may even need to create new product or service offerings. These results lead to the next issue of how to best get these products and services to the key customers, which is addressed in Box 5: Channels.
5. The **channels** by which you get the product or service to the customer are important to determine. During a crisis, these channels may need to change, impacting company resources such as time, money, and other resources. For example, if key customers normally come to the business's physical location to make purchases, they might require the business to deliver products and services to homes. This would require the entity to secure a delivery vehicle and driver, both of which come with additional costs. This leads to Box 6: Changing Costs.
6. **Changing costs** occur with new or changing value propositions provided in the product and service offerings to key customers, along with any changes in the channels of distribution. It is important to determine exactly what will cost more, what will cost less, and what costs will not change. Then we determine how everything combined will impact the bottom line. A small business can assess all internal capital sources to determine how it will meet the new or changing costs and challenges. All the changes identified in Boxes 1 to 5 will result in changing costs. Small business owners should spend adequate time and attention to Box 6 to keep an eye on extra costs associated with any change implemented with the new strategies. A useful tool is the Input-Output System Model (Figure 3), first introduced by Buffa (1961) in a production management textbook. This is the organizational process that transforms inputs into valuable outputs for customers.

FIGURE 3
Input-Output System Model



Source: Buffa (1961).

If the outputs change (i.e. the products or services delivered with the new or changing value propositions), then the inputs and processes have also most likely changed. When those items change, their costs also change. As one can see, the inputs do include economic and human capital (Boxes 7 and 8 of the SBCT). Other things that may change are the number of labor hours required, different types and quantities of materials, and supplies. Likewise, the processes by which inputs are transformed into outputs may change. If goods are manufactured, this process may need to be altered along with how products are stored or transported. Changes to inputs and processes must be carefully quantified and calculated in Box 6 to determine the sum of all changing costs.

Once total costs are determined and calculated in Box 6, the business must determine if and how it will make it happen. This leads to Boxes 7-10, the collective economic, human, social, and psychological capital available that can be applied constructively to this new plan.

7. **Economic capital** refers to *what we have*. It includes all tangible resources such as facilities, equipment, information, and patents, along with financial working capital and growth capital. The business might need to use facilities or equipment in different ways to better meet the changing needs of key customers through the new and altered value propositions offered in products and services. The business may also have financial capital previously planned for other uses, but now it is more feasible to allocate them towards business sustainability during the crisis. When circumstances change, all economic capital sources must be reevaluated to determine where and how they can best

be utilized for long-term business success and sustainability. During this assessment, the business must calculate the amount of financial capital needed and quantify the impact on physical resources such as facilities and equipment. If it is economically feasible to make the necessary changes and cover the costs identified in Boxes 1-6, this leads to Box 8. It may be noted that if the business does *not* have the economic capital necessary, Box 9 should be explored before going to Box 8.

8. **Human capital** refers to *what we know and what we can do*. If the business has the human capital necessary to execute the new plan effectively, then Box 10 needs to be addressed. Otherwise, Box 9 should be explored. Are the previous human capital sources transferable to the new plan? Furthermore, does the business possess any knowledge, abilities, skills, and experience that have been unused or underutilized? Small business owners should survey everyone's human capital sources in the business and determine how they can use them to execute the new plan. If the business has the human capital necessary to execute the new plan effectively, then Box 10 needs to be addressed. If the business does *not* have the human capital necessary, then Box 9 should be explored.
9. **Social capital** refers to *who we know*. This includes family, friends, business networks, and business legitimacy (personal, product, and organizational). Every person, business, and other organizations who can help are to be identified. Then, we determine specific ways in which they can help. Some might loan or provide the business with economic capital (money, use of storage space, a piece of equipment, or use of a vehicle). Some might be able to provide the business with some temporary human capital to help get the business through the pandemic crisis (knowledge, abilities, skills, experience), while others may be able to help increase the business owner's psychological capital (hope, efficacy, resilience, and optimism) by providing moral support and ongoing encouragement. Once the business has identified all social capital sources and how that capital can be used to execute the new plan, Box 10 must be addressed.
10. **Psychological capital** refers to *who we are*. High levels of hope, efficacy, resilience, and optimism are critical to sustain the business and effectively execute the changes determined in Boxes 1-6. Small-business owners must be purposeful about maintaining high levels of hope, efficacy, resilience, and optimism. They must also model these traits for others in the business, and possibly even find ways to develop them in other small-business owners.

[Appendix A provides an example of the Small Business Continuity Template (SBCT) applied to a small restaurant ("Blind Pig") during the COVID-19 pandemic.]

CONCLUSION

The Small Business Continuity Template (SBCT) is a design tool primarily used to help small-business owners generate business survival strategies and growth in times of crisis. It differs from the Business Model Canvas (Osterwalder & Pigneur, 2010) because it centers on existing external factors such as key customer segments and existing internal capital sources by operationalizing the Expanding Capital for Competitive Advantage Model (Luthans et al., 2004).

The SBCT is also useful as a discovery tool to determine how other small-business owners have sustained their companies during the pandemic crisis. During the spring 2021 semester, 12 undergraduate research teams who enrolled in a small-business management class at a Midwestern university have been using the SBCT to research small businesses in specific industries to discover what surviving small business owners are doing to not only, but to grow during the COVID-19 pandemic and corresponding economic shutdown. Each student team is developing a 'best practices' guide for other businesses in their industry who are on the brink of permanent closure and need ideas to help them survive the current pandemic. The best practices guide will be made available to small businesses in the future, should a different, unforeseen external threat cause a similar type of crisis as the COVID-19 pandemic.

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APPENDIX A: AN EXAMPLE OF SBCT APPLICATION

The Blind Pig is a fine-dining establishment located in a small, Midwestern town. Their regular menu features entrées such as 30-days' aged New York strip steaks, prime rib, fresh Faroe Island salmon, blueberry port duck breast, and chicken Oscar. Every week, they have nightly specials such as smoked chicken confit, Wagyu sirloin steaks, butter poached lobster tail, and filet mignon with foie gras. The Blind Pig also serves high-end cocktails such as their own twist on the French 75, a barrel-aged Manhattan, and a variety of martinis, along with high-quality wine selections and handcrafted beers.

While many customers drive up to 200 miles to eat at The Blind Pig a few times each year, the restaurant had to focus on **Recurring Revenue (Box 1)** to sustain it during the pandemic and in the face of mandatory restaurant shutdowns. It needed to identify the type of customer who would most likely continue to provide the restaurant with revenue during the shutdown. This led the owner to think about **Key Customers (Box 2)**. He knew that residents of surrounding towns within a 10-to-15-miles' radius provided his business with recurring revenue during normal conditions, because many of them ate at this restaurant two or three times each month. During mandatory shutdowns, the only food that could be sold was takeout food that could only stay hot for a short time after the customer picked it up. So, the focus was on the customers who lived nearest to the restaurant. It should be noted that the largest town within the radius of this geographic key customer segment has a population of 5,500 people. There are also a handful of other towns located within this radius with 100-500 residents. Local farmers and their families were also included in this geographic key customer segment.

Next, The Blind Pig used social media and direct interpersonal communications to determine these key customers' new and changing needs during the pandemic to develop **Key Customer Relationships (Box 3)**. What they found was that their regular menu items did not lend themselves well to takeout, even if customers got the food home within a short period of time. Another finding was that many key customers also wanted offerings that fed their entire family. Under normal circumstances, these adult customers would order pizza to their homes for their children while they had a night-out at The Blind Pig. But now, they were all home together and needed meals that appealed to everyone and were large enough to feed everyone. This led the owner/chef of The Blind Pig to consider **New and Changing Value Propositions (Box 4)**.

The Blind Pig was still committed to upholding their standards and reputation by cooking and selling high-quality food. The owner/chef was not willing to compromise on that but needed to create and offer different types of dishes with value propositions that met key customers' new and changing needs. Several ideas were introduced, including meatballs and spaghetti, pizza, brisket sold by the pound, spareribs sold by the rack, whole smoked hams, roasted New York Strip loins, lasagna, whole roasted chickens, and large containers of soup. Several side dishes were also identified to go with the main entrées—such as mashed potatoes, sweet potatoes, beans, and different types of salads, along with different kinds of breads. These were all food items that key customers liked, and who would also be willing to drive to the restaurant to pick them up to take home (verified through Facebook polls). This satisfied the **Channels (Box 5)**.

Next, The Blind Pig had to determine the **Changing Costs (Box 6)** of altering almost all their food offerings. The owner/chef had to determine if their current suppliers could provide all the ingredient changes. For example, normally little cheese was used for the traditional menu. But with the pizzas, lasagnas, and other items planned, it was necessary to purchase large amounts of cheese. There were other food items to be purchased in far fewer quantities such as duck breast, salmon, and certain cuts of beef. It was also necessary to determine the costs of all the new takeout containers and other supplies the restaurant would need to serve their food in. For this, several different types of containers were needed in large quantities along with napkins, takeout bags, and other items. As for employees, the owner/chef was determined to keep all of them on staff but use them in different ways. For example, waitresses would be taking orders over the phone, boxing up food, and running orders out to cars in the parking lot. They had to be paid more because they were not receiving tips by waiting on tables. Some of the new menu items even required kitchen equipment that The Blind Pig did not currently own. After identifying and calculating all these changing costs, the owner/chef had to determine if it was going to be possible and profitable. This led to consideration of all **Capital Sources (Boxes 7-10)**.

For **Economic Capital (Box 7)**, the owner/chef determined that sufficient financial capital was unavailable to support all the costs of this new strategy—including the purchase of a commercial pizza oven and an additional meat smoker, which would increase the economic capital by adding this equipment. One part of the kitchen had to be rearranged and used for the party room to store all the takeout supplies, which was an effective use of the facilities. Next, the **Human Capital (Box 8)** was considered. The owner, as a chef, had the knowledge, skills, and abilities to cook all these new menu items, but did not have the experience. It was therefore determined that part of the staff would need some training to fulfill their new duties and responsibilities. To make up for the owner's lack of experience in cooking family-style food in large quantities, the **Social Capital (Box 9)** was tapped into. The previous owner of The Blind Pig, the current owner's father, used to offer a Sunday buffet—aided by significant knowledge, skills, abilities, and experience to share.

The Blind Pig also had well-established relationships with suppliers, the Chamber of Commerce, and the county's Economic Development Corporation that provided much support through these changes and challenges. The local community also rallied around The Blind Pig because of the value propositions they have offered for many years. No one wanted to see this business fail. The owner/chef of The Blind Pig also utilized **Psychological Capital (Box 10)** to get through the challenges created by the pandemic and mandatory shutdowns. He modeled hope, efficacy, resilience, and optimism every day to his staff to keep their spirits up. He also made positive Facebook posts each day that not only advertised their new food items, but also thanked everyone for their support.

By utilizing the Small Business Continuity Template and taking all the measures necessary to plan carefully, The Blind Pig flourished in the face of restaurant shutdowns during the pandemic. On most nights they were sold out of food before closing time. Today, The Blind Pig is operating normally and are back to offering their traditional menu items.

SOCIALLY RESPONSIBLE CROWDSOURCING WITH SMALL BUSINESSES IN THE COVID-19 ERA: AN EMPIRICAL STUDY

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ABSTRACT

Crowdsourcing involves soliciting information, knowledge, and ideas from the public by entities seeking to change the status quo or to advance their agenda in a competitive environment. These extra-organizational intellectual resources from the crowd are accessed inexpensively, which is advantageous to small businesses because crowdsourcing attracts additional funding, insights, innovation, and problem-solving. Crowdsourcing is manifested through five essential practices—Crowdfunding, Crowd Creation, Crowd Wisdom, Crowdvoting, and Co-creation. Although Crowdsourcing can occur in these five practices, the extent to which the teaching of Crowdsourcing occurs within undergraduate Entrepreneurship courses is unknown. Accordingly, an exploratory study was conducted to examine the current incorporation of Crowdsourcing within undergraduate Entrepreneurship courses in the United States. Based upon an analysis of the results, two issues are highlighted in this paper: (1) Instructors are not incorporating all the above types of Crowdsourcing within Entrepreneurship courses, and (2) Limited opportunities exist to augment curricula with more Crowdsourcing content within Entrepreneurship courses. These issues are addressed and exemplified through the development of a Crowdsourcing Case Study as well as a Framework for Crowd Wisdom for Small Businesses that can supplement the current Entrepreneurship curricula. Additionally, both the Case Study and the Framework incorporate internal Corporate Social Responsibility (CSR) initiatives and COVID-19 issues to ensure the relevancy of Crowdsourcing with respect to the business environment in the real world.

Keywords: Crowdsourcing, crowdfunding, crowd creation, crowd wisdom, crowdvoting, co-creation, CSR, small businesses, entrepreneurship, COVID-19

INTRODUCTION

Crowdsourcing is a term that was coined by Jeff Howe who was a contributing editor to the magazine *Wired* (Howe, 2006). This was seen as an opportunistic move to tap into the “latent talent” of the public and as a significantly less expensive alternative to “outsourcing.” Crowdsourcing thus combines “crowds” and “outsourcing,” and is simply a means of attracting both intangible and tangible resources from a large group (“crowd”) of people who are essentially unknown to the solicitor. Thus, work, information, ideas, goods and services, and data can be collected from the public (Bloomberg Cities, 2019).

