

## **A COMPREHENSIVE STUDY OF STARTUPS REDRAFTING THEIR BUSINESS TRACKS AMIDST 'COVID 2019' PANDEMIC**

**Dr Narender Yadav**

Assistant Professor, School of Pharmaceutical Sciences, Apeejay Styta University

**Dr Kapil Kumar**

Associate Professor, School of Pharmaceutical Sciences, Apeejay Styta University

### **Abstract**

#### **Purpose**

The present research study keenly investigates systematically, the businesses of the selected startups for financial years 2019-20 & 2020-21 in order to evaluate their business affairs, so as to measure their performance in the gone by months and for the present under 'Covid 2019' pandemic ( RQ1), to identify their immediate, medium and long run concerns for their business; to understand the adequacy of their existing support mechanisms and level of preparedness to absorb the shock;(RQ2), to describe their thought off strategy to deal with the situation and new practices likely to be adopted in terms of operations and dealing with labour, employees, customers and other stakeholders;(RQ3), and to reason their optimism in revival of their business and of the economy as a whole(RQ4),

#### **Design/Methodology/Approach**

A study of an organization or business passing through a crisis does require a comprehensive approach covering financial and management strategies that makes the research to make use of both quantitative and qualitative approach. Therefore, the present study has used a combination of quantitative and qualitative aspects as this unpredictable event has a multidimensional effect on the financial and non-financial functions of a business unit. Some directly quantifiable through financial analysis and some based on perception of an individual to be explored and described (Unstructured Interview). 40 startups were selected for the study who are closely associated with BSSS Incubation centre (one of the MSME approved Host Institutions under the scheme of "Support for Entrepreneurial and Managerial Development of MSMEs through Incubators" of Ministry of MSME, Government of India) & its Associate Partners.

#### **Findings**

It has been found that these startups are suffering from liquidity crunch and the government support system did not reach to them the way it needed to be. As the depth and the nature of bad effects of the pandemic vary differently from each other, the detailed findings of the 40 startups are represented in 6 major challenges identified by the researchers based on the detailed review of the available literature.

#### **Practical Implication** :

*\*Autora de correspondencia / Corresponding author.*

Startups are getting flourished in Madhya Pradesh by creating lot of employment opportunities. So, there is an urgent need for the revival of the start-ups to safeguard the jobs of large number of employees

### **Originality Value**

The study will definitely boost the new economic paradigm by accelerating cultural shift in society where being job provider is encouraged rather than being job seeker. Effective analysis of strategies adopted by the successful startups during the pandemic are systematically presented in this research which will help us to redefine and redraft success strategies of budding startups.

**Keywords:** Startups, redraft, redefine, success strategies, pandemic-proof business

### **Introduction**

India saw a national lockdown and unlocking from March 24 to September 2020. After that, in April 2021, lockdown-like restrictions were implemented. India's economy had only recently begun to recover from the first wave of Covid-19 as of September 2020. The second wave of lockdowns and curfews, on the other hand, had a negative influence on the economy. According to a poll conducted by community platform LocalCircles, the impact of the second wave of the Covid-19 pandemic is expected to cause nearly 59 percent of startups and micro, small, and medium enterprises (MSMEs) in India to scale down, shut down, or sell themselves this year. Entrepreneurship has a significant impact in economic development and is a critical component of productivity and growth of any country (Baumol, 1993).

The revival of small, medium enterprises and budding startups is really very harsh if the Pandemic continues. Thus, moving with this thought it interested us to conduct a research study on the topic A Comprehensive Study of Startups redrafting their business tracks amidst 'Covid 2019' Pandemic linked with 'Bhopal School of Social Sciences Incubation Centre' and its Incubation Partners by taking 'Start-ups' and evaluating their status in this troubled time, especially, the ones that are chosen by the designated 'Incubation Centres' of our country. The present research study keenly takes interest to investigate systematically, the businesses of the selected startups for calendar (as the first report of pandemic in India was reported in the month of January) and financial year of 2020 & 2021 with the following research question in mind "How Start-ups linked with 'BSSS Incubation Centre' facing different levels of jolt by 'Covid 19' look at their bearings and what changes they propose to introduce in their own businesses? Besides, the received and desired help from the government. And what additional role BSSS incubation centre identifies under the current situation? The research team investigated the multidimensional effect of the pandemic on the financial and no financial functions of the selected business units under the study. Through this study, an attempt is done to redefine the start-ups success and investigated the main challenges that startups and entrepreneurs faced during COVID 19 pandemic. As Startups are mushrooming in the state of Madhya Pradesh by creating huge employment opportunities, there found an urgent need to enquire on the topic. The study will definitely boost the new economic paradigm by accelerating cultural shift in society where being job provider is encouraged rather than being job seeker. These start-ups have the potential to expand social innovation to address pressing environmental and societal challenges. This study is extremely critical for boosting start-up milieu in central India, as it has brought in the insights gathered from studying success and failures of start-ups across different regions of India. If a competent entrepreneurial eco system is built in the state, the potential for entrepreneurial growth is very large. Interviews with entrepreneurs provide a first-hand account of the adversity that startups face during a crisis

and how do they manage to mitigate the effects of the crises. The interviews helped us to understand their future plans for establishing a pandemic proof shield around their businesses. The financial statement analysis of the startups showed that all are facing liquidity crunch.

### **Review of Literature**

Start-ups should get ready to deal with such a disaster. To accomplish so, individuals must first understand their current situation before deciding which actions to take or which paths to pursue. As a result, knowing their problems has become a must for these creative-thinking companies. Previously, a few studies looked into the challenges faced by entrepreneurs in growing economies like Iran (Eggers 2020).

Being resilient requires being innovative, because successful organisations anticipate and respond to a wide range of crises on a regular basis (Linnenluecke, 2017). However, businesses do not always identify the true harm that a prospective crisis event poses (Munoz et al., 2019), and the majority of startups will have been caught off guard by the events of the recent four months. We know from research on the effects of Hurricane Katrina and its aftermath that failing to prepare can have disastrous consequences, especially for small businesses, which are vulnerable to disrupted cash flows, a lack of access to capital for recovery, problems accessing federal assistance, and serious infrastructure issues (Runyan, 2006).