With modern technology, this has become a highly effective means of garnering knowledge and resources from the ambient community using the Internet, social media, and computer apps. Most of the contributors are freelancers, a few are paid, and many are volunteers. An example of voluntary crowdsourcing is that of public motorists reporting traffic accidents to a local government entity through an app on their mobile phones. A crowdsourcing example that involves payments could be that of an electric car designer inviting ideas with incentives paid for the best design among the most promising designs accepted. Yet another example would be that of freelancers such as writers who choose to be part of the crowdsourcing pool and contribute freelance articles for publication in a variety of news and magazine outlets.

Historically, crowdsourcing has existed informally for centuries. For instance, the “Longitude Prize” was offered in 1714 by the British government to encourage distributed problem-solving among the public to find a practical means to compute the longitude(s) of the globe; later, King Louis IV of France offered a prize for making alkali from sea salt (Chrum, 2013). Furthermore, from 1884, the Oxford English Dictionary relied upon readers across the British population to catalog words; by the time the first edition was published in 1928, more than 2,000 volunteers from the public had assisted the editors in its completion (Reilly, 2019). Today, crowdsourcing has spread across the globe, fueled by the Internet and digital technology.

Crowdsourcing is composed of several constituents that may be employed individually or together. Howe (2006), the progenitor of the term, categorizes Crowdsourcing into five types of practices: Crowdfunding, Crowd Creation, Crowd Wisdom, Crowdvoting, and Co-creation. Businesses have benefited from each of these types in numerous ways. For example, Oculus VR utilized *Crowdfunding* to raise \$2,400,000 (Haslip, 2021). Similarly, Lego has an ongoing invitation to individuals visiting their website to submit new ideas (Fournier, 2019). *Crowd Creation* is used by iStockphoto that collects creative pictures from amateur photographers. Great Britain used *Crowd Wisdom* to solicit strategies to solve the problem of red tape associated with existing rules and regulations (Welbers, 2020). Toyota used *Crowdvoting* to determine the preferred plural word for its Prius model. BMW used *Co-creation* by soliciting ideas from customers through an innovation contest.

Crowdsourcing can be integrated with other strategic initiatives. For example, Spanos (2016) advocates pairing crowdsourcing with an organization’s Corporate Social Responsibility (CSR) initiatives such that opportunities exist for the public to interact constructively with the community. CSR initiatives extend “beyond the law in incorporating social, environmental,

ethical, and consumer concerns into their business operations to create shareholder and stakeholder value.” (Newman, Rand, Tarp, & Trifkovic, 2020, para. 12). CSR is also viewed as an organization’s social conscience (Bierema & D’Abundo, 2004). Additionally, Jia, Yan, Liu, and Huang (2019) differentiate between external and internal types of CSR applicable to crowdsourcing. External CSR impacts issues important to consumers, the environment, and community. Internal CSR impacts employees within the firm, and can focus upon areas such as fair decision-making, work safety, training, working conditions, and fair pay (Hameed, Riaz, Arain, & Farooq, 2016; Shen, & Zhu, 2011).

During the challenging times of COVID-19, numerous businesses have engaged in internal CSR activities using crowdsourcing to better assist their employees during the pandemic. For example, some employers paid partial salaries to their employees while they were in quarantine and gave small reimbursements for stress relief aid, including childcare reimbursements (Ladika, 2020). Additionally, some firms continued to pay hourly workers for the first two weeks of a COVID-19 lockdown and developed an employee portal for wellness resources; they also provided online education activities for children, offered permanent remote work, and arranged for virtual therapy sessions (Epperson, 2011; Kramer, 2020; Sarkis, 2021).

The topic of COVID-19 is occurring not only in the real world of business, but also in pedagogy. For example, teachers are incorporating the relevancy of the pandemic topic into their courses. In some instances, lesson plans have already been created and are available for free access from the National Institute of Environmental Health Sciences (2020) as well as National Geographic Learning (Cengage, 2020). Additionally, teachers in numerous disciplines have created their own lesson plans including the impact of the pandemic. For example, in science classes, students study the topic of social distancing, examine COVID-19 vaccines for animals, and compare this deadly viral infection with the seasonal flu. In history classes, students create ongoing journal entries of COVID-19 observations, as well as compare local and federal guidelines for COVID-19 protection. In math classes, students analyze statistical data published on COVID-19 occurrences (Flannery, 2020).

Incorporating the relevancy of COVID-19 can also occur within Entrepreneurship courses. Recognizing the challenges encountered by employees during COVID-19, as well as the examples of CSR Crowdsourcing for employees, a Small-Business COVID-19 Crowdsourcing Case Study (with CSR incorporated), as well as a CSR COVID-19 Organic Crowd Framework were developed. Both the Case Study and the Framework can engage undergraduate Entrepreneurship students without adequate exposure to the subject of Crowdsourcing in its various dimensions and manifestations within their Entrepreneurship courses.

CONCEPTUAL BACKGROUND

The rapid adoption of crowdsourcing by a variety of entities in multiple industries and governments can be attributed to its mass appeal and pragmatism (Howe, 2006). The potentially actionable information derived from crowdsourcing informs, enriches, and empowers organizational strategy and decision-making. Similarly, small businesses continue to benefit from external resources through crowdsourcing to inform and scale up their viability and

continued growth. The deliberate practice of CSR underscores the benefits of crowdsourcing while minimizing the problems that may accrue from its unfettered practice.

Benefits of Crowdsourcing

The benefits of crowdsourcing are numerous. Problem-solving with the help of diverse individuals in the public domain has tremendous merit. The generation of innovative ideas that can be harnessed to produce creative outputs, as well as ideas for process improvements for the efficiency of operational systems, would constitute some of the beneficial aspects of crowdsourcing (Howe, 2006). Diversity of thinking and action from a variety of largely anonymous contributors makes for a rich tapestry of ideas that can be marshalled and crystallized for focused action (Fournier, 2019). The enormous leverage gained from the multiplying effects of creative solutions through crowdsourcing in a volatile, competitive arena can easily be imagined. Additional benefits from crowdsourcing include: unexpected solutions to tough problems; greater diversity of thinking; reduced management burden; more marketing buzz; faster problem-solving; and, a rich source of customer-data-focused action (Schenk & Guittard, 2011). This can also result in unexpected solutions to complex issues from the public at large.

Problems with Crowdsourcing

Not surprisingly, as with most social phenomena, downsides exist with crowdsourcing, stemming largely from accountability, reliability, and ethical issues (Arora, 2020). The public sources of crowdsourcing information may knowingly or unwittingly provide incorrect information, evidence bias, or even outright misinformation, thereby rendering the information unreliable. Additionally, the users of crowdsourcing may deliberately distort the data and adopt other unethical practices. Some of the most creative ideas from crowdsourcing may be utilized for personal gain by entities without benefit of copyright; also, intellectual property rights may be at stake through open and unregulated forums (Beer, McCarthy, Soliman, & Treen, 2017).

Furthermore, a firm's confidentiality and proprietary information may be compromised by public participants in the process of crowdsourcing to cross-pollinate ideas. If not managed well therefore, crowdsourcing can in general cause confusion, overload of information, or misinformation. In a city government's efforts to create equality and inclusiveness in policymaking, a study found that the civic data overload and the restricting hierarchy complicated the adoption of crowdsourcing as a democratic innovation in governance (Chen & Aitamurto, 2019). Despite these deleterious issues, crowdsourcing must not detract from the tremendous potential inherent in this popular 21st-century socioeconomic phenomenon that is fueled by rapidly evolving communication technology.

Crowdsourcing in the COVID-19 Era

Crowdsourcing has served as a useful tool during periods of crises—for crisis monitoring, emergency planning, social cohesion, crisis management, and research (Conrad,

Becker, Power, & Hall, 2020; Desai, Warner, Thompson, Painter, Lyman, & Lopes, 2020). Crises affect whole communities, and people gain first-hand knowledge of the critical issues involved. After analyzing 16 crowdsourcing initiatives during times of crisis, researchers detected a strong link between tasks related to knowledge management and creative production, as well as corresponding crowdsourcing configurations that were internal, external, or mediated through agents (Vermicelli, Cricelli, & Grimaldi, 2020).

Crowdsourcing involves many stakeholders such as governments, health agencies, transportation firms, and the scientific community. To combat the alarming numbers of COVID-19 infections and well over 3 million fatalities worldwide at present, crowdsourcing has proved to be a boon for projects focusing on emergency healthcare, vaccinations, and recovery programs (WHO, 2021). Overall, crowdsourcing in the current pandemic environment is useful for information-gathering, strategizing, and decision-making, and could enable rapid responses throughout ailing communities to ameliorate the tragic nature of the pandemic.

Constituents of Crowdsourcing

The five constituents or types of crowdsourcing are briefly outlined below:

1. *Crowdfunding*: This type of crowdsourcing is a method of raising capital (mostly online) by appealing to the public, and by including friends, acquaintances, and family members (Johnson, 2021). Many types of crowdfunding exist. These include *donation-based* crowdfunding whereby no returns are expected; *rewards-based* crowdfunding that provides some form of token reward for the funding; and *equity-based* crowdfunding that provides shares or equity interest for participation in the crowdfunding activity (Startups.com, 2021). Crowdfunding thus differs from more traditional fundraising, where companies and institutions seek business capital from one or more major investors (Kurani, 2021; Scholz, 2015).

2. *Crowd creation*: This type is the most common form of crowdsourcing. Activities are focused on creativity and problem-solving, asking individuals and businesses to solve a particular issue to yield a satisfactory solution to the specific problem (Howe, 2006). Individuals or businesses upload their creations to a designated website that is viewable by the public at large, and this in turn attracts further creative ideas. Perhaps, the best-known forms of crowdsourcing are such “creation” activities exemplified by asking multiple individuals to film TV commercials, perform language translations, or solve challenging scientific problems (Bantrr, 2010).

3. *Crowd wisdom*: There has been enduring interest and investigation into the power of collective judgments (Simoiu, Sumanth, Mysore, & Goel, 2019). As the term suggests, “crowd wisdom” represents the collective knowledge derived from a plurality of sources (Bantrr, 2010). It assumes that when information is aggregated in groups, the results obtained are more reliable—and therefore more actionable—than when they are taken from a single source (Kopeck & Szopa, 2015; Simoiu et al., 2019; Surowiecki, 2004). Three categories of crowds exist in

crowdsourcing—a “good” crowd that can make fair, unbiased, and rational decisions even in cases with a deficiency of information; a “bad” crowd that may lack some important aspects such as diversity or independence to produce wrong judgments; and, an “ugly” crowd that is likely to react unpredictably to events and information (Kozlov & Radoslav, 2019).

4. *Crowdvoting*: This type of crowdsourcing is a means of receiving votes from the public for specific activities, proposals, events, or products (Bantrr, 2010; Tricider, 2019). In small businesses, its use is to evaluate a product for quality, price, and timeliness through votes received from the public. This in turn can be used to modify the product for wider acceptance by consumers, with the added benefit of gaining goodwill and enhancing the value of the firm (Wagner, 2020). Crowdvoting thus employs multiple users’ judgment to evaluate content. This aspect of crowdsourcing is especially appealing to users whose expertise is not high but whose status in the crowdsourcing community is significant (Chen, Xu, & Liu, 2020).

5. *Co-creation*: Co-creation involves businesses or organizations working alongside private or public individuals (usually customers) to develop ideas for new products, services, and systems (Fournier, 2019). This type of crowdsourcing enhances customer engagement by directly involving them in the value creation process of the business and derivatively, in its product development processes (Raines, 2011). As an intensive version of crowdsourcing, co-creation demands more time, resources, and planning than popular crowdsourcing. It requires buy-in from the internal creative team of the business entity and sometimes includes external customer participation within the project team. Thus, co-creation involves an extensive and deep collaboration between small businesses and consumers (Lang, 2017). It thereby enables these businesses to harness and learn from customers’ observations, experiences, and creativity.

Crowdsourcing and Small Businesses

Crowdsourcing is advantageous for small businesses as entrepreneurial ventures with limited financial and human resources because it attracts additional funding, insights, innovation, and solutions to intractable problems (Arora, 2020). Through the past year, the COVID-19 pandemic has made crowdsourcing both a challenge and an opportunity. Businesses have encountered additional challenges due to the pandemic—such as increased costs, shutdowns, and decreased business; furthermore, employees and customers have faced challenges such as isolation, stress, job losses, childcare issues, and COVID-19 infections and deaths. On the other hand, small businesses have benefited through the pandemic by adapting on the fly and finding creative ways to change their operating models; many of them plan to use innovations developed during the pandemic to drive revenue and to generate new opportunities as the economy recovers (Gurchiek, 2020; Tremblay & Yagoubi, 2017).

Crowdsourcing and CSR

Small businesses can no longer operate with the sole aim of making profits at the expense of the environment, society, economy, consumers, and employees, and need to consider how they can give back to society (Heyward, 2021). CSR extends the mission of small businesses by connecting with their customer base and serving this market by addressing issues that are of interest to these customers. Crowdsourcing can be a way to build relationships with such a wide range of consumers and to provide them unique ways to get involved with the programs launched by these small businesses (Insider Intelligence, 2011). In fact, a study exploring the relationship between CSR and crowdsourcing determined that the essential role of trust is a key moderator between them (Park & Kang, 2020). This underscores the potential for strong relations between small businesses and their customer base through trustworthy crowdsourcing. With such crowdsourced assistance from the Internet community, and with moderate effort, professional crowdsourcing providers can help small-business entrepreneurs to responsibly accelerate the implementation of their projects (Maione, 2015).

METHODOLOGY

The researchers sought to explore, through a national survey of undergraduate entrepreneurship professors, the degree to which all five types of crowdsourcing discussed (crowd funding, crowd creation, crowd wisdom, crowdvoting, and co-creation) were prevalent within undergraduate Entrepreneurship courses (Howe, 2006). The various types of teaching methods utilized were also studied. Thus, exploratory empirical research was employed with a targeted sample of educators teaching Entrepreneurship courses.

Sample

The researchers solicited participation from undergraduate professors at US colleges and universities that offered courses in Entrepreneurship. They were sourced from listings in *The Princeton Review* and the *Entrepreneur* magazine's "Top 25 Undergraduate Schools for Entrepreneurship" as well as the *US News and World Report's* (1) "Best College Rankings: Online Bachelor's Degrees and Programs" & "Best Undergraduate Entrepreneurship Programs"; (2) "Best College Rankings: Online Bachelor's Degrees and Programs"; (3) "Best Undergraduate Business Programs Rankings", and, (4) "Best College Rankings: Online Bachelor's Degrees and Programs (Top 20)." Additionally, the researchers included universities from their own personal knowledge and added universities in the public domain from Internet searches.

Instrument

The instructions for the instrument required the participants to allocate 15 minutes for completion of the survey (Appendix A). The first part of the survey focused on academic background questions. These were designed to capture each participant's academic institutional

affiliation, position type, and title, as well as the names and topics of Entrepreneurship courses that were taught by them, along with any associated research in those areas.

The next part of the survey asked participants if they incorporated Crowdfunding, Crowd Creation, Crowd Wisdom, Crowdvoting, or Co-creation within their Entrepreneurship classes that included Crowdsourcing, and queried about the associated methods of teaching. Participants were encouraged to share both their perspectives and those of their students to evaluate the quality of the Crowdsourcing teaching experience. Additionally, participants were invited to share any recommendations toward incorporating Crowdsourcing in their courses or in courses outside of the Entrepreneurship curriculum. They were also requested to identify any associated challenges of such inclusion. (The complete instrument can be found in Appendix A).

RESULTS

Faculty participating in the study represented five private academic institutions and 10 public institutions. Out of the 209 surveys distributed online, 23 completed surveys were returned for our analysis, representing approximately 11% of completed surveys. Positions were in tenured, tenure-track, and fixed-term statuses. Ranks included Adjuncts, Lecturers, Instructors, Assistant Professors, Associate Professors, and Professors who taught undergraduate Entrepreneurship classes. Thirty percent (30%) of the participants had engaged in crowdsourcing research, and 67% of participants included a degree of crowdsourcing within their Entrepreneurship courses. Table 1 below summarizes the participants' Entrepreneurship courses that contained Crowdsourcing.

TABLE 1
Percentage of Crowdsourcing Content in Entrepreneurship

Entrepreneurship (7%)
Entrepreneurial mindset (8%)
Entrepreneurship and innovation (10%)
Entrepreneurial finance (6%)
New venture development (23%)
New product development (8%)
Social enterprise practicum (6%)
Business planning for technology growth ventures (7%)
All entrepreneurship courses (25%)

After sharing the five types of crowdsourcing with participants as categorized by Howe (2006), participants were asked to list the types that were specifically taught in their Entrepreneurship classes. Table 2 summarizes the types of crowdsourcing used by participants. Some of these types align with those identified by Howe (2006) in formalizing the concept of Crowdsourcing, while others are new types that have been defined by the participants.

TABLE 2
Aspects of Crowdsourcing within Entrepreneurship Courses

Funding a social enterprise (7%)	Market feasibility and capitalization (6%)
Crowdfunding (20%)	Co-creation (4%)
Crowdfunding platforms (5%)	Crowd wisdom (8%)
Rewards-based funding for new product development (8%)	Crowdfunding statistics (7%)
Funding marketing (4%)	Crowdfunding models (6%)
Test marketing (5%)	Basic information (20%)

The various teaching methods faculty used for Crowdsourcing to provide diverse students with a spectrum of learning methods are summarized in Table 3 below.

TABLE 3
Teaching Methods Used to Teach About Crowdsourcing

Research (5%)	Lectures (35 %)	Videos (5%)
Cases (6%)	Real-life examples (6%)	Assignments (8%)
Hands-on work (10%)	Guest speakers (4%)	Analysis of Kickstarter categories (4%)
Group discussions (8%)	Storytelling (5%)	Website analysis (4%)

DISCUSSION

Two key issues were identified for the discussion incorporating Crowdsourcing within the context of courses in Entrepreneurship:

1. The Issue of Not Including All Five Types of Crowdsourcing

Participants tended to incorporate the Crowdfunding type of Crowdsourcing within their Entrepreneurship courses more often than they did the other types of Crowdsourcing: Crowd Creation, Crowd Wisdom, Crowd Voting, and Co-creation. These 92% of participants prioritizing Crowdfunding worked solo and with Crowdfunding as part-and-parcel of the general Crowdsourcing topic. They also incorporated Crowdfunding into testing the market using diverse technology platforms such as Kickstarter, RocketHub, GoFundMe, and Indego. Only 1% of the participants used other types of Crowdsourcing such as Co-creation and Crowd Wisdom.

2. The Issue of Time

We analyzed common themes for the questions, “What could be improved from your perspective?”, “What could be improved from the students’ perspectives?”, and, “What challenges do you anticipate if Crowdsourcing were added to more of the Entrepreneurship program?”. The only common recurring theme for all three questions was the issue of time. Participants observed that their current Entrepreneurship classes were already filled with various

topics. Therefore, even though they wished to include more Crowdsourcing exercises or additional types of Crowdsourcing types, there was not sufficient time to do so. Smith, Collins, and Hannon (2006) also confirm the time challenge that exist within such courses.

New Pedagogic Exercises to Address the Two Issues

To assist Entrepreneurship faculty with the issue of not teaching students all types of crowdsourcing, and to address the issue of not having sufficient classroom time to cover expanded types of Crowdsourcing, the authors have proposed both a case study on Crowdsourcing during the COVID-19 pandemic era, and a framework for Crowd Wisdom for small businesses as supplements. These Crowdsourcing supplements were integrated with the topic of CSR. Almaz (2011) asserts that CSR is a powerful instrument for leveraging the ideas and perspectives of crowds. Furthermore, this combination produces a positive social change in the community because crowds that contribute creative ideas have a self-motivated interest to be involved with problem-solving (Park & Kang, 2020). Lastly, these CSR-infused Crowdsourcing exercises are relevant because they are framed within the COVID-19 era, thereby highlighting the real challenges of pandemic issues experienced by small businesses.

CROWDSOURCING CASE STUDY SUPPLEMENT

A case study is a narrative of real events with sufficient depth and complexity to enable problem analysis, discussion, looking at alternative solutions, and decision-making. An effective case study harvests actionable facts and knowledge by enabling the student or other participant to think through choices faced by decision-makers in real-life situations; by confronting these actual scenarios, participants develop and refine analytical skills for solving similar problems in their own decision-making environments and projects (National Aeronautics and Space Administration, 2008).

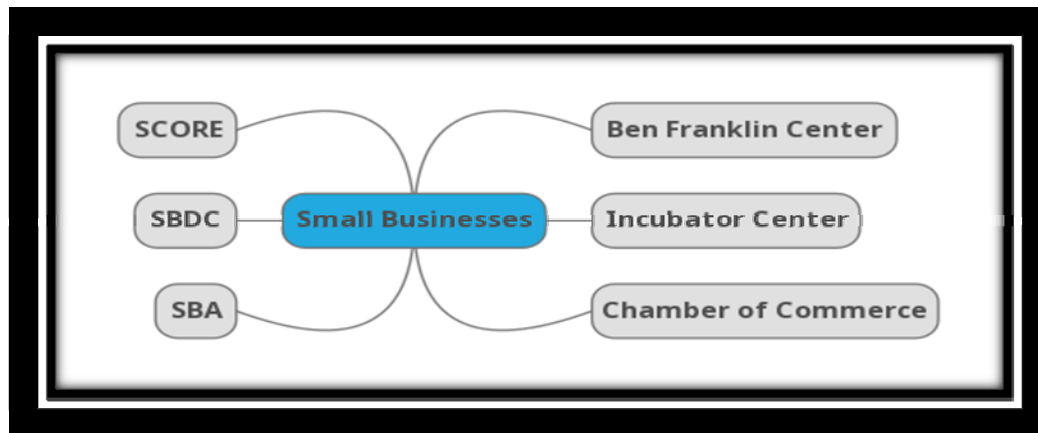
Instead of assigning a Crowdsourcing case study within an Entrepreneurship class that may already be filled with basic Entrepreneurship concepts and essential Crowdsourcing topics, an external case study is proposed. This would be open to undergraduate students from any major. The case study is presented in Appendix B.

FRAMEWORK FOR CROWD WISDOM FOR SMALL BUSINESSES SUPPLEMENT

To further assist with the issue of time, a new framework is proposed as a supplement to provide students with the opportunity to practice outside of the classroom. This framework reflects a type of Crowdsourcing that is not typically taught in the Entrepreneurship classroom—Crowd Wisdom.

Traditionally, non-crowd wisdom to a small business owner came from an individual who worked at an established organization that was designed to help entrepreneurs as depicted in Figure 1 below:

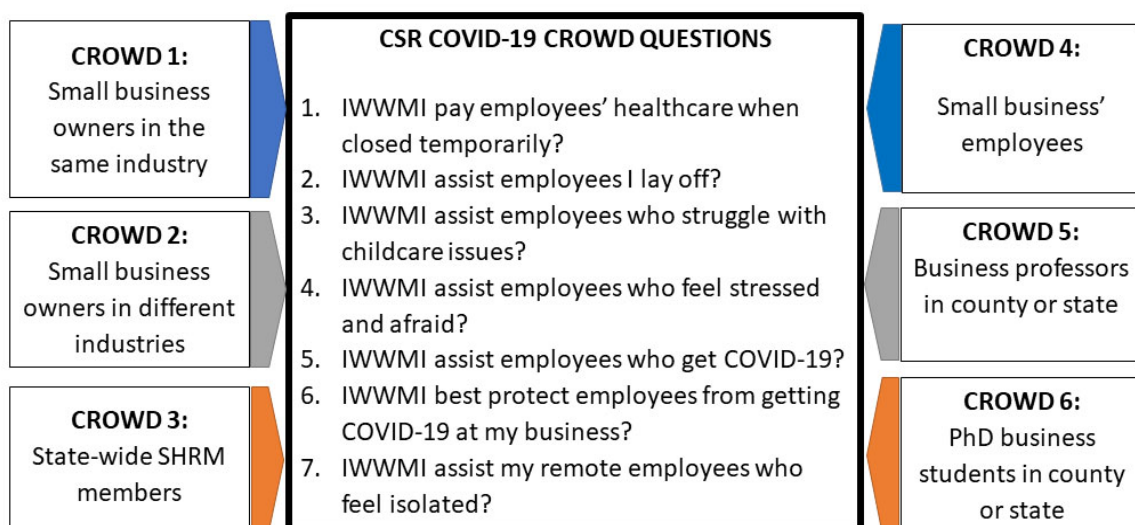
FIGURE 1
Traditional Non-crowd Wisdom Resources



Note: **SCORE**: Service Corps of Retired Executives; **SBDC**: Small Business Development Centers; **SBA**: Small Business Administration

The COVID-19 era calls for a new framework of organic crowds that can assist small businesses. Some of the reasons for this change are due to many small businesses needing assistance that may overwhelm the single employee at the traditional centers listed in Figure 1. Also, innovative, diverse, and expert solutions can arise from crowds. Therefore, a new framework is proposed in Figure 2 below that incorporates crowds that are of an organic nature to create solutions to key CSR issues. When engaged in the Creative Problem Solving (CPS) model, the stem, “In What Ways Might I” is often used for constructively exploring solutions. This stem is adopted and used in Figure 2 with the acronym “IWWMI”.

FIGURE 2
CSR COVID-19 Organic Crowd Framework



If students were working on this framework outside of the time-packed Entrepreneurship classroom (perhaps in an Entrepreneurship club), they could select the small business, form one or more of the crowds, determine the crowd wisdom technology to utilize, solicit solutions from the crowd, and analyze the solutions for the small-business owner.

LIMITATIONS

A limitation to this study is that not much research has been done on this topic geared to the COVID-19 pandemic era. Therefore, the scope and applicability of the research may be deemed as rudimentary. Another limitation is that of time constraints (Single, 2010). The study was completed in a Fall academic semester. If the research were extended contiguously into the Spring semester, the likelihood of more time availability would have encouraged additional participants to join the study. Also, during the Fall semester, competing time activities may have prevented some faculty from participating. The time limitation may have also caused participants to provide brief and sketchy—rather than detailed and thoughtful—responses to the exploratory study (USC Libraries, 2021). The limited amount of funds allocated for this study could have been another limitation (Dudovskiy, 2019). The researchers used financial incentives in the form of five \$20 gift cards to raffle winners to encourage faculty participation across a wider, diverse range of academic institutions. If increased funding were available, potentially more faculty members may have participated from the same or additional academic institutions. Also, more funding could have been useful in purchasing professional services from marketing firms to target and solicit a wider pool of faculty participants.