The COVID-19 epidemic, combined with other economic lockdowns around the world, has created a unique circumstance with no reported analogue in the entrepreneurship literature. However, there is a body of research on entrepreneurship and crisis management that provides two study streams in particular that could be useful in the COVID-19 pandemic. The first is what is known as entrepreneurial crisis management, and it is concerned with how businesses react to a crisis. Many of the studies in this field are concerned with resilience (Doern, 2016; Doern et al., 2019). The second stream suggests which policies can help a company survive a crisis (Alesch et al., 2001), as well as what impediments might exist (Runyan, 2006); this second stream could help policymakers devise effective solutions. Resilience is a key concept in entrepreneurial crisis management (Doern et al., 2019). It not only describes an organization's ability to continue operating in the face of a disruptive event, but it also considers which resources were accumulated prior to the crisis and then deployed during the crisis and its aftermath (Williams et al., 2017). To develop resilience, crisis management is used, and it will be crucial during the COVID-19 situation. Crisis management (Spillan and Hough, 2003) is used to mitigate the effects of a crisis and, when done correctly, can quickly restore functionality to businesses suffering from the effects of disrupted or weakened systems (Williams et al., 2017). Changes in sales, marketing, and employment policies are among the activities that entrepreneurs or organisations take to alleviate the possible negative implications of a crisis, according to the few studies on crisis management in entrepreneurship research (Doern et al., 2019). Small enterprises, in particular, are known for their agility and flexibility (Smallbone et al., 2012), and we should expect them to show it in the COVID-19 situation. Thus, rather than advocating inflexible processes to handle the issues posed by COVID-19, it seems more appropriate for innovative companies to adopt iterative and flexible methodologies such as effective logic (Sarasvathy, 2001). The resilient entrepreneurs, according to findings from research on the 2012 Emilia earthquakes in Italy (Martinelli et al., 2018), were those who produced change and opportunity with the resources available at the time, clearly following one crucial effectual concept.

To get through the COVID-19 problem, startups said they relied heavily on what are known as relational

capabilities (Williams et al., 2017). As a result, their response to adversity has primarily been based on purposeful bricolage (Williams et al., 2017; Gilbert-Saad et al., 2018) by combining available internal resources and enlisting external resources from their network (Baker and Nelson, 2005), which would include partner goodwill, mutual support in the startup community, and access to social capital through social media. Furthermore, founders acknowledged attempting to strengthen their companies' financial capacities (Williams et al., 2017) by raising funds through internal adjustments or process and applying for government support. Bullough and Renko (2013); Doern, Williams, and Vorley (2019); Egan and Tosanguan (2009); Shepherd and Williams (2014); and Williams and Shepherd (2016) are some of the relevant studies that investigated entrepreneurial activities in times of crisis at an individual level. Davidsson and Gordon (2016) looked into the persistence of nascent entrepreneurs during the global financial crisis. They identified a downward trend in the number of startups during the global financial crisis, which they believe is due to potential entrepreneurs' lack of desire to start a business. The majority of these studies were carried out to assess less severe economic crises than the ones we are currently experiencing. Furthermore, at the commercial (Latham 2009; McDonald and Eisenhardt 2020) and societal (Bennett and Nikolaev 2020) levels, a separate body of work has focused on startup challenges during the crisis.

Nonetheless, there are a few scholarly studies and publications about their issues that have been published recently (Kuckertz et al. 2020). They were told to "prepare for the worst and cut spending," according to a TechCrunch article. Then it became clear that fundraising institutions and venture capital funds were warning startups and advising them to avoid any developments that were not in line with their approved plans, instead opting for downsizing and cost-cutting strategies (TechCrunch, 2020).

According to a recent study (CBInsights 2020), the first quarter of 2020 is expected to have a 22% drop globally, compared to the same period in 2019. The same survey revealed a more significant drop in Asian-based seed funding. This is still a difficult issue for seed-stage companies, which have struggled to survive in these difficult times.

According to a survey published by Iran's Statistical Research and Training Center, start-ups in the Iranian entrepreneurial ecosystem lower costs to survive. Furthermore, just a few state-backed venture capital funds continue to invest in early-stage companies. The number of start-up investments has dropped considerably in the last six months. According to TechinAsia (2020), various countries, notably South Korea, responded differently at the same time. They insisted on fighting the pandemic with digital start-ups. A number of start-ups have also begun taking steps to reduce infection rates and handle the problem, such as manufacturing testing kits and employing artificial intelligence. The important aspect is that the government has opened up new avenues for closer collaboration with agile start-ups. The government's initiatives, notably the actions done by the Ministry of SMEs and Start-ups, may be responsible for unleashing the power of start-ups to handle the pandemic in South Korea.

The European start-up ecosystem, too, was on the move and didn't want to waste any time. For example, to combat the COVID-19 outbreak, Norway's tech and start-up community organised an online hackathon from March 27th to March 29th, 2020. (EU Start-ups, 2020).

In Italy, the Fintech District, a prominent open ecosystem for fintech start-ups, has developed a number of initiatives to help Italian fintech start-ups with fundraising and consulting (EU Start-ups, 2020). The infrastructure in the United States was better suited to utilising the skills of start-ups. More than twenty-five Y

Combinator- based biotech and health-tech start-ups, for example, were actively participating in the epidemic response (Y Combinator 2020).

Only a few recent studies have focused on the difficulties faced by startups during this crisis. For example, Kuckertz et al. (2020) investigated the financial issues faced by start-ups during this time period using bricolage theory. They offered a framework for start-ups to manage such crises, as well as start-ups' potential actions to become more resilient. Their approach, however, was primarily focused on the financial elements of start-ups. Eggers (2020) also focused on small and medium-sized businesses, completing a literature analysis to identify a number of obstacles and opportunities for these businesses during the crisis. Finally, Maritz et al. (2020) compiled a series of anecdotes from a variety of sources to demonstrate how entrepreneurs in an Australian environment may turn obstacles into opportunities during the crisis; nevertheless, their research ignored any challenges.

Aidin Salamzadeh et al. explains in their paper *The Coronavirus (COVID-19) Pandemic: Challenges among Iranian startups* by the key challenges faced by Iranian startups by interviewing the co-founders of fifteen well-known startups. In their research paper titled *Impact of Covid-19 in the European Start-ups Business and the Idea to Re-energise the Economy*, Stavros Kalogiannidis and Fotios Chatzitheodoridis covered all of the major effects of the COVID 19 pandemic and worldwide shutdown on start-up businesses operating in Europe.. The following recommendations were made by them, like using the Government's stimulus packages is highly recommended and interventions of different policies are recommended to speed up the process of recovery in the start-up industry in Europe (Kalogiannidis, 2020).

In their paper *A Comprehensive Review of the COVID-19 Pandemic and the Role of IoT, Drones, AI, Blockchain, and 5G in Managing Its Impact*, Vinay Chamola and et.al explain how they calibrate the disastrous impact of the COVID-19 and take a broad look at the state of the global economy following its outbreak by providing some recent insight into COVID 19 various stages and symptoms. Brown Rose et al. look at how the current COVID- 19 situation is affecting important sources of entrepreneurial capital in the UK. This hypothesis is investigated in the paper by using a real-time data source of equity investments. Their data imply that since the start of the COVID-19 pandemic, the volume of new equity transactions in the United Kingdom has decreased significantly. Seed money looks to be the main sort of entrepreneurial finance most severely impacted by the crisis, as it often goes to the youngest entrepreneurial start-ups with the most difficult time securing capital. These real-time data sources can be used by policymakers to help influence their strategic policy actions to help the enterprises most affected by crisis situations.