FUTURE RESEARCH

The future of crowdsourcing will be driven by the insightfulness, creativity, and innovation of businesses, governments, and academia. In a world where the challenges we face become increasingly complex, finding methods of bringing together crowds, experts, and technology in ways that facilitate creative and beneficial solutions presents exciting opportunities to solve real-world challenges (Cancialosi, 2019). As this study was conducted with a small sample of faculty from the USA who taught undergraduate Entrepreneurship classes, a similar study could be conducted with larger samples, both from the USA, and from other countries where undergraduate Entrepreneurship classes are taught. Additionally, a new, rigorous study could be launched by analyzing and incorporating the results of the current case study and to inform, refine, and implement the organic crowd framework proposed in this paper.

CONCLUSION

Businesses have begun to integrate crowdsourcing with CSR projects (Maione, 2015). For example, Blurna (2011) shares the results of a study in which 44% of business leaders utilized crowdsourcing. In fact, 95% of those leaders reported that some of their crowdsourcing was geared towards external projects actuated by CSR. Businesses have also engaged in internal

CSR-infused COVID-19 activities to assist employees and their families during crisis periods such as the prevailing pandemic era. Additionally, as educators have recognized the value of teachable moments during the pandemic, the development of COVID-19 pedagogic learning activities for Entrepreneurship courses can be deemed appropriate. Therefore, a CSR-infused COVID-19 case study, as well as a COVID-19 organic crowd framework, would bolster purposeful and relevant learning. Finally, the instruments proposed in this research may serve to resolve the issue of Entrepreneurship educators not currently teaching all five types of Crowdsourcing as subtopics—and that of their not having sufficient time to add more Crowdsourcing activities to their courses.

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APPENDIX A

Crowdsourcing and Entrepreneurship Survey

Purpose: This study seeks to explore the ways Crowdsourcing is or is not integrated within the undergraduate Entrepreneurship curriculum at institutions throughout the United States. To that end, this study seeks to answer the following research question: *How can Crowdsourcing practices inform the pedagogy in Entrepreneurship curricula?*

Q1. Tell us about yourself: affiliation and undergraduate entrepreneurship courses taught.

- University affiliation
- Title: Adjunct, visiting professor, fixed-term, tenure-track, tenured, other
- Names of undergraduate Entrepreneurship courses you taught at any university

Q2. What topics that were undergraduate Entrepreneurship courses did you teach at any university?

Q3. Do you have any experience in Crowdsourcing research?

Q4. Have you included Crowdsourcing in undergraduate Entrepreneurship courses taught at any university?

- Which course(s)?
- Which aspect of Crowdsourcing?
- What teaching methods were used?
- What went well, from your perspective?
- What went well, from your students' perspectives?
- What could be improved from your perspective?
- What could be improved from the students' perspectives?

Q5. Are there any Entrepreneurship courses/topics in your university's curriculum that could benefit from the inclusion of Crowdsourcing?

Q6. Does your university have any Crowdsourcing-related courses in the undergraduate non- Entrepreneur curriculum?

Q7. What benefits do you think will be achieved in applying Crowdsourcing practices into the undergraduate Entrepreneurship curriculum?

Q8. What challenges or drawbacks would you anticipate from making this change in the undergraduate Entrepreneurship curriculum?

Q9. How do you think these changes in the undergraduate Entrepreneurship curriculum can be received by the course committee in your department?

APPENDIX B

CASE STUDY

Socially Responsible Crowdsourcing by Small Businesses During the COVID-19 Era

Important background information

Read the background information below regarding crowdsourcing and internal CSR. Both topics will be utilized in your responses to the case study.

Background information on crowdsourcing

Howe (2006) explains that the five types of Crowdsourcing include Crowdfunding, Crowd Creation, Crowd Wisdom, Crowdvoting, and Co-creation. It may be beneficial to see how specifically each type has been used. For example, Materson (2017) reports that Cornell University used Crowdfunding to reach the audience of young donors to raise \$900,000. Analysis of successful crowdfunding campaigns shows that the average campaign raises around \$7,000 (Heaslip, 2021). Fournier (2019) explains that IKEA incorporates Co-creation for new furniture and product design by soliciting ideas from customers, boot camps for entrepreneurs, world-wide innovation labs, and academic institutions. Dupin (2019) highlights the use of Crowd Wisdom by SeaFreight Labs that helps firms in the shipping industry solve environmental issues. Huizen (2015) speaks of the National Audubon Society's efforts to use Crowdfunding to raise public awareness and funds from well over 1,000 donors to combat the imminent extinction of three endangered species of Australian birds.

Background on what some firms have done regarding CSR for employees

Businesses have ethical and moral obligations to employees (Carroll, 2016). During times of COVID-19, Walmart, Microsoft, Apple, and Lyft have all made commitments to continue payments to hourly workers for at least the first two weeks of lockdown (Kramer, 2020). JLL developed a website portal for employees to access resources that could have a positive impact on their health and/or finances. The *New York Times* created a virtual pet parade for employees to participate in, with their pets. HP (Singapore) offered parents online educational activities created by academic experts. Goodway Group created "Family Fun Fridays" such that employees with children could attend online sessions that included magic and music (Court, 2020). Additionally, Ford Motor Company permitted 30,000 of its worldwide employees to work remotely on a permanent basis (Sarkis, 2021). Also, due to the additional stress and mental health issues of employees during the COVID-19 era, Starbucks offered virtual therapy sessions to their employees (Epperson, 2011).

Instructions

Select one of the two cases. Answer all questions as part of the case.

Small Business 1

A restaurant has been in business for 12 years and is characterized by casual dining and American cuisine in a leased space. The hours of operation are from 7:00 am to 9:00 pm. The small-business owner maintains a staff of 20 waitresses, waiters, hostesses, and four cooks in a combination of full-time and part-time capacities. The small-business owner contracts out for bookkeeping, IT services, and marketing support.

Challenges During COVID-19

With the outbreak of COVID-19, the small business owner experienced the following challenges:

- For some time, the company closed, so it had no revenue
- For some time, employees had no work
- Revenue has still fallen during reopening
- Increased costs were incurred for safety precautions
- Some employees got COVID-19 and needed medical assistance and are off from work
- Some employees are struggling with childcare since schools are closed
- The restaurant had reopened with limited seating
- Some employees are afraid of catching COVID-19 at work
- Some employees' spouses are laid off from their jobs
- Some other employees are laid off while some employees remain working

Small Business 2

This is an office-type company that had been in business for eight years. The hours of operation are from 8:30 am to 5:00 pm Monday through Friday. The small-business owner maintains a staff of 15 customer service representatives in a mortgaged structure. This small-business owner contracts out (outsources) for bookkeeping, IT services, and marketing support. Prior to COVID-19, all employees reported to the office.

Challenges During COVID-19

With the outbreak of COVID-19, the small-business owner experienced the following challenges:

- For some time, the company closed, so there was no revenue
- For some time, employees had no work
- The office-type company reopened with most of the employees working from home
 - Some employees needed laptops with printer/scanner/fax
 - Some employees did not have quiet office spaces
 - Some employees felt isolated, depressed, and stressed
- The small business owner incurred additional costs for safety precautions
- Some employees are afraid of catching COVID-19 if they return to work
- Some employees got COVID-19, needed medical assistance, and could not work
- Some employees are struggling with childcare issues since schools are closed
- Some employees' spouses are laid off from their jobs
- Some other employees of the office-type company are laid off, while some employees remain working

Questions

1. Create socially responsible crowdsourcing solutions for each of the Crowdsourcing types: Crowdfunding, Crowd Creation, Crowd Wisdom, Crowdvoting, and Co-creation (Howe, 2006) that would address one or more of the COVID-19 challenges experienced by the small business in this case. One or more Crowdsourcing types can be combined to address one or more issues. All types of Crowdsourcing must be used when creating socially responsible solutions reflecting CSR.
2. Which type of Crowdsourcing would have the most social impact on employees?
3. What type of technology would you recommend for any of the Crowdsourcing initiatives you listed?
4. Identify who/what might assist any of the Crowdsourcing initiatives you listed.
5. Identify who/what might resist any of the Crowdsourcing initiatives you listed.
6. Some companies' CSR initiatives create customer loyalty and/or create marketing buzz. Identify and explain one of your Crowdsourcing initiatives that would create either issue.

VUCA: A MANAGEMENT TOOL FOR DEALING WITH CHALLENGES IN CHANGING ENVIRONMENTS

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ABSTRACT

This article begins by commenting briefly on several characteristics (order, disorder, and movement) of the current pandemic environment in which we live and work. It seems clear that organizations need tools to help cope with challenges from our changing environment; one tool which seems likely to be useful is VUCA analysis. The origins of VUCA analysis and definitions of its four components (Volatility, Uncertainty, Complexity, and Ambiguity) are discussed. After describing a process for doing VUCA analysis as suggested by Meyer (2019), the article provides several comments and/or examples offered by executives and/or analysts regarding VUCA analyses and their usefulness, based on the use of primary and secondary sources. Concluding comments by the authors touch upon some of the implications that are believed to emerge from our examination of this topic.

Keywords: VUCA, target market, volatility, uncertainty, complexity, ambiguity

INTRODUCTION

It has become especially clear this year that we live in a world in motion, where expressions of order and disorder, organization, and disorganization, predictable and unpredictable, all co-exist. The world has changed; in this world, the consideration of movement and its fluctuations (i.e., variability) prevails over that of permanence, structures, and organizations. The characteristics of the current environment comprise the following: order, disorder, and movement. In this world, chaos not only exists but is in fact ever-present, and organizations need tools to deal with considerations including the following:

- 1) Order and disorder do not separate but occur in association through complex and sometimes mysterious relationships.
- 2) Uncertainty and complexity have increased and force organizations to grope forward.
- 3) The multiplicity of variables and their compound interactions are always uncertain; reducing them for analysis is difficult.

VUCA ANALYSIS: A MANAGEMENT TOOL SUITED TO THE PANDEMIC ENVIRONMENT

Based on management research by Warren Bennis and Bert Nanus in *Leaders: The Strategies for Taking Charge*, (1985), the U.S. Army War College (USAWC) introduced the concept of VUCA as an acronym to define strategic leadership as occurring “within a volatile uncertain, complex and ambiguous global environment, marked by possibilities and opportunities” (Barber, 1992, p. 8). Since then, the idea of VUCA had been applied to a variety of organizations including educational institutions and for-profit corporations (Systems Innovation, 2019).

In an article posted on the Forbes website, Kraaijenbrink (2018) provides the following concise definitions of the four key variables in the VUCA model:

Volatility: Volatility refers to the speed of change in an industry, market, or the world in general. It is associated with fluctuations in demand, turbulence, and short time to markets and it is well-documented in the literature on industry dynamism. The more volatile the world is, the more and faster things change.

Uncertainty: Uncertainty refers to the extent to which we can confidently predict the future. Part of uncertainty is perceived and associated with people’s inability to understand what is going on. Uncertainty, though, is also a more objective characteristic of an environment. Truly uncertain environments are those that do not allow any prediction, not even on a statistical basis. The more uncertain the world is, the harder it is to predict.

Complexity: Complexity refers to the number of factors that we need to consider, their variety, and the relationships between them. The more factors, the greater their variety and the more they are interconnected, the more complex an environment is. Under high complexity, it is impossible to fully analyze the environment and come to rational conclusions. The more complex the world is, the harder it is to analyze.

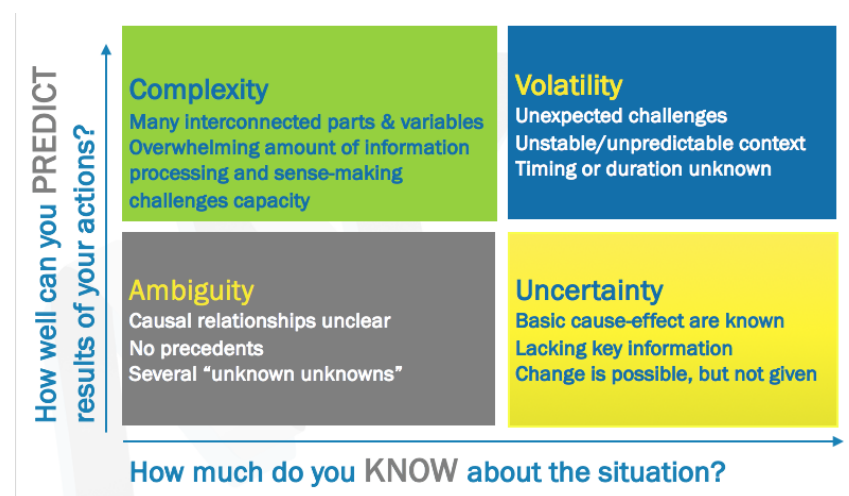
Ambiguity: Ambiguity is a lack of clarity about how to interpret something. A situation is ambiguous when information is incomplete, contradicting or too inaccurate to draw clear conclusions. More generally it refers to fuzziness and vagueness in ideas and terminology. The more ambiguous the world is, the harder it is to interpret (Kraaijenbrink, 2018).

After providing the above definitions, Kraaijenbrink (2018) goes on to observe that “in practice, the four terms are related. The more complex and volatile an industry is, the harder it is to predict and therefore more uncertain it will be. Yet, all four represent distinct elements that make our environment-the world, a market, an industry-harder to grasp and control.