Sreenivasan A (2021) et al in their paper pinpoint the COVID-19 era's sourcing risk enablers.. The application of supplier risk, quality risk, and demand risk was found to be strongly dependent on other enablers. Anjani Kumar and Neeru Bhoosahan (2020) in their paper titled *How Did Agri-start-ups Fare during the COVID-19 Pandemic? Challenges and the Way Forward* detailed the agricultural start-ups during the covid 19 pandemic discuss the Agri start-ups in the chosen locations. Despite a liquidity constraint, a shortage of investor money, and poor demand, many start-ups have adapted their goods, adjusted their technology, and invested in their long-term growth potential, according to 162 start-ups from 29 states and 98 towns. To harness the potential of innovation and marketing, the government should give funding, market access support, and end-to-end solutions.

(Kuckertz, 2020) in his research explains the challenges entrepreneurs face as a consequence of the crisis, how

entrepreneurs are dealing with the effects of the crisis and what they are doing to protect their ventures and finally, he suggests measures that could be utilized by policymakers to assist entrepreneurs facing challenges. Abed S. S (2021) in his paper systematically review the role of technology in business survival. Kumar Mukul (2021) in his research article investigates the talent acquisition strategies used by startups, to learn how small businesses use social capital to address talent acquisition difficulties, and to identify some of the unique parameters used by startups in talent acquisition.

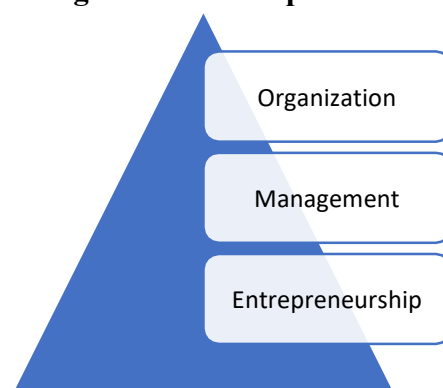
To summarise, start-ups faced numerous hurdles in surviving or, presumably, tracking their growth during the pandemic. No one could say how long it would take to get back to normal because there was no specific treatment for the COVID-19. As a result, we should identify the obstacles and, as a result, design policies and propose ways to address them. Otherwise, the world economy will find itself in a precarious scenario.

#### Theoretical & Conceptual Framework

We're attempting to understand the impact of entrepreneurship on economic growth from different perspectives suggested by various economists through entrepreneurship theories. The process of inventing and utilising opportunities with a great deal of labour and endurance while taking financial, psychological, and social risks is how entrepreneurship is defined. Earning profit, self-satisfaction, and independence are all motivating factors. (Hisrich, 2007: 172). Three degrees of economic forces were presented by Cantillon in his text: owners, entrepreneurs, and employees. Entrepreneurship, according to Cantillon, stems from a lack of accurate forecasting. Vone Thunen made a distinction between entrepreneur and capital provider as well. Entrepreneur, in his opinion, is a person who is identical to the one Cantillon described as entrepreneur (Wennekers and Thurik 27: 1999). Menger, one of Austria's school founders, thought about this distinction as well. Initially, he defines an entrepreneur as a person who brings together production components, and he introduces entrepreneur as a result of this persona. (Lumpkin and Dess, 631: 1996). In comparison to previous neoclassical theorists, Marshal adds a new role to entrepreneur: "new route pioneers". Modern monetarist neoclassical economists do not include entrepreneur in their models. The roles of management and supervision, as well as the function of entrepreneur, were distinguished by Knight and Schumpeter. "Entrepreneur is a responsible individual for making accurate judgments which influence the environment, employing commodity, resources, or institution," Herbert and Link (1989) (Thurik, 1999).

Various Startup Theories that are found during our extensive literature review are categorised into three and are represented below

**Figure 1.1. Startup Theories**

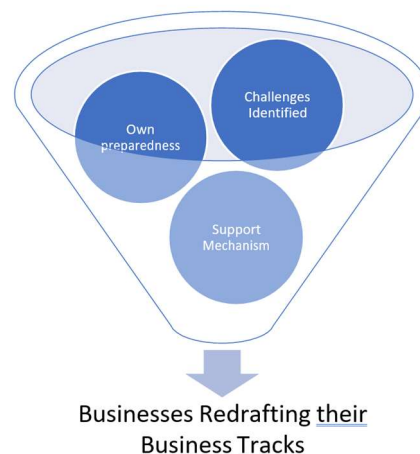


Van de Ven and colleagues (1984) were among the first to identify three primary approaches to investigating startup creation. They looked at entrepreneurial, organisational, and ecological approaches. Organization theories found totally silent on the topic of organisational evolution, particularly startup evolution (Salamzadeh, 2015a). However, there is a scarcity of study on the early stages of a business. organizational ecology theory (Scholz & Reydon, 2009), organizational configurations (Miller, 1990), contingency theory (Slocum, 1984), resource dependence theory (Davis& Cobb, 2010), uncertainty theory (Kamps & Pólos, 1999), etc are defined to answer organizational queries. (Aidin Salamzadeh & Leo Paul Dana (2021)) Strategic Management (Pettigrew et al., 2001), small business governance (Ritchie& Richardson, 2000), human resource management (Miles & Rosenberg, 1983), team management ( Kaiser& Müller, 2013), complexity theory (Lan, 2006), etc are some of the main management theories which used in various startup researches.

It is found that the entrepreneurship theories are more focussed on startups. According to Salamzadeh (2015), entrepreneurship theories are categorized into macro level theories (e.g., Schumpeter's theory (Schumpeter, 1934), and population ecology (Hannan and Freeman, 1977)), and micro and meso level. As entrepreneurship deals with idea, creativity, innovation, new product or service development, opportunity, and so on, entrepreneurship theories are more inclined to be considered in the early stages of any business or organization. Going deep more than into entrepreneurial theories, organisation and management theories will arise, which deal with people and organisations management (Van de Ven et al., 1984). Finally, startups are about converting ideas into businesses.

Maslow's 'Hierarchy of Needs' endlessly remains as the driving force right from food, cloth and shelter of the lowest order to personal and social security, to social interactions, to desire of building self and social esteem and to further experience the joy of self-actualization. The scientists and doctors though have experienced the esteem of trials of inventions and discoveries and philanthropists joining the dots of human connections bolder with service to humanity during these times but the lower order of existence has felt a severe blow for all, although not in same measure. These needs of Maslow along with Herzberg theory of 'Hygiene and Motivational' factors make us to initiate the process of trial and error either to mend our ecosystem with new thought process and ideas by tweaking the existing framework or laying down of a new one suiting the local economic environment.

**Figure 2 : Conceptual Framework**



## Businesses Redrafting their Business Tracks

### Research Methodology

Bulgu& Islam (2007) in their research work discuss the appropriateness of system approach as there are various subsystems in it and in such a 'multi-dimensional framework' information can be incorporated from different 'disciplines and domains'. A study of an organization or business passing through a crisis does require a comprehensive approach covering financial and management strategies that makes the research to make use of both quantitative and qualitative approach.