METHODOLOGY: MEYER’S VUCA ANALYSIS

While there are undoubtedly several different approaches to conducting a VUCA analysis, one suggested by Meyer (2019) seems especially straightforward and builds on the following graphic from a *Harvard Business Review* article by Bennett and Lemoine (2014). As indicated, the vertical axis of this 2X2 contingency table measures the response to: “how well can you predict the results of your actions?” whereas the horizontal axis measures the response to: “how much do you know about the situation?”

FIGURE 1
The VUCA Model



Source: Bennett & Lemoine (2014).

After indicating that the next step in conducting a VUCA analysis is “to identify which of the (above) four characteristics are most relevant to your current situation” (Meyer, 2019, p.2), the author identifies various challenges associated with each VUCA element. Subsequently, she

indicates that the next step in conducting a VUCA analysis is the identification of characteristics most closely related to the present situation (Meyer, 2019). Following this process, there is a need to determine challenges associated with each VUCA element. Some issues are likely to cause ambiguity such as when the timeframe and impact of the current conditions are unknown. Other issues resulting in ambiguity are moving into a new market, launching a new product, creating a new strategic alliance, expanding beyond your core competencies and experiencing a change in leadership or the organization (Meyer, 2019).

Issues likely to create complexity include: 1) Doing business in global markets; 2) Having multiple stakeholders with competing or shifting priorities; 3) Having multiple brands, products, supply chains and distribution channels, and whatever is going on in the current environment which will greatly impact your entire business eco-system (Meyer, 2019).

Regarding issues likely to create uncertainty, the following are identified: Competition is launching a new product/service and the impact on the market not known, uncertain impact on the availability of key resources including capital (and/or) skills (and/or) knowledge and talent, past supply and demand metrics may not apply, merger/acquisition may be on the horizon, and proposed legislation/regulations may be adopted (Meyer, 2019). Regarding issues likely to create volatility, the following may be noted: Natural disaster, global health crisis, supply chain disruption, labor dispute, technology breach, geopolitical instability, and PR/Ethics Scandal (Meyer, 2019).

The next step in conducting a VUCA analysis is to “discuss with your colleagues: Which (of the above) VUCA characteristics are most relevant to the challenges and opportunities you are confronting.” (Meyer, 2019, p. 4).

Having determined which of the above VUCA characteristics are most relevant to the challenges and opportunities an organization is facing for each of the VUCA elements) best practices are addressed for those issues; the decision-makers pay particular attention to those issues that are within the span of control or influence, and that will have the most immediate positive impact on customers and on business sustainability (Meyer, 2019).

Regarding these VUCA-related best practices relating to volatility the following may be noted: promote and train for role elasticity and develop generalizing specialists; improve decision-speed; build redundancy into the system and build slack into the supply chain; leverage technology and alternative strategies to ensure continuous communication and collaboration and coordination; focus on learning and capacity building by identifying what is learned and how customers are changing through the volatility; regularly train for various disruptions and ID needed skills (and/or) knowledge (and/or) talent as well as other critical business continuity factors; and, tap high-potentials for temporary assignments (Meyer, 2019).

As for VUCA best practices for reducing uncertainty, the following are considered: tap relational web of skills (and/or), knowledge (and/or), talent (and/or), resources to reduce uncertainty; gather additional information and insight (including customer data, market analytics); improve access to market insights via resources like slack and yammer; and, reflect on (and) share experiences of successfully working through uncertainty (Meyer, 2019).

Additional best practices relating to reducing uncertainty which Meyer (2019) explains include: the givens of the current situation and focus on what is within the span of control;

provide or seek career-pathing (and/or) “stay interviews” to identify people’s interests plus strengths to keep them engaged; and, implement agile performance appraisals and regularly provide feedback and acknowledge agile success. Regarding VUCA best practices for reducing complexity, Meyer (2019) identifies the following: Improve communication, collaboration, and coordination; clarify decision-rights; adapt organizational structure and expertise to match the complexity of the context; identify people who have strengths and experience in dealing with complexity; and, recruit and develop people who can thrive in complexity. Regarding VUCA best practices for reducing ambiguity, Meyer (2019) states the following: create (some) clarity; make space for interactions; re-engage and recommit to your purpose; understand and prioritize user (customer) needs; focus on the MVP (Minimal Viable Product); practice rapid prototyping to fail faster and learn quicker; experiment and pilot to discover what is unknown; and, make time to learn the lessons from experience and carry them forward.

There are additional best practices offered by Meyer to help reduce uncertainty in organizations. For example, a greater focus on the givens of a situation and emphasis on what is within one’s span of control.

COMMENTS BY SENIOR EXECUTIVES REGARDING MEYER’S VUCA ANALYSIS

The authors had access to both primary and secondary sources and this section includes comments from both types of sources. We begin with comments that the authors gathered through secondary sources.

In a post on the CEO website, Forsythe, Kuhia, & Rice (2018) provide comments by a few CEOs which appear to focus on the relevance and usefulness of VUCA analyses:

1. Comments made by Joe DePinto of 7-11 Store and reported by Forsythe et al. (2018) include the following: “Disruption is as great as we have ever seen it. We are seeing all aspects of VUCA...we are an immediate consumption business...the e-commerce businesses are starting to encroach on our space. They are in fact beginning to redefine convenience as we have traditionally known it. We are working to move our company toward being more of a technology company that works in coordination with our traditional convenience stores...to offer increased convenience (to our customers), We are also focused on utilizing our stores as distribution points for other businesses. Customers can have their boxes shipped to a local 7-Eleven and can pick them up at their convenience. Finally, we are working on digital payment options that are multiple and varied. So, we have all of this going on. It’s really being driven by the customer and new e-commerce entrants. It’s forcing businesses like 7-Eleven to change the way we have done things in the past.” (pp. 2-3).
2. Comments made by Bob Leduc, President of Pratt & Whitney, and reported by Forsythe et al. (2018) include the following: “There is no question that we are in a VUCA environment right now....When you think about our business, we have got a very complicated landscape. We have established competitors, but also emerging competitors,

particularly in China and Russia. We have technology that is constantly advancing, and we have commercial and military customers redefining what their business models are and [what] they value now vs. what they previously did. So basically, the whole landscape is moving on us in many different directions.” (p. 5).

3. Comments by Mike Fucci, Chairman of Deloitte, and reported by Forsythe et al. (2018) are as follows: “I’d say the same things that are affecting our clients are affecting us, which is artificial intelligence, robotics and cognitive technology. Our clients are struggling with the question of how they incorporate these innovative technologies into their day-to-day operation. Therefore, if we are going to consult with them, we need to be ahead of the curve and help them decide how they use this technology. We must anticipate things that aren’t even fully baked yet, but it’s mostly around technology. I call it the ‘everything is a what-if’ scenario. The way we work is so different. It used to be that that technical experience was kind of all you needed—you had a deep knowledge in something, and you brought that knowledge to clients. We must stay in front of disruption with our clients, and as the chairman, one of the things that concerns me a lot is how do we govern over disruption. So, how do I build nimble leaders to be able to address a little bit of the unknown? That is why the VUCA analogy resonates with me, because it’s really more about building leadership than it is about building technical skills.” (pp. 6-7).

The analysis by Rossolillo (2021) regarding prospects for Delta Airlines in particular, and the airline industry in general, could be seen as an effort to begin working through the steps in the VUCA process suggested by Meyer (Meyer, 2019). Readers will recall the assertion by Meyer (2019) that an early step in the VUCA process is to decide which of the four (VUCA) characteristics is most relevant to the current situation. In his article, Rossolillo (2021) provides data suggesting because business travel generated more than a third of Delta’s total 2019 revenue (and a much higher percentage of Delta’s total 2019 profits), uncertainty regarding how quickly business travel will recover after covid-19 is controlled is a very key and critical question.

Meyer (2019) explains that in situations where uncertainty is high, best practices for reducing it include: Tap your relational web of skills (and/or) knowledge (and/or) talent (and/or) resources to reduce uncertainty, gather additional information and insight (including customer data, market analytics), improve access to market insights via resources like slack and yammer, and reflect on (and) share experiences of successfully working through uncertainty. Additional best practices relating to reducing uncertainty which she identifies include: Identify the givens of the current situation and focus on what is within your span of control, provide or seek career-pathing (and/or) “stay interviews” so you can identify people’s interests plus strengths to keep them engaged, and implement agile performance appraisals and regularly provide feedback and acknowledge agile success (Meyer, 2019).

Fellows (2021) reports that in a February 2021 presentation on CNBC’s “Squawk on the Street,” Coca-Cola CEO James Quincey indicated that uncertainty regarding how quickly Coca-

Cola revenues and volumes begin growing is a very key and critical question. Best practices suggested by Meyer for addressing uncertainty are as indicated above.

While the article does not say so explicitly, the analysis by Canal (2021) regarding prospects for streaming services offered by Disney+ and Apple could also be seen as an effort to begin working through the steps in the VUCA process suggested by Meyer (2019). Readers will recall the assertion that an early step in the VUCA process is to decide which of the four (VUCA) characteristics is most relevant to your current situation (Meyer, 2019).

Canal (2021) provides data provided by Netflix co-founder Marc Randolph suggesting that investments by Disney+ have contributed importantly to the company's success in attracting nearly 90 million new subscribers in its first year of operations. Canal (2021) contrasts this success by Disney+ with the lackluster performance of streaming services offered by Apple and quotes Randolph as saying that "if Apple spent one quarter as much on time on content as they do on giveaways, they could really play." (Para. 13). The implication seems to be that ambiguity regarding the business they are in and the business model they are using may be a key and critical question for Apple.

Meyer (2019) suggests that in situations where ambiguity is high, best practices for addressing that issue include: Create (some) clarity, make space for interactions, re-engage and recommit to your purpose, understand and prioritize user (customer) needs, focus on your MVP (Minimal Viable Product), practice rapid prototyping to fail faster and learn quicker, experiment and pilot to discover what you do not know, and make time to learn the lessons from experience and carry them forward.

Primary Sources. Regarding comments by primary sources, these reflect the opinions of the senior executives of two firms: Altos de Tinogasta and Globant. Background information on these two companies and on the comments by their senior executives are captured below.

Altos de Tinogasta: As for background, the business model for this Argentinian company based in Catamarca offers investors the possibility to own not only farmland planted in grapes or olives but also a share of (in the case of land planted in olives) the oil factory or (in the case of land planted in grapes) the wine cellar. The model also offers investors a share of assets like machinery, oil and wine manufacturing facilities, and other fixed assets, in proportion to the number of parcels acquired. The model entrusts the management of all operations (farming, processing of crops, etc.) to Altos de Tinogasta (AT); AT has selected and chosen well-known engineers (with specialized training in vineyards and olive grove management) to manage the operation. Since the beginning AT has been structured as a production/operation driven organization; the main priorities have always been earthmoving operations, construction of irrigation systems, and creation of plantations. Regarding key elements of the marketing strategy AT uses, Smith, Aimar, and Ruedin (2019) indicate the following:

1. **Target Market:** Individuals and families in Argentina who are among the ABC1 socio-economic categories.
2. **Product:** The 3000 hectares (322, 920 square feet) which AT purchased is being planted in olive trees and in grape-vines. The land planted in olives has been divided up into 216

parcels of 10,000 square meters (107, 640 square feet) each; as for the land planted in grapes, it has been divided up into 208 parcels of 2,500 square meters (26, 910 square feet) each.

3. **Price:** Land planted in olives has been offered to investors at a price of \$27,000 per parcel. The land planted with grape-vines has been offered to interested investors at a price of \$15,000 per parcel.
4. **Promotion:** Over the years, AT has purchased very little radio and/or print advertising. Much of their advertising has been by word of mouth and/or through friends and family relationships plus satisfied investors sharing their experience and reactions with their friends, neighbors, etc. Regarding the message: The benefits AT has offered to investors in the few promotions it has run included pro-rata portions of the total revenue generated by sales of the olive oil or wine produced by AT, increases in the value of the real estate parcel(s) buyers have purchased, and the enjoyment of owning parcel(s) of land in the mountains of Argentina.
5. **Place (Distribution):** AT has used a small direct sales force to successfully sell its products (Smith et al., 2019).

Altos de Tinogasta (Comments by a senior executive): The executive references the VUCA model several times. Readers will recall the assertion by Meyer (2019) that an early step in the VUCA process is to decide which of the four (VUCA) characteristics is most relevant to your current situation. As reported by Aimar (2020), the following observations by the executive suggest that in the current situation, he believes uncertainty is the most relevant VUCA characteristic: “It is clear that the pandemic and the effects/consequences that it is generating in the economy will not be resolved in three months, nor in six...this is not a ‘zonda’ wind that happened but uncertainty...the challenge will be, then, to reconcile the new forms of work, processes, consumption, among others, with the capacities and needs that made AT a concrete reality (there is the) growth of e-commerce...(where) numerator=net income; denominator=investments, assets, expenses...lowering the denominator is a priority in uncertain times...it is time for the reconstruction of the present before futures with a wide range of uncertainty...many companies will disappear, others will weaken, only 20% will survive this crisis...in the long term, with uncertainty dissipated or reduced, companies will find an uncontested market space, instead of fighting in the ultra-competitive market...clear the fog of uncertainty the strategy structure and culture 2021 will emerge from a new scheme of VUCA concepts.” (pp. 1-4).