### Research Design

The Startups associated with BSSS incubation centre and its incubation partners are covered along with the budding entrepreneurs of the college that are either alumni or existing students having a startup of their own. The unit of analysis is startup. The start-ups that were not willing to participate in this research are excluded. A totally Unstructured Interview Schedule along with the secondary data of the startups related to their revenues, sales, costs etc. were the main source of the data collection. The financial information was analysed by calculating financial ratios and a non-financial data of the startups are presented on case-by-case basis keeping their nature of business, number of years of existence and size of business in mind to effectively reason the strategy and policy changes that they intend to make in their startup.

## DATA REPRESENTATION, ANALYSIS AND INTERPRETATION

**Table No: 4.1 a. Demographic Profile of the Startups:**

	Frequency	Percentage	
Gender of the Startup Founders	Male	34	85.0
	Female	6	15.0
	Total	40	100.0
	18-28	15	37.5
	29-38	12	30.0
	39-48	13	32.5
	Total	40	100.0
	1-3 years	7	17.5
	3-6 years	14	35.0
	More than 6 years	19	47.5
	Total	40	100.0
	Manufacturing	4	10.0
	trade	3	7.5
	Service	32	80.0
	Others	1	2.5
	Total	40	100.0

In this study, 85% of the startup founders were males and 80% of the startups were from service sector. Sector wise GDP report as per Ministry of Statistics and Programme Implementation (17 June 2021) clearly states that the service sector contributes 53.89% (highest contributor) to GDP of India.

Also, it is noticed that 19 out of 40 startup founders under the study had more than 6 years of experience and only 7 were with less than 3 years of experience in the industry. 14 were of 3-6 years of experience in the similar industry. The 37.5 % of startup founders of the study were aged between 18-28 which indicates the



popularity of startups among the youth of Madhya Pradesh and their enthusiasm to take business initiatives. Interview Questions wise data representation and analysis are presented below; The present Status of the Startups as operational, still setting up, temporarily closed due to pandemic or completely abandoned the business are presented below;

### PRESENT STATUS OF STARTUPS LINKED WITH BSSS INCUBATION CENTRE

**Table No 4.1.b**

		Frequency	Percent
Current Status	Operational	10	25.0
	Still setting up	4	10.0
	Temporarily closed due to COVID Pandemic	24	60.0
	Closed Down	2	5.0
	Total	40	100.0

It has been found that only 10 startups out of the 40 were very confident to say that they are operational. 4 said they are still in their setting up phase. 24 are temporarily closed down due to COVID Pandemic and the two, who were already struggling before the Pandemic, completely closed down their businesses and were unable to talk about their revival. The pandemic sped up the winding up process due to no sales.

### IMMEDIATE FACTORS FOR THE REVIVAL OF STARTUPS LINKED WITH BSSS INCUBATION CENTRE

**Table No 4.2**

	Count	Percent
Strategic Plan	19	47.5%
Digitalization	2	5.0%
COVID acted as a Catalyst	1	2.5%
Could not Survive	18	45.0%

It's been noticed that the startups with good strategic plans were able to survive their startups without much complications. But it a fact that all business operations were hindered during the lockdown. None of the startup founders or the co-founders experienced a similar situation before. 95% of the startup owners of our sample study were youth (Below 40 years) and with no much experience in the similar field of their businesses. But the strong business strategy that they have set for long term like their market plan emphasising more on the quality services or products helped them to come out of the uncertainty to a great extent.

Table 4.2 details that 19 out of the 40 startups are of the opinion that their strong strategic plan became the backbone of their business existence during the pandemic. But 45% of the startups were temporarily closed down in order to understand the situations and identify various revival plans suited for their businesses. During

the pandemic, all 40 startups lowered their costs as part of a change in business strategy for revival, resulting in some liquidity for their businesses.

### MID FACTORS FOR THE REVIVAL OF STARTUPS LINKED WITH BSSS INCUBATION CENTRE

**Table 4.3**

	Value	Count	Percent
Mid Factors	Orders already in Hand	6	15.0%
	Digitalization	13	32.5%
	Not working	16	40.0%
	Government Support	5	12.5%

Table 4.3 depicts that 15% startups were able to survive due to the customer orders already with them. 32.5% adopted digitalization and technological advancement to revive their businesses which helped them to overcome the difficulty in functionality otherwise. Lifesaving was found to be the major concern for all. It is learnt that the first wave did not affect the businesses that badly, and the lock down period helped majority of them to plan out things in a better way. But the second wave badly hit the businesses. Out of the 24 temporarily closed down 16 said they had to temporarily closed down due to the heavy loss they incurred so they neither try for any change in their traditional mode of operation nor did they try for any government support schemes.

### LONG TERM FACTORS FOR THE REVIVAL OF STARTUPS LINKED WITH BSSS INCUBATION CENTRE

**Table 4.4**

	Count	Percent
Strong Customer Base	4	10.0%
Good Strategic Plan	7	17.5%
Digitalization	3	7.5%
Experience and Good Networking	8	20.0%
Waiting for COVID Pandemic to Get over	18	45.0%

The majority of startup founders (45 percent) stated that they are waiting for the pandemic to end because only then would their company be able to survive in the long run. Good strategic plan will help only when the COVID cases come under control and the government ease the restrictions. 20% startups were of the opinion that their strong networking with experienced or with the similar startup community and the regular online deliberations they had, build enough confidence in them. They could decide either to wait or respond quickly to the need of the hour of the society rather cursing the adverse circumstances but with proper government permissions as their existing business license don't permit for doing any other businesses under the same

banner. 10% startups appreciates their customers for the strong support they have extended where as 17.5% of them believe that only good strategic plan will suffice in the long run. 3% identifies digitalization as one of the factors for the business survival or success in the future.

**THE FACTORS SUPPORTED THE STARTUPS DURING THE PANDEMIC**

**Table No 4.5**

	Count	Percent
Good Customer Relationship	10	25.0%
Digitalization and Technological Advancement	6	15.0%
Nothing	18	45.0%
Team support and Networking	2	5.0%
Cost Control	4	10.0%

The startups founders fondly remembers their good customer support during the COVID pandemic. 25% of the startups identified strong customer base and customer support as the supporting factors to strive for success. They were hopeful that the quality of their product and the integrity with which the business is conducted in response to the needs of the clients will undoubtedly aid the quick recovery. The customers were ready for the delayed

delivery which was a great support for 25% of the startups we interviewed. They said, they did not lose their customers due to non-delivery of services/products in time. This boosted their morale to continue the business even in adverse situation. 18 startups said they did not receive any type of support because of which they had to close the business operation temporarily. Cost control and technological advancement also supported 10 % and 15% of the startups respectively.