According to Kaivo-Oja and Lauraeus (2018), key issues in modern VUCA management are agility (response to volatility), information and knowledge management (response to uncertainty), restructuring (response to complexity) and experimentation (response to ambiguity). Useful foresight tools are challenging tools, decision-making tools, aligning tools, learning tools and the ability to combine these management tools in the practices of corporate foresight and management systems. The VUCA approach is a key solution concept to

technological disruption. As indicated earlier, Meyer (2019) suggests that in situations where such uncertainty is high, best practices for addressing that issue include the following: Tap into the relational web of skills (and/or) knowledge (and/or) talent (and/or) resources to reduce uncertainty, gather additional information and insight (including customer data, market analytics), improve access to market insights via resources like slack and yammer, and reflect on (and) share experiences of successfully working through uncertainty. Additional best practices relating to reducing uncertainty which she identifies include: Identify the givens of the current situation and focus on what is within your span of control, provide or seek career-pathing (and/or) “stay interviews” so you can identify people’s interests plus strengths to keep them engaged, and implement agile performance appraisals and regularly provide feedback and acknowledge agile success.

Globant: Founded in Argentina in 2003 but now headquartered in Luxembourg, Globant is a technology services company which helps client companies develop mobile apps, websites, and digital journeys. Globant has more than 13,000 professionals working for companies like Google, LinkedIn, JWT, EA, and Coca Cola, among others. While its consultants work in more than 16 countries, Sun (2021) indicates that Globant generates 70% of its revenue in North America, nearly 8% in Europe, and the remainder of 22% in Latin America and other countries (Sun, 2021). Sun (2021) also indicates that the 3rd quarter of 2020, Globant’s largest customer was Disney Parks and Resorts Online. Globant has been featured as a business case study at Harvard, MIT, and Stanford; in addition, the company was named a Worldwide Leader of Digital Strategy Consulting Services by IDC MarketScape Report (2016 and 2017). Regarding the company’s recent performance in this very challenging environment, comments which can be made include the following:

Globant’s revenue rose by 26% to \$659.3 million in fiscal 2019, aided by the following:

1. In the first nine months of 2020, Globant’s revenue rose 22% year over year to \$581.5 million. Its adjusted gross margin dipped 180 basis points to 37%, partly due to COVID-19 costs, while lower utilization rates reduced its adjusted operating margin 240 basis points to 14.8%. However, its robust revenue growth still lifted its adjusted EPS by 6%.
2. Sun (2021) indicates that during last quarter's conference call, CFO Juan Urthiague estimated that Globant’s adjusted operating margins “would stay between 15%-17% in the near and mid-term as its revenue growth and utilization rates rebound toward pre-covid-19 levels.” (p. 2).

Globant (comments by a senior executive): Aimar (2021) reports that the executive indicates that at Globant, VUCA analyses are “applied and carried out by all our managers, having as an initial trigger a series of assumptions and hypotheses that are defined for each country, market, or geography. On some occasions we take input from consulting firms such as PW, BCG, (and/or) McKinsey, that is, external organizations.” (pp. 1-2). Aimar (2021) goes on to report that the executive made the following additional VUCA-related observations: “we do

not measure (the four VUCA characteristics) in quantitative terms...(for example) there is no complexity index that can be used as an indicator...Fiscal Year 2020 was evidence of the importance of the VUCA analysis. In March/April 2020 we had to take the plan prepared in 2019 and reinforce it, given the nature and magnitude of the uncertainty and volatility generated by covid...we respect the long-term commitments but are being flexible in our short-term agenda. This means that “strategy emerges as we walk down the road.” (pp. 2-3).

As indicated above, the executive highlights two VUCA characteristics (that is, uncertainty and volatility) as being especially relevant to Globant’s situation. The implication is that both the uncertainty and the volatility-related best practices identified by Meyer could be especially relevant to him. As indicated earlier, best practices for reducing uncertainty, according to Meyer (2019) may be identified as the following: Tap your relational web of skills (and/or) knowledge (and/or) talent (and/or) resources to reduce uncertainty, gather additional information and insight (including customer data, market analytics), improve access to market insights via resources like slack and yammer, and reflect on (and) shared experiences of successfully working through uncertainty. Additional best practices relating to reducing uncertainty include: “Identify the givens of the current situation and focus on what is within your span of control, provide or seek career-pathing (and/or) “stay interviews” so you can identify people’s interests plus strengths to keep them engaged, and implement agile performance appraisals and regularly provide feedback and acknowledge agile success: (Meyer, 2019).

As discussed earlier, best practices for reducing volatility, according to Meyer include: Promote and train for role elasticity and develop generalizing specialists; improve decision-speed; build redundancy into your system and build slack into the supply chain; leverage technology and alternative strategies to ensure continuous communication and collaboration and coordination; focus on learning and capacity building by identifying what you are learning and how you and your customers are changing through the volatility; regularly train for various disruptions and ID needed skills, knowledge, and/or talent as well as other critical business continuity factors; and, tap into your high-potentials for temporary assignments (Meyer, 2019).

IMPLICATIONS FOR THE CURRENT PANDEMIC ENVIRONMENT

Under current market conditions of corporate foresight, turbulence is a key element of the business landscape. Such turbulence is exacerbated by the pandemic environment and can be summarized using the trendy managerial acronym “VUCA”: volatility, uncertainty, complexity and ambiguity (Kaivo-Oja, & Lauraeus, 2018). We have identified a few major changes in the current business environment, including the conflict between order and disorder (a characteristic associated with both uncertainty and complexity) and movement (that is, variability). Managers need tools to address these issues. After suggesting that VUCA analysis is one such potentially relevant and useful tool and after providing a bit of background on the model and on the definitions of the VUCA variables, the authors describe a straightforward process for conducting a VUCA analysis suggested by Meyer (2019). The authors also provide comments by several senior managers regarding the relevance and usefulness (in today’s changed and changing

environment) of VUCA analysis. We believe the following implications flow from our in-depth examination of the above topics:

1. The profound and systemic recent changes in characteristics of the current business environment have already and will continue to provide serious challenges to companies and their managers.
2. Senior managers across a variety of different industries indicate that VUCA analysis is a relevant and useful tool for dealing with the realities of a changed and continually changing environment.
3. The VUCA analysis process described by Meyer (2019) seems useful; it is straightforward but also (and more importantly) provides executives with actionable recommendations regarding issues likely to need special attention and (for those areas) actions likely to be especially useful.
4. It turns out that developing and better-utilizing human capital (including training, career-pathing, development and utilization of expertise, and experimentation) show up as a “best practice” for dealing with challenges flowing from each of the VUCA variables (that is, Variability, Uncertainty, Complexity, and Ambiguity). It seems clear that the tension between order and disorder plus the continuous presence of movement (i.e., characteristics of our changing environment, and elements underlying VUCA analysis), can generate new perspectives and cause questioning and continuous organizational learning. When managers fight, question, learn together to discover the new, this creates tension in successful organizations and can be a creative source of the company's continued development.
5. In their reflections regarding VUCA and its usefulness, several senior executives mentioned issues identified in the call for papers for this special issue as “topics of interest;” issues commented on and the executive making those comments include:
 - a. Regarding customer service, by DePinto: “...we are an immediate consumption business...the e-commerce businesses are starting to encroach on our space. They are in fact beginning to redefine convenience as we have traditionally known it. We’re working to move our company toward being more of a technology company that works in coordination with our traditional convenience stores...to offer increased convenience (to our customers).” (Forsythe et al., 2018, pp. 2-3).
 - b. As for technological innovation and disruptions, by Leduc: “We have technology that is constantly advancing, and we have commercial and military customers redefining what their business models are and [what] they value now vs. what they previously did.” (Forsythe et al., 2018, p. 5).
 - c. Reflecting on technological innovation and disruptions, by Fucci: “I’d say the same things that are affecting our clients are affecting us, which is artificial intelligence, robotics and cognitive technology. Our clients are struggling with the question of how they incorporate these innovative technologies into their day-to-day operation. Therefore, if we’re going to consult with them, we need

to be ahead of the curve and help them decide how they use this technology....We must anticipate things that aren't even fully baked yet, but it's mostly around technology. I call it the "everything is a 'what-if' scenario..." (Forsythe et al., 2018, pp. 6-7).

- d. In reviewing liquidity and bankruptcy issues by a senior executive from Altos de Tinogasta, as has been mentioned earlier in this manuscript: "...many companies will disappear, others will weaken, only 20% will survive this crisis..." (Aimar, 2020, p. 3).
 - e. Regarding technology innovation and disruption issues by a senior executive from Globant, mentioned earlier in this manuscript: "VUCA context favors this course (that is, artificial intelligence, or AI) of action. AI is knowledge and technology; it produces great changes..."
6. The authors believe that the above observations by senior executives in a variety of industries relating to issues identified in the call for manuscripts for this special issue support the following ideas:
- a. The COVID-19 pandemic and global health crisis has not introduced change to the business environment; rather, it has increased the number of dimensions which are changing and accelerated the pace of those changes.
 - b. VUCA analysis has the potential to be an extremely useful and relevant managerial tool, for managers struggling to cope with the COVID-19/post-COVID-19 business environment, that is, a business environment featuring not only an increased number of dimensions of change but also an acceleration in the speed of those changes.

CONCLUSION

This article began by highlighting several characteristics (order, disorder, and movement) of the current environment in which we live and work. It seems clear that organizations need tools to help cope with challenges from our changing environment; one tool which seems likely to be useful is VUCA analysis. Therefore, the origins of VUCA analysis and definitions of its four components (Volatility, Uncertainty, Complexity, and Ambiguity) were discussed. After describing a process for doing VUCA analysis suggested by Meyer (2019), the article provided several comments and/or examples were provided by executives and/or analysts, regarding VUCA analyses and their usefulness.

Based on the research carried out by the authors using primary and secondary sources, several important implications emerged. There is a belief that our environment will continue to change, and during this changing environment, VUCA analysis can be a useful tool. The VUCA analysis can be used by managers across a variety of industries, to make decisions. A third and final important implication from our examination of this topic is that the primary and secondary source executive comments suggest that VUCA analysis has the potential to be useful to managers dealing with many of the issues identified in the prevailing COVID-19 pandemic era.

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SHIFTS IN FAMILY BUSINESSES DUE TO THE COVID-19 PANDEMIC

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ABSTRACT

The Business and Economics Research Center (BERC) at Middle Tennessee State University conducted the Family Business Survey from February 13, 2020, to May 23, 2020, to analyze family business frustrations and threats to its survival. This data was split into two sections: before the COVID-19 pandemic and during the COVID-19 pandemic, according to the chronology of the responses. An extensive analysis was conducted on the qualitative responses to two questions regarding "family business frustrations and threats" from the survey for the purpose of this research. Results for the first question found that the top three frustration themes for family businesses were: "time," "family," and "lack." Results from the second question indicated that the most concerning threat before the pandemic was "competition," which fell behind "Coronavirus" during the pandemic. Pre-pandemic concerns regarding technology, cyber-attacks and, cyber-security also reduced during the pandemic, implying an increase in familiarity, comfort, and adoption.

Keywords: Family business, COVID-19, frustrations, threats, employees

INTRODUCTION

Businesses around the world experienced the impact of the COVID-19 pandemic at the beginning of 2020. In the United States, new claims for unemployment insurance went from around 300,000 during the week of March 14, 2020, to 3 million during the week of March 21, 2020, and only grew in the weeks after (U.S. Department of Labor). The number of active business owners dropped by 3.3 million (or 22 percent) from February to April, and the "total hours these owners worked decreased by 29%" (Fairlie, 2020, p. 728). In a study of 3,613 small business owners, the Service Corps of Retired Executives (SCORE) found in the wake of the COVID-19 pandemic, only 26.4 percent of all businesses were able to keep their employees working. In contrast, "73.6% of all businesses had to lay off, furlough, or reduce employee hours/pay due to COVID-19" (SCORE, 2020, p. 5). According to the U.S. Census Bureau's Small Business Pulse Survey (2020), for the week of April 26, 2020, 74 percent of businesses sustained decreases in revenue. Only 16.7 percent had enough cash on hand to continue business operations for three or more months. These are merely a few pieces of evidence that illustrate the impact the pandemic has had on businesses and business owners.

In this unprecedented crisis, some businesses have found it challenging to implement change and keep up production. In a survey of over 206 service employees, Bartsch, Weber, Büttgen, and Huber (2020) observed that most employees found it difficult to transition to a virtual work environment and balance work-family responsibilities. Bartsch, Weber, Büttgen, and Huber (2020) further explain that leaders who insist on reinforcing strict goals and objectives are not helping the individual or team. With this approach, these leaders are counterproductive: they are removing the individual's ability to be self-reliant and develop problem-solving skills in an uncharted crisis-induced virtual environment (Bartsch, Weber, Büttgen, & Huber, 2020).

However, many businesses were able to make changes to their business operations and adapt to these challenges. In an attempt to retain customers, provide excellent service, and keep revenue flowing, some small businesses turned to virtual personal training and coaching sessions via Zoom. Many restaurants began offering take-out or delivery services, in addition to online ordering of meals (Akpan, Soopramanien, & Kwak, 2020).