**REVIVAL OF ECONOMY**

**Table No: 4.6**

	Count	Percent
Government Support	15	37.5%
Technology & Strategic Plan	5	12.5%
COVID Control	13	32.5%
Don't Know	7	17.5%

When asked “how do you come to a conclusion that the Economy will revive? 15% of them opined that they strongly believe only through the government support the economy can revive further. “Ease of restrictions related to COVID Protocol as well as some financial support will definitely help us to improve the present situation. There are many farmer families depend on us. If we revive, definitely it will improve the economic

condition of the State as we provide employment to many,,” said Co-Founder Startup 4. But at the same time COVID control is another worry in everyone’s mind. Startup 9 said that there were 45 families did depend on them which is now temporarily closed down. The expenses were huge and no sales were there. It was very hard to fire employees who worked for the success of the startup. “Technology adoption took a little time for us because of which we lost the customers” said startup 23 who runs an innovative lab in Itarsi, Madhya Pradesh. Everyone is looking at the different revival initiatives, whether they are government-sponsored or not.

**GOVERNMENT OR INCUBATION SUPPORT**

**Table 4.7**

	Count	Percent
Government Support	8	20.0%
Incubation Support	3	7.5%
No support	29	72.5%

Only 20% startups said they were able to get some government support. Out of those who received the government support said that though the loan facility she received was not really meant for COVID Pandemic revival schemes but it helped their business to survive. Only 3 startups said they got incubation support to come of the Pandemic. It was so surprising for the team that some of them asked what is incubation centre?

And what is their role in businesses and why should they help us? We realized the urgent need for publicising the roles and responsibilities of incubation centres so that the real objectives of setting up of incubation centres by the government across the nation can be fulfilled.

**CURRENT STATUS \* GOVT AND INCUBATION SUPPORT CROSSTABULATION**

**Table 4.8**

		Govt and Incubation Support			Total
		Government Support	Incubation Support	No support	
Current Status	operational	3	1	6	10
	Still setting up	0	0	4	4
	Temporarily closed or struggling due to COVID Pandemic	4	2	18	24
	Closed Down	0	0	2	2
Total		7	3	30	40

To know more about the role of support systems in the survival or revival of the startups, a cross tab analysis was done between the current status of the startups and the support mechanisms if any they have received. Table 4.8 explains that 3 startups out the 10 are operational have received government support and only one

has received the incubation support. 6 survived without any support from either government or any incubation centres. 4 plus 2 startups who have received the support from Incubation and Government were temporarily closed down and planning for their revival in the near future. 2 of them have completed shut down their business due to heavy loss and we have found that they were otherwise also not performing well. COVID Pandemic sped up the process of their closure.

**FINDINGS, SUGGESTIONS, DISCUSSIONS AND CONCLUSION**

The Madhya Pradesh Incubation and Start-up Policy has been formulated by keeping three core policy focus areas firstly the availability of “Plug and Play” Incubation Facility, secondly Funding Support & Incentives and thirdly Start-up. We observed a huge difference in the personality characteristics of these entrepreneurs while responding to the cognitive approaches, Network Approaches, Financial Approaches and striving motives they have adopted as a part of their survival or revival strategy. We also found similarities and variances among the various sorts of entrepreneurs. While entrepreneurs of all levels of experience perceive the cause of business failure to be permanent yet controllable, differences in the decision to pursue a different career path are evident, and depend on whether the cause of business failure is extrinsic or intrinsic, manageable or unmanageable, and perpetual or momentary. Some were with very flexible approach as their major motive was the revival of their startups. But some were of the opinion that only the government intervention can pull them up to survival. The ones who closed their businesses were regretting their decision to set up a business where no flexible support mechanisms are available. Even when the uncertainty is generated by a crisis like the COVID-19 epidemic, the literature demonstrates that dealing with uncertainty and failure is a typical component of business for entrepreneurs ( Mandl

et al., 2016). As a result, in the event of a crisis, entrepreneurs can be expected to show flexibility and adjust their business strategies.

The responses collected from each respondent are put together. A detailed discussion with the team helped to identify the following first order categories, second order categories and then the aggregate dimensions (A. Kuckertz et al 2020). The challenges identified in this study are in line with the findings of Aidin Salamzadeh et al(2020). These are mentioned as below;

**FINDINGS : Crisis Related Challenges**

**Table : 1**

**DATA STRUCTURE**

<b>Aggregate Dimensions</b>	<b>Second Order categories</b>	<b>First Order categories (Statements mentioning the following)</b>
Financial Challenges	Working Capital Management	Problems faced because of no Sales during the COVID Pandemic
	Loan disbursal and other financial Commitments	Problems in arranging the Day-to-day cash needs
	Cash Requirement Issues at family	Salary and wages disbursement Challenges
		Family's cash requirement during the Pandemic Management of other financial commitments

Human Resources Management Challenges	Firing existing team members Finding new team members	Managing the team members/ employees who are less capable to adopt the changing environment due to COVID  Not ready to work from home Dealing with those denied to work due to fear Technology adoption by the team Firing Extra team members/workers/staff due to no business activities
Customer Management Challenges	Tech market Entry Tech Customers  Door to Door Services	Managing the product delivery at the door step of customers  Technological upgradation to connect with customers Challenge to ensure the safety concerns of our customers during the delivery of goods It was a pleasure dealing with new customers but don't know how to retain them even after the pandemic. Succeeded in retaining some of the existing customers No help from government agencies to overcome the present situation.
Support Mechanism Challenges	Networking  support mechanisms	Awareness about incubation centres and their services No Help from any of the incubation centres, Incubation centres helped in networking only Received some help from the network specially from our area
Any Other Challenges (Environment)	Need of Entrepreneurship Education  Need of a strong Strategic Plan Need of multi-faceted Businesses Need of Skill development Need to Know Government Support Mechanisms Need to convince self on strong networking Supply Chain Issues  Multiple Issues	'Go digital' need during the Pandemic  Short term and long-term business plans Orientation on basics of entrepreneurship before setting up of your business Awareness regarding setting up of a separate business account for all the financial transactions of your business  How to overcome the present situation in very near future?  Strategies for long run

## GENERAL CHALLENGES OF THE START-UPS IDENTIFIED

1. Entrepreneurship Education: The startups founders were found to be less oriented towards the basics of setting up of a business. 60% started their businesses with confidence to solve a solution pertaining to the society. But they are less oriented towards the business mandates, types of businesses registration, systematic recording of business transactions, need to develop a promising marketing strategy to win the market

competition etc.

2. Technologically Advanced Team: Team members with both technical and business background are hard to find, so putting together a competent team that includes both is essential if anyone wants to compete and win the market.

3. Inadequate Working Capital: Adequate working capital is essential for running startups successfully especially when it's in its seed stages. We noticed that all of these businesses are self-funded or rely on funds raised from family or friends. However, as they expand, they will require a large amount of capital, which may be impossible for them, looking at their present financial crunch. This requires an urgent attention by the policy makers or MSME. Finding right investor and raising fund is what the main concern of these startups.

4. Proper Communication: It has been noticed a huge communication gap between the policy makers and problem solvers belonging to the rural India. The startups from the rural areas fear to express their business problems before the Startup/ MSME Officials.