Although multiple studies and surveys have covered the impact of COVID-19 on businesses, few have focused on how family businesses have been affected by the pandemic. One study conducted during the early months of the pandemic reported that creativity, risk-taking, and future orientation were significantly related to the performance of 114 Kuwaiti family businesses (Zainal, 2020). Another study analyzed qualitative data from 27 European family businesses and found five overarching topics of key interest: protecting liquidity, protecting operations and communications, business models, and cultural changes (Kraus, Clauss, Breier, Gast, Zardini, & Tiberius, 2020). The study also derives from crisis management literature to analyze family businesses' various strategic actions during this pandemic. Many organizations simply persevere in maintaining organizational operations (Kraus et al., 2020). They also engage in some combination of perseverance, retrenchment, and innovation (Kraus et al., 2020). Retrenchment refers to steps taken to reduce costs, while

innovation refers to a mindset of renewal, reconsideration of the existing business model, and recognizing opportunities for change (Kraus et al., 2020).

Even with providing these examples of studies on family businesses, the research done so far has largely focused on all businesses or small businesses. Thus, there is a sparsity of extant literature on the COVID-19 pandemic's effects on family businesses.

Family businesses engage in certain behaviors that may give insight into how they responded to COVID-19. In general, they value long-term survival over short-term performance (Minichilli, Brogi, & Calabrò, 2016), act responsibly towards their stakeholders, and make decisions more oriented towards non-economic goals such as values and principles (Chrisman, Chua, & Sharma, 2005). Their non-bureaucratic structure may also allow them to make fast decisions (Carney, 2005). Due to their debt structure, they are better positioned to ensure the continuance of activities and services and be resilient (Amann & Jaussaud, 2012). De Massis and Rondi (2020) speculate that long-standing family businesses may have an advantage in handling crises because they can lean on their traditions and family values to carry them through uncertain times and learn how previous family members endured hardship.

The purpose of this study is to investigate the changes in threats and frustrations perceived by the family businesses using unique survey data.

DATA AND METHODOLOGY

The Family Business Survey (FBS) data may fill in a portion of the gap in information regarding the pandemic's effect specifically on family businesses. Family Business Survey was conducted from February 13, 2020, to May 23, 2020.

Qualtrics was contracted to contact family businesses and collect survey data; the research team at BEREC did not communicate with the businesses. Working with Qualtrics on the development and distribution of the survey ensures a high level of quality in this project's execution. Through Qualtrics, business owners received monetary compensation as an incentive to participate in the survey. Qualtrics provided a requested sample once the survey deadline had passed. The data gathered in this survey was split into two sections: from February 13, 2020, to March 31, 2020, is referred to as "before the COVID-19 pandemic," while the range of dates April 1, 2020, to May 23, 2020, is referred to as "during the COVID-19 pandemic." These date ranges divide the data in half, with 49 percent of responses gathered before the pandemic and 51 percent during the pandemic. Owners from 311 companies completed the survey.

Although the survey was initially intended to study information about family businesses, the timing presented a unique opportunity to observe any shifts in operations during the early response to the pandemic. Only a portion of the results are examined in this study, as the survey was not focused directly on issues related to the pandemic. This data gives a view of broad changes since it does not capture responses from the same companies before and after the pandemic began.

Survey respondents were family business owners from around the United States. Table 1 below lists the location of respondents' headquarters by state. Several screening questions were used to filter out irrelevant responses, so each participant:

- Owns more than half of their company
- Has voting control in their company
- Earns over a million dollars in annual revenue through their company

Three hundred and eleven (311) responses were collected. The survey was not limited to a certain industry or level of operations; the top three most represented industries are construction, retail trade, and information. Also, 29 percent of these companies operate at the local level, 34 percent at the regional level, 28 percent at the national level, and 9 percent at the international level. Of the 311 respondents, 63 founded their companies before 2000; 92, between 2000 and 2009; and 146, between 2010 and 2019. Additional descriptive statistics related to the survey participants are provided in Table 1.

TABLE 1
Descriptive statistics from survey respondents

Descriptive Statistics			
Industry Classification	Count		
Accommodation and Food Services	16	Annual Sales	Count
Administrative and Support and Waste Management and Remediation Services	3	Less than \$10 million	81
Agriculture, Forestry, Fishing and Hunting	8	\$11 to \$50 million	89
Arts, Entertainment, and Recreation	3	\$51 to \$100 million	32
Construction	46	\$101 to \$200 million	30
Educational Services	2	\$201 to \$300 million	21
Finance and Insurance	37	\$301 to \$400 million	14
Health Care and Social Assistance	5	\$401 to \$500 million	25
Information	40	\$501 to \$750 million	19
Management of Companies and Enterprises	6		
Manufacturing	32	Number of Employees	Count
Mining	1	Less than 100	99
Other Services (except Public Administration)	7	100 to 200	86
Professional, Scientific, and Technical Services	29	201 to 500	81
Real Estate Rental and Leasing	8	501 or more	44
Retail Trade	42		
Transportation and Warehousing	7	Headquarters	Count
Utilities	4	Alabama	14
Wholesale Trade	15	California	15
		Delaware	4
		Florida	61
Area of Primary Operation	Count	Georgia	50
Local	90	Kentucky	13
Regional	106	Maryland	9
National	87	Mississippi	3
International	28	North Carolina	21
		Ohio	2
Year Founded	Count	Tennessee	27
Before 2000	63	Virginia	30
2000-2009	93	Washington D.C.	29
2010-2019	146	West Virginia	7
		Other	25

The survey included closed-ended and open-ended questions. The qualitative data was processed using the text-analysis software WordStat8. Answers to the questions "List your top three frustrations in your family business." and "What do you consider to be the main threats facing your business in the next three years?" were analyzed. Since each question required three responses, over 900 responses were analyzed for each. The qualitative analyses include the frequency of words that occurred in open-ended questions and provides TF*IDF, a statistical measure of how relevant a word is to a document in a corpus. Also, results include qualitative data analysis, which was descriptively analyzed through MATPLOTLIB, the plotting library of Python programming language.

RESULTS

There are two main questions from the survey that allow us to assess the pandemic's impact: the frustrations of family business owners and major threats to their businesses. Frequency tables for keywords are included in the analysis below.

Family Business Frustrations

TABLE 2
Major word frequencies from the "frustrations" question

Major Frequencies in Frustrations					
Pre-COVID-19 Pandemic			During COVID-19 Pandemic		
Word	Frequency	TF*IDF	Word	Frequency	TF*IDF
Time	27	33.2	Time	22	29.3
Family	19	26.3	Family	19	27.0
Lack	15	22.3	Business	13	20.3
Employees	13	20.1	Money	11	18.0
Communication	13	20.1	Communication	10	16.8
Work	12	19.0	Lack	10	16.8
Money	11	17.8	Employees	8	14.2
Management	9	15.4	Management	8	14.2
Hours	8	14.1	Laziness	7	12.8
Technology	8	14.1	Good	6	11.4

Time. When owners were asked to "List [their] top three frustrations in [their] family business," the most frequently given answer had to do with "time" both before and during the pandemic. In responses before the pandemic, "time" was listed 27 times; the same word was recorded 22 times during the pandemic (Table 2). Amidst the furloughs and reductions in hours experienced in most businesses, time management became an especially important skill to capitalize on when the pandemic hit.

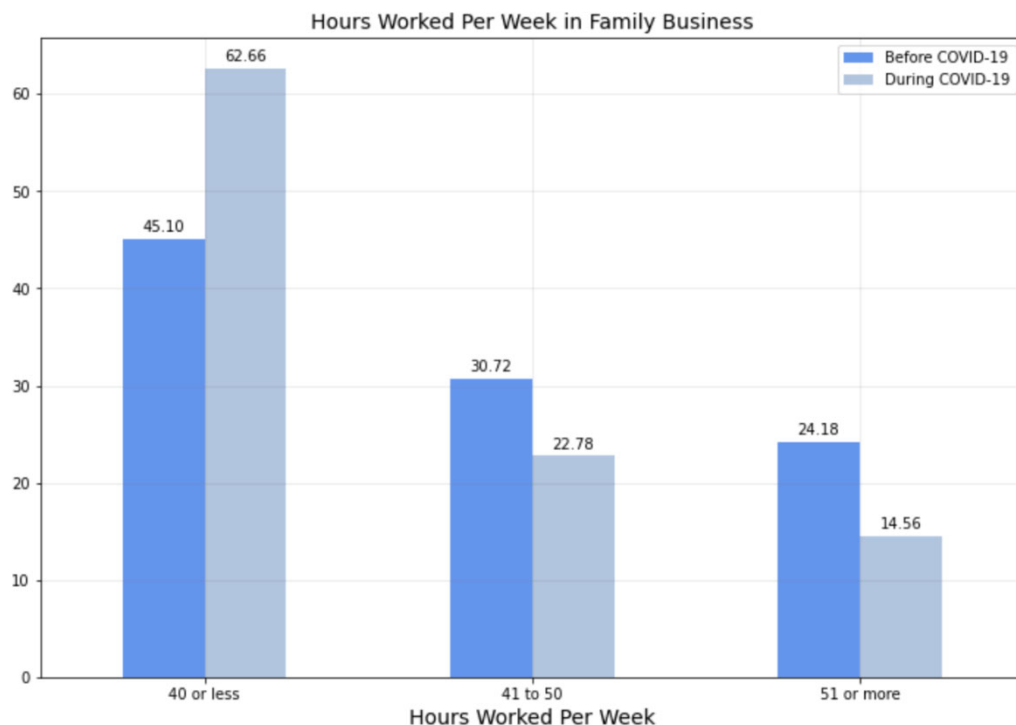
In both categories, the owners of businesses that were established between 2010 and 2019 struggled the most with time: 48 percent of answers related to the time before the pandemic came from owners of companies established from 2010 to 2019 and 55 percent of those during the pandemic related to time were from owners of companies founded in the same period. This suggests that owners of long-established companies are better equipped not only to manage their schedules in day-to-day life but also, to respond to crises when compared to those with newly formed family companies. Younger generations may experience the most challenges in learning to adapt their actions and business plans in the face of uncertainty (Table 3).

TABLE 3
Instances of "time" in "frustrations" before and during the pandemic

Instances of "Time" in Frustrations			
Pre-COVID-19 Pandemic		During COVID-19 Pandemic	
Response	Frequency	Response	Frequency
Time	11	Time	12
Time management	3	Time management	2
Being on time	2	Time convenient	1
Time commitment	1	Not enough free time	1
Adequate employee time off	1	Segmented time	1
My employees need to spend their time better	1	Taking time off or being late because they are related to the business	1
IT on time	1	Being on time when I want off	1
Time to get procedures done in a timely manner	1	Rallying for help from other family members in a time of need	1
Time with family at home	1	Time consuming	1
Time to meet deadlines	1	Time to complete tasks	1
Scheduling myself time off	1		
Time Off	1		
Payment processors and on-time techs.	1		
Separate personal from professional time	1		

Since time is such a large concern for many family business owners, the qualitative data from the question "How many hours per week are you working now?" was analyzed. The results are shown in Figure 1, which displays the variation in hours worked per week before and during the pandemic. Before the pandemic, 69 family business owners worked 40 or fewer hours; during the pandemic, the number of owners working 40 or more hours increased to 99. Also evident is the drop-off in the number of family business owners working 41 to 50 hours or 51 or more hours. This shift in hours worked likely stems from the effects of COVID-19-related lockdowns, as business owners were forced to close their offices and conserve resources. These findings reinforce those of Fairlie (2020), who, using Current Population Survey data, discovered that the hours worked by business owners in the U.S. fell by 29 percent during the period February to April 2020 (p. 728).

FIGURE 1
Hours worked per week by company owners before and after pandemic



Family. The second most mentioned word is “family”, which occurs in the data 19 times both before and during the pandemic. The ramifications of the crisis on business owners' frustrations with family are less obvious initially than those regarding time. However, when the instances are analyzed in context, the issues can be encapsulated in two main categories: the family business creating tension in the family and the difficulty of treating a family member like a non-family employee.

Many of the responses collected before the pandemic were "training family members" or were related to managing family employees as if they are non-family employees. The answers noted during the pandemic seem to convey a higher level of tension: family business owners are frustrated with "Family members not pulling their weight," "Family issues," and "Intrafamily friction." There is naturally a measure of overlap in the responses between the two time periods. However, the issues business owners were having with family members were likely exacerbated by the stress of the pandemic. This would explain the heightened discord seen in the second set of answers (Table 4).

TABLE 4
Instances of "family" in "frustrations" before and during pandemic

Instances of "Family" in Frustrations	
Pre-COVID-19 Pandemic	During COVID-19 Pandemic
Family in-fighting	No clear succession on family business
Training family members	The lack of money to pay utility bills, grocery bills, and rent can cause family conflicts
Training family members	Family employees thinking they deserve more because they're family, especially in compensation
Family	Family issues
Looking beyond a family member and seeing them as an employee	Convincing members to pay attention to the family business
Family gossip	Unproductivity from family members
High turnover of non-family employees.	Working with family
Playing to each family member's strengths.	Family business management is harder
My family needs to realize that I am doing the best I can	Family member not pulling their weight
Time with family at home	Rallying for help from other family members in time of need
Training new family members that are fresh out of high school	A family conflict can impede business relations and decisions
Tardiness due to being family	Family misunderstandings
Lazy family members	Family issues
Training family members like regular employees	Training family members from within
Power struggles within family	Frustrations among employees because of a family member
Taking advantage that they are family	Getting the younger ones to pay attention during family meeting
Find the right management to help the family business	A difference at work can make interacting in the family more difficult.
My family doesn't like me employing my wife to the business.	Intrafamily friction
Treat family employees better than others	Difficult to grow a family business

Lack. Although family businesses may have experienced a reduction in available resources when the pandemic and subsequent response measures disrupted operations, the number of times the word "lack" was used in relation to their frustrations decreased during the pandemic, from a frequency of 15 to 10. In both categories, business owners are lacking various soft skills, attributes, and tangibles. Before COVID-19, business owners wanted more drive, enthusiasm, ambition, attributes, and soft skills geared toward growth.