**Table No 1.2 : Industry Experience of the founders \* Current Status Crosstabulation**

		Current Status				Total
		operational	Still setting up	temporarily closed or struggling due to COVID Pandemic	Closed Down	
Industry Experience of the founders	1-3 years	2	1	4	0	7
	3-6 years	5	1	6	2	14
	more than 6 years	3	2	14	0	19
Total		10	4	24	2	40

This finding is in line with the findings of Jose Manuel Saiz-Alvarez, 2017 that the factors like amount of training, participation in past ventures, business experience, and the number of founders are positively associated to business success.

## MAJOR FINDINGS

No sales during these periods have pushed these startups to huge loss and some ran out of cash. Due to heavy loss, the startups closed down their businesses temporarily and 2 of them closed down permanently. Startups are reluctant to share details of their financial performance. One to one interaction with entrepreneurs helped us to know their psychological differences like personality characteristics, cognitive approaches, push-pull motives, network approaches, financial approaches and ecological approaches. During the interview we have identified their thought off strategy to deal with the situation and new practices likely to be adopted in terms of operations and dealing with labour, employees, customers and other stakeholders. Cost cutting and firing of extra labour (due to less customer order) was the immediate measures they have adopted. Identifying a technically sound team was another major challenge for many. As the people stopped eating outside and became extra vigilant about health and hygiene, change of their present business was what the only solution identified by those startups engaged in food and beverages businesses. COVID Control or the complete protection against CORONA Virus (vaccination drive) was identified as reason for their optimism in revival of their business and of the economy as a whole. We have explored the role of BSSS incubation Centre in such

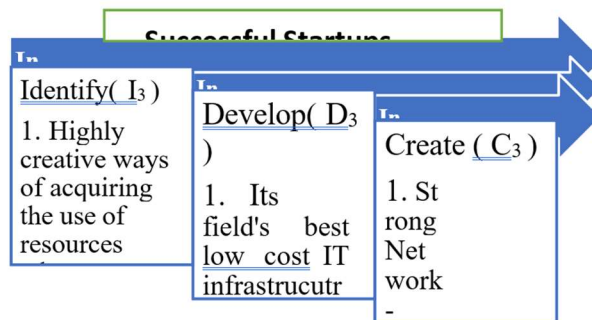
conditions and identified the need of redrafting operational strategies of our incubation centre. A model is suggested to establish an entrepreneurial eco system in the state based on the findings of the study. The state government/ MSME can play a vital role in streamlining the activities of these incubation centres and route various government support schemes effectively through these incubation centres. An effective implementation of support system will help us to evaluate effectiveness of each scheme, its reachability to the startups who are really struggling to revive or survive.

**FINDINGS REGARDING THE SURVIVAL OF STARTUPS**

1. The liquidity crunch was found as the major concern for the startups in Madhya Pradesh.
2. There is a need of strong intervention of the government /MSME to support these startups in order to ensure proper implementation of various startup schemes.
3. Except for those whose business acted as a catalyst during the covid pandemic, it is very hard to survive for majority of the startups as there is no strong support system existing in the State according to the startups we interviewed.
4. Business environmental elements, such as the existing trends, limitations in the markets, legal issues, etc. play a big role in the success of any startups. The environment for a startup is even more difficult and critical than for an established firm (Bruton & Rubanik, 2002; Van Gelderen et. al., 2005). These startups are not well aware of the business mandate procedures once registered. No proper records of business transactions was found to be one of the reasons for their non-co-operation for the research.
5. It is observed that they are unaware of the requirement for a separate account to conduct business activities and the startups hailing from remote areas are not aware of the concept of incubation centre or its support mechanisms
6. It is observed that the startups founders were not very confident in dealing with government departments due to many reasons and some of which are mentioned in chapter four.
7. Customer support was found to be a major factor in the survival of many startups.
8. The founders of very successful startups from the State emphasised the need of a strong strategic plan and identifying the exact pain of the society so that the business will be pandemic free. ( as the pressing issues of society need to be attended in any circumstances)

**STARTUP SUCCESS REDEFINED: OFF THE FLOOR – ON THE FLOOR SUCCESS MANTRA**

**Figure 1**





Source: Self Developed

In the above figure 5.1, The researchers redefine the term Startup Success. The above model is an outcome of the in depth study done by the researchers on startups during the COVID Pandemic and the existing startup theories and Crisis management Theories related to startups. The following references are emphasised through the above Model.

The Bricoleurs show how disasters can foster the growth of new chances (Jürgen Brünjes and Javier Revilla Diez) (2013). Entrepreneurship theories are important components of any startup and are more likely to be addressed in the early phases of any company or organisation. (Salamzadeh&Radovic-Markovic, 2012). Second, theories of organisation and management, which deal with managing people and organisations, will arise in addition to entrepreneurship theories (Van de Ven et al., 1984). Startups are all about converting ideas into businesses, which is an important aspect of entrepreneurship studies including new venture formation, value generation, and opportunity recognition, appraisal, and monetization. There found a strong need of interpersonal entrepreneurial traits ( Melisa Contreras 2013) to be identified and developed by these entrepreneurs.

Components wise explanation of I3D3C3 Startup Success Model is given as below;

I3.1 emphasis the need of identifying highly creative ways of acquiring the use of resources where your startup is located. I3.2 says that the startup team must have acquired entrepreneurship education on types of startup venture registrations and its benefits, basics knowledge on business functions and business entity concept at its pre seed stage (bootstrapping). There found a strong need of interpersonal entrepreneurial traits ( Melisa Contreras 2013) to be identified and developed by these entrepreneurs. Lack of awareness on environmental elements identified as the major issue with the startup units under the present study. Identifying a sustainable operational strategic plan is the key to success. Resilient SSP will act as a Divine Shield around businesses against any crisis (I3.3 ) Personality characteristics, cognitive approaches, push-pull motives, network approaches, financial approaches and ecological approaches entrepreneurs also draws attention here.

D3.1 stress the need of developing the best IT infrastructure in its specific field, good internet facility, D3.2 points towards the need of developing or identifying technically sound team, and team with agility & flexible business plans. The team must conduct regular research with the help of nearby university incubation centres to identify the market trend and other development in the market. Highly deliberated SSP( D3.3) is another feather on the cap of successful startups.

C3.1 reinstates the need of good networking, regular webinars on the similar startup progress and glitches. The sparrow approach or companion calls are the best method of connecting to various startups from the corresponding sector. This will help in building enduring business relationships. C3.2 says regular customer interactions to identify their changing needs, after sale support, proper communication with the Startup officials (Government/ MSME officials, strengthened support mechanism, global connects (either through international startup network or through business news) are required to become a successful player in your field. C3.3 rechecking of business vision, mission and objectives to evaluate how far it is achieved, regular check on both customer & employee retention policies and Employee & Customer Safety measures etc. Kaizen approach would be adopted by each business to ensure continuous growth of their entity.

## SUGGESTIONS

The following suggestions are made to the Policy Makers or Government Officials based on our study;

1. Once startups are registered in the government portal, automatically an incubation centre of that area must be assigned to them so that the centre can guide and monitor the growth of budding startups during their initial years.
2. Scope or the areas of operation of incubation centres must be widened with the idea that two hubs are better than one.
3. There must be at least one incubation centres area wise( as per the government rules) so that the government support and network support etc will reach to the maximum.
4. The Government of Madhya Pradesh has to reduce the registration charges for setting up of startups/ companies so that more companies will get registered in the state. Many businessmen were of the opinion that due to the heavy charges they move to other states for registering their startups.
5. The authority concerned from the state must devise relevant policies to help these entrepreneurs to overcome the identified challenges (Table 5.1 Data Structure) as they are one of the major drivers of economic development in the country.
6. Measures must be taken to ensure that these registered businesses (startup companies, sole proprietorships, partnerships, and etc) report their financial results for each fiscal year to a specific MSME state government designated authority. This will help us to determine their contribution to the state's economic development like number of employments created, profit earned, infrastructural development etc. (More authentic data base can be generated)

## SUGGESTIONS TO THE STARTUPS FOUNDERS FOR ITS REVIVAL

1. An entrepreneur must have multifaceted outlook for his business
2. An entrepreneur must research the possible businesses in the area where his or her company is located. ((D3.2)
3. Entrepreneur must have self-confidence.
4. Always try to start with zero input cost as there are immense business opportunities in our land ( I3.1 )
5. Never depend on the system to bring something for you. Instead, you can be the initiator and the change maker.
6. Let the support system reach you voluntarily, you be prepared to take up challenges
7. Identify the need of the hour and identify the businesses accordingly ((D3.2)
8. Market study will help startups to understand the potential customers. ((D3.2). Market study will help startups to understand the potential customers. ((D3.2). During the pandemic, the media played a major role in identifying the market need/ potential customers.
9. All the risk takers had the upper hand in the market during the COVID Pandemic.

The support mechanisms announce by the central MSME are often executed thorough state MSME. The state MSME can ensure the reachability of these schemes through Incubation centres affiliated to the state & Central MSME in the states. Business environment education, such as different sorts of enterprises, its registration formalities, mandate Procedures to set up a business, and so on, must be one of the core functions of these incubation centres. These sessions/trainings can be carried out with the assistance of state startup officials.

This will strengthen the communication between beneficiaries and the state's MSME/Startup officials. C3.2 (I3D3C3)

Newly registered startups, on the other hand, will be automatically linked to incubation centres and get familiar with their assistance mechanisms. The 9 areas identified under the - I3D3C3 Startup Success Model can be ensured then.

## **DISCUSSION**

The factors like amount of training, participation in past ventures, business experience, and the number of founders are positively associated to business success (Jose Manuel Saiz-Alvarez, 2017). However, in the COVID Pandemic, this was proven to be inaccurate, since those with experience and a large number of highly efficient team members were left with a question i.e how to revive and survive?. Their prime objective was to save the lives of their loved ones leaving the business. However, after the first half, the entrepreneurs were prepared to tackle the uncertainties, and the numerous webinars hosted by various experts/entrepreneurs assisted the fledgling businesses in becoming self-motivated to solve the problem. Incubation centres associate with MSME DI Indore were hugely involved in effective deployment of oxygen concentrators to various beneficiaries. (Learnt from the interview with the MSME DI Official Mr Gaurav Goyal and the AIC AARTECH Incubation Centre CEO Mr Amit Raje).

An organization's reaction to a crisis is often related with its resilience and its ability to improve innovation, teamwork, agility, and persistence. So, we here by suggest a Workable Model to entrepreneurs I3D3C3 (Figure 5.1) which is based on the redefined startup success. The 40 startups we interviewed were mostly smaller businesses operating either locally or nationally. Additionally, smaller businesses are frequently more creative than larger enterprises, and this ingenuity may help to ensure that those businesses survive difficulties. As they try to promote change and create opportunities with the resources they have, they show how adversity may foster the growth of fresh opportunities, creativity, and alternative products/services. Crises can spur innovation and the development of alternative products and services by encouraging the exploitation of new opportunities. So, the COVID-19 problem will present changes, such as improving hygiene or digital work solutions.

## **CONCLUSION**

Through this study an attempt is done to redefine the start-ups success and to understand the major challenges that startups and entrepreneurs faced during COVID 19 pandemic. There has been a huge paradigm shift towards the startup culture in the Central India in recent times. This has created lots of employment in the State. As many

families are directly or indirectly dependent on these startups for their livelihood, there is an urgent need to resolve the startup problems and revive them to safeguard the jobs of large number of employees. We have reinstated through this research that Maslow's 'Hierarchy of Needs' endlessly remains as the driving force right from food, cloth and shelter of the lowest order to personal and social security, to social interactions, to desire of building self and social esteem and to further experience the joy of self-actualization. So, there is an

urgent need of addressing the problems of startups with the potential to expand social innovation to address pressing environmental and societal challenges. This study is extremely critical for boosting start-up milieu in central India, as this study is an outcome of detailed analysis of the problems of the startups during the pandemic and otherwise. Some success stories are also mentioned in this report and the suggestions are made based on those success parameters as well. This study will help the policy makers to understand further the need for creating a Pandemic-Proof Ecosystem of innovation which will foster a start-up culture that is inclusive, efficient, valuable for everyone and sensitive to the local voices. Effective analysis of strategies adopted by the successful startups during the pandemic will also fill the gap of what we know and what we need to know about the success of Pandemic -Proof -Enterprises.

To conclude, the study will inform policy to achieve a transition to a more sustainable Business Models that promote local entrepreneurship resulting into increasing employment opportunities on the ground. The Success model suggested for startups and the Model for establishing a sustainable startup eco system in the state can also help Incubation and Start up Policy of Madhya Pradesh to identify the present challenges of start-ups and redraft their future plans accordingly

#### **DIRECTION FOR FUTURE RESEARCHERS:**

Future research could look into the impact of the COVID 19 pandemic on startups sector wise. As the crisis impacted differently in different sectors, the challenges could not be generalized expect in a few cases. Also, researchers can make a detailed study on the startup environment awareness among the startup founders/team. Similarly, our findings point towards the scope of a similar study that can be extended to identify the intensity of Pandemic challenges based on the location of startups in India i.e urban and rural startups. Future researchers are welcome to add more areas in I3D3C3 Startup Success Model suggested in this study.

Also, researches can be conducted to measure the effectiveness of Grameen Bank, Naman Seva Samiti (registered society in Betul, Madhya Pradesh), Unlimited India Incubator, Vilgrow, Deshpandey AIC Bansthali Vidhyapeeth Jaipur etc who are a few success models operating in the State for promoting and developing entrepreneurial eco system.