Conversely, during the pandemic, owners were focused on survival-related soft skills, such as communication, coordination, and honesty. There is also a difference in the resources that they noted to be lacking. Pre-pandemic, the focus was on equipment, skillsets, vacation, and education. During the pandemic, answers highlighted frustration with the lack of money to pay the bills, a successor to take over the business, staff, and goals. This contrast indicates a shift in applied effort from long-term business growth to short-term survival and maintenance of their business needs (Table 5).

TABLE 5
Instances of "lack" in "frustrations" before and during pandemic

Instances of "Lack" in Frustrations	
Pre-COVID-19 Pandemic	During COVID-19 Pandemic
Lack of drive	Lack of money to pay utility bills, grocery bills, and rent
Lack of enthusiasm	Lack of a successor
Lack of ambition	Lack of staff
Lack of interest	Lack of honesty
Lack of integrity	Lack of goals
Lack of accountability	Lack of interest
Lack of equipment	Lack of cooperation
Lack communication	Lack of coordination
Lack of skillset	Lack of communication
Lack of income	Lack of communication
Lack of vacation	
Lack of employees	
Lack of management team	
Lack of continuity	
Lack of education	

Employees. Like the trends seen with mentions of "family," the number of times "employees" appeared in answers decreased during the pandemic. Before the pandemic, "employees" was listed 13 times with a TF*IDF of 20.1, compared to being mentioned eight times during the pandemic with a TF*IDF of 14.2. Pre-pandemic, most responses were related to hiring and employee management; as shown in Table 6, business owners were frustrated by the "high turnover of non-family employees," "retaining employees," and "unreliable employees." These irritations were likely made worse when business owners had to lay off or fire employees after conditions continued to deteriorate in April and May 2020.

As expected, some businesses note "finding good employees" and "number of employees" as a frustration during the pandemic. However, comparatively more employers highlighted the division between family member employees and non-family employees during the pandemic. They said that "family members [think] they deserve more because they're family," "working with families is different than regular employees... and that's tough," and that there are "frustrations among employees because of a family member." The contrast in responses displayed here signals a turn from operational challenges to an increase in emotional and relational strain among family members operating the family business.

TABLE 6
Instances of "employees" in "frustrations" before and during pandemic

Instances of "Employees" in Frustrations	
Pre-COVID-19 Pandemic	During COVID-19 Pandemic
My employees need to spend their time better	Finding good employees
Unreliable employees	Controlling the employees
Training family members like regular employees	Family employees thinking they deserve more because they're family, especially in compensation
High turnover of non-family employees	Number of employees
Finding good employees	Working with families is different than regular employees because there's a personal level there and that's tough
Employees	Employees
Retaining employees	Employees
Not allowing employees to work from home	Frustrations among employees because of a family member
Need more employees	
Retaining good employees	
Employees	
Hiring new employees	
Treating family employees better than others	

Money. The U.S. Census Bureau's Small Business Pulse Survey (2020) indicates that in the first week of their data collection, April 26, 2020, to May 2, 2020, an average of 16.7 percent of companies had enough cash on hand to continue operating their businesses for three or more months. Especially at the beginning of the pandemic, when everything was unclear, cash flow was a major concern. Many of the participants in this survey were formed recently, between 2010 and 2019. Newly formed businesses may face disruptions in cash flow, given that they likely have less cash on hand than well-established firms.

In the data BERC collected before the COVID-19 pandemic, "money" appeared with a frequency of 11 and TF*IDF of 17.8. Surprisingly, the number of occurrences was equivalent during the pandemic but had a slightly higher TF*IDF of 18. This demonstrates that regardless of whether a crisis is occurring, businesses face financial issues and setbacks, which emphasizes the importance of financial literacy and training for businesses to be as prepared as possible (See also Table 2 above).

Business. Mention of the word "business" in responses rose from a frequency of 7 with a TD*IDF of 12.7 pre-pandemic to 11 with a TF*IDF of 20.3 during the pandemic. "Business" went from being the 11th most mentioned word before March 31 to the third most noted word after. The contrast between the word in context before and during the pandemic shows that the owners' frustration regarding aspects of their businesses altered slightly as the pandemic hit.

Before the pandemic, owners struggled with marketing, finding a work-life balance, planning, and budgeting. In contrast, during the pandemic, owners were more dissatisfied with managing the family business, which is illustrated in responses such as "convincing members to pay attention," "a family conflict can impede business relations and decisions," and "I have been deceived by business partners" (Table 7).

TABLE 7
Instances of "business" in "frustrations" before and during pandemic

Instances of "Business" in Frustrations	
Pre-COVID-19 Pandemic	During COVID-19 Pandemic
Keeping up with big businesses	No clear succession in family business
Business expense	Convincing members to pay attention to the family business
Marketing and promoting our business	Family business management is harder
Normal pains of a small business	No code of conduct in the business
Business profits	Taking time off or being late because they are relatives
Separation of personal and business life	Dynamic business environment
Finding the right management to help the family business	A family conflict can impede business relations and decisions
My family doesn't like me employing my wife in the business	I have been deceived by business partners
	Business is not connected
	No paid training in the business
	Opening a new business
	Business
	It is difficult to grow a family business

Threats Facing Family Business in the Next Three Years

Competition & Coronavirus. Company owners were asked, "What do you consider to be the main threats facing your business in the next three years?" Before the pandemic, the most frequent response was "Competition," which was mentioned 20 times in the data. While competition was still a significant issue during the pandemic, it was more statistically significant in the data set from the COVID-19 time period, with a TF*IDF of 28.4 overshadowed by "Coronavirus," which was mentioned 31 times. "Coronavirus" had a TF*IDF of 44.8, making it the most significant term compared to all others in either data set by far. Also apparent is that technology and cyber concerns were pushed down by economic and family worries. This shift demonstrates that family businesses' focus went from advancing and growing their businesses to staying afloat amidst the turmoil caused by the pandemic (Table 8).

TABLE 8
Major word frequencies from the "threats" question

Major Frequencies in Threats					
Pre-COVID-19 Pandemic			During COVID-19 Pandemic		
Word	Frequency	TF*IDF	Word	Frequency	TF*IDF
Competition	20	27.2	Coronavirus	31	44.8
Economy	20	27.2	Competition	21	28.4
Technology	14	21.2	Economy	18	25.6
Business	13	20.1	Family	12	19.2
Cyber	13	20.1	Economic	11	18.0
Lack	9	15.4	Business	8	14.2
Money	9	15.4	Government	8	14.2
Security	9	15.4	Technology	8	14.2
Time	9	15.4	Lack	7	12.8
Family	8	14.1	Money	7	12.8

Technology. While many businesses had to shift their operations to an online environment, the concern surrounding technology decreased during the pandemic. The frequency of the word's appearance in responses was almost cut in half, from 14 pre-pandemic with a TF*IDF of 21.2 to 8 during the pandemic with a TF*IDF of 14.2. There are many potential explanations for this change: it could be due to business owners' increased concern for their family and the condition of the economy, or it is possible that companies have now integrated more technology into their practices. Let us suppose this second possibility is a factor at work here. In that case, many companies may be more comfortable using technology, such as dealing with their online platforms or using Zoom for video conferencing. This adaptation could help companies in the long run, as the increased exposure to new technology makes other new technologies more approachable (Table 9).

TABLE 9
Instances of "technology" in "threats" before and during pandemic

Instances of "Technology" in Threats			
Pre-COVID-19 Pandemic		During COVID-19 Pandemic	
Reponse	Frequency	Response	Frequency
Technology	8	Technology	6
Changing technology	1	Technology integration	1
New technology	1	Keeping up with evolving technology	1
Cost of changing technology	1		
Information technology	1		
Technology advancement	1		
Keeping pace with technology	1		

Additionally, the use of the word "cyber" dropped dramatically. Mentions of cyber-attacks or cybersecurity being a major threat to these businesses went from 13 before the pandemic to 2 in the pandemic. As with technology, it is possible that company owners have become more familiar with managing cybersecurity, and it is, therefore, less of a concern. If this is not the case, the lack of concern for cybersecurity is an extremely dangerous trend, considering the reliance that most companies now have on technology to operate their businesses. Even before 2020, there was a growing trend toward conducting business online; the pandemic and necessary safety measures making in-person transactions unfeasible accelerated this progression. Without strong cyber-security systems in place, businesses are left vulnerable to a range of different technological disasters. On a related topic, mentions of "security" also decreased. Some instances overlapped with "cyber", but "security" unrelated to "cyber" was recorded 6 times before the pandemic, compared to 3 during. This decline is also concerning, as it indicates that many business owners have blind spots when it comes to protecting their companies from potential external threats.

Family. The mentions of "family" as a threat increased. While business owners were certainly worried about their family members' health, that is not the focus of these entries. These business owners are concerned about the threat their family members pose to the business. Responses before the pandemic are very similar to those during the pandemic, including those like "family issues," "family differences," "feuds within the family," or simply "family." While the phrasing of the responses is not drastically different, the number of times that "family" was listed as a threat went from 8 pre-pandemic to 12 during the pandemic, a 50% increase. This hike

in frequency demonstrates the stress that family businesses are experiencing, particularly from the family side. With tighter finances and less ability to hire new people, many businesses' core teams may have been reduced to just the family members, putting additional pressure on them to keep the business functioning in an economically uncertain period while also exacerbating any previous issues that may have been present (Table 10).

TABLE 10
Instances of "family" in response to "threats" before and during pandemic

Instances of "Family" in Threats	
Pre-COVID-19 Pandemic	During COVID-19 Pandemic
Family	Family members
Family	Family misunderstanding
Losing family ownership over time	Loss of non-family employees
Family differences	Commitments from family
The government not helping family businesses	Family size
Younger family members not investing or being a part of the business	New family members
Family financial trouble	Family problems
Family issues	Understanding family members
	Family
	Finding good employees besides family members
	Feuds within the family
	Family threat

Government. During the pandemic, the number of times people listed "government" as a threat also rose. Before the pandemic, mentions of the government were largely vague; of the five responses that included this term, three solely responded "government." During the pandemic, responses were more numerous and slightly more specific. Of the eight responses featuring this word during the pandemic, half listed "government policy" as one of their frustrations. One business owner listed "government regulations" as frustration, and another, "government assurance." It is possible that these answers became more specific while measures related to the COVID-19 pandemic were being instated, although they may be addressing other policies (Table 11).

TABLE 11
Instances of "government" in response to "threats" before and during pandemic

Instances of "Government" in Threats			
Pre-COVID-19 Pandemic		During COVID-19 Pandemic	
Reponse	Frequency	Response	Frequency
Government	3	Government	2
Government laws	1	Government policy	4
The government not helping family businesses	1	Government assurance	1
		Government regulations	1

Lack. The term "lack" is featured multiple times in both data sets but is incomprehensibly out of context. When read in context, it becomes clear that pre-pandemic, most company owners found the lack of employees and resources to be a major threat. For example, some of the answers given were "lack of employees," "lack of equipment," and "lack of resources." During the pandemic, owners were more worried about the lack of potential clients and control over their circumstances: the answers shifted to "lack of clients in the future" and "lack of trust" (Table 12).

TABLE 12
Instances of "lack" in response to "threats" before and during pandemic

Instances of "Lack" in Threats	
Pre-COVID-19 Pandemic	During COVID-19 Pandemic
Lack	Lack of clients in the future
Lack of equipment	Lack of control
Lack of employees	Lack of clients
Lack of funding	Lack of skilled workers
Lack of resources	Lack of trust
Lack of people accepting and understanding the vision	Lack of interns
Lack of qualified employees	Lack of technical talent
Lack of employee	
Lack of employees	

CONCLUSION

There is a sparsity of literature that covers the impact of the COVID-19 pandemic on family businesses. In response to this knowledge gap, the data gathered by the Business and Economics Research Center (BERC) at Middle Tennessee State University in the Family Business Survey were analyzed to determine if any shifts occurred as the pandemic began. The survey was administered to family business owners from February 13, 2020, to May 23, 2020. This data was split into two sections: before the COVID-19 pandemic and during the COVID-19 pandemic, according to the chronology of the responses. The qualitative responses to two questions from the survey, those regarding frustrations and threats, were analyzed extensively for the purposes of this paper.

Results for the first question found that the top three frustration themes for family businesses were: "time," "family," and "lack." Time was the most common concern pre-pandemic and during the pandemic. Owners of businesses that were established between 2010 and 2019 particularly struggled the most with time. The occurrence of "family" increased slightly during the COVID-19 pandemic. A deeper exploration revealed that this crisis is testing the strength of family cohesion instrumental in creating a stable operational foundation for a family business. The theme of "lack" was more commonly observed pre-pandemic. A more in-depth analysis indicated that the absence of communication, unwillingness to grow and innovate, as well as lack of skill-set and education of employees were the major concerns of family business owners. Results from the second question indicated that the most concerning threat before the pandemic was "competition," which fell behind "Coronavirus" during the pandemic. Pre-pandemic concerns regarding technology, cyber-attacks and, cyber-security also reduced during the pandemic, implying an increase in familiarity, comfort, and adoption.

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