Acknowledgements: We take this opportunity to thank Indian Council of Social Sciences Research (ICSSR) for sanctioning grant-in-aid to this project. This research work would not have been possible without the financial support of ICSSR. Our team especially indebted to Dr Fr John P J, Principal, and Dr Sr Sonia Kurien, Vice Principal of The Bhopal School of Social Sciences, who have always been supportive of our research endeavours. Also, we thank all the Chartered Accountants, Company Secretaries, Startup founders and both the State & Central Government officials who have participated in this research to bring out more accurate results of the study.

#### **References**

Abed, S.S. (2021), "A literature review exploring the role of technology in business survival during the Covid-19 lockdowns", International Journal of Organizational Analysis, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/IJOA-11-2020-2501>

- Afghah, S. M., Raoofi, A., & Hoshyar, S. (2014). To Study the Effect of Entrepreneurship on Economic Growth. The University of Shahid Chamran, ahvaz, Iran
- Aidin Salamzadeh & Leo Paul Dana (2021) The coronavirus (COVID-19) pandemic: challenges among Iranian startups, *Journal of Small Business & Entrepreneurship*, 33:5, 489- 512, DOI: 10.1080/08276331.2020.1821158
- Alesch, D., Holly, J., Mittler, E., Nagy, R., 2001. Organizations at Risk: what Happens when Small Business and Not-For Profits Encounter Natural Disasters? Technical Report. Public Entity Risk Institute, Fairfax, VA, October.
- Alexander, P., 2010. Rebellion of the poor: South Africa's service delivery protests –a preliminary analysis. *Rev. Afr. Polit. Econ.* 37, 25–40.
- Baker, T., Nelson, R.E., 2005. Creating something from nothing: resource construction through entrepreneurial bricolage. *Adm. Sci. Q.* 50, 329–399.
- Baumol, William J., 1993. *Entrepreneurship, Management and the Structure of Payoffs*. Cambridge, MA: MIT Press.
- Bennett, D. L., and B. Nikolaev. 2020. “Historical Disease Prevalence, Cultural Values, and Global Innovation.” *Entrepreneurship Theory and Practice*.
- Bhalla, Tarush (2020). “47% of Indian startups and SMEs have less than a month of cash left: Survey”. Viewed on 05/05/20 <https://www.livemint.com/companies/start-ups/47-of-indian-startups-and-smes-have-less-than-a-month-of-cash-left-survey-11587933957822.html>.
- Bishop, P., 2019. Knowledge diversity and entrepreneurship following an economic crisis: an empirical study of regional resilience in Great Britain. *Enterpren. Dev.* 31, 496–515.
- Bishop, P., Shilcof, D., 2017. The Spatial Dynamics of New Firm Births during an Economic Crisis: the Case of Great Britain, 2004–2012, vol. 29. *Entrepreneurship & Regional Development*, pp. 215–237.
- Boin, A., 2009. The new world of crises and crisis management: implications for policymaking and research. *Rev. Pol. Res.* 26, 367–377
- Brem, A., Nylund, P., Viardot, E., 2020. The impact of the 2008 financial crisis on innovation: a dominant design perspective. *J. Bus. Res.* 110, 360–369
- Brown Rose et al (2020) The impact of Covid-19, associated behaviours and policies on the UK economy: A computable general equilibrium model, *SSM - Population Health* Volume 12, December 2020, 100651
- Brush, C.G., Greene, P.G., & Hart, M.M. (2001). From initial idea to unique advantage: the entrepreneurial challenge of constructing a resource base. *Academy of Management Executive*, 15 (1), 64-80.
- Bulgu, Aba M & Islam, Sardar M. N. (2007). “Corporate Crisis and Risk Management: Issues, Mathematical Modelling, Strategies, and Small and Medium Size Enterprise Applications” *International Business and Management Series Editor: Pervez N. Ghauri, Volume 21, Elsevier Ltd. UK.*
- Bullough, A., Renko, M., Myatt, T., 2014. Danger zone entrepreneurs: the importance of resilience and self-efficacy for entrepreneurial intentions. *Enterpren. Theor. Pract.* 38, 473–499.
- Caseiro, N., & Coelho, A. (2019). The influence of Business Intelligence capacity, network learning and innovativeness on startups performance. *Journal of Innovation & Knowledge*, 4(3), 139–145. <https://doi.org/10.1016/J.JIK.2018.03.009>

- CBIInsights. 2020. "How Covid-19 Could Impact Seed-Stage Startup Investing." Last accessed 2 April 2020. <https://www.cbinsights.com/research/coronavirus-seed-stagestartup-impact> [Google Scholar]
- Damodaran, A. Valuing Young, Start-up and Growth Companies: Estimation Issues and Valuation Challenges, Social Science Research Network, Stern School of Business, 2009, New York University.
- Davidsson, P., and S. R. Gordon. 2016. "Much Ado about Nothing? The Surprising Persistence of Nascent Entrepreneurs through Macroeconomic Crisis." *Entrepreneurship Theory and Practice* 40 (4): 915–941.
- De Carvalho, G. D. G., Cruz, J. A. W., De Carvalho, H. G., Duclós, L. C., & De Fátima Stankowitz, R. (2017). Innovativeness measures: a bibliometric review and a classification proposal. *International Journal of Innovation Science*, 9(1), 81–101. <https://doi.org/10.1108/IJIS-10-2016-0038>
- Doern (2016), *Entrepreneurship and crisis management: the experiences of small business during the London 2011 riots*. *Int Small Bus. J.* 34, 276-302
- Diethorn, H. A. (2021). *Better Safe than Sorry : The Impact of Green Card Delays on the Propensity of Foreign STEM Doctorates to Work at Startups* .
- Doern et al., (2019), *Special Issue on Entrepreneurship and Crisis, business as usual? An introduction and review of the literature*. *Entrepreneurship Reg. Dev.* 31, 400-412
- Egan, V., and P. Tosanguan. 2009. "Coping Strategies of Entrepreneurs in Economic Recession: A Comparative Analysis of Thais and European Expatriates in Pattaya." *Thailand. Journal of Asia Entrepreneurship and Sustainability* 5 (3): 17–36.
- Eggers. 2020. "Masters of Disasters? Challenges and Opportunities for SMEs in Times of Crisis." *Journal of Business Research* 116: 199–208
- EU Startups. 2020a. "Apply by Midnight Today to Join the Online COVID-19 Hackathon run by Norway's Tech Community." Last accessed 2 April 2020.
- Fischhoff, Baruch (2006). "Modelling: Visualizing Your Vulnerabilities". Viewed on 05/05/20 <https://hbr.org/2006/05/preparing-for-a-pandemic-growth>. *The Business & Management Review*, 9(3), 229-237.
- Gilbert-Saad, A., Siedlok, F., McNaughton, R.B., 2018. Decision and design heuristics in the context of entrepreneurial uncertainties. *J. Bus. Ventur. Insights* 9, 75–80.
- Hong, J. (2018). Rise of the Sharing Economy and the Future of Travel and Tourism Industry. *Journal of Business and Hotel Management*, 07(02). <https://doi.org/10.4172/2169-0286.1000180>
- Hisrich, Robert, D. and Drnovsek, M. (2002), "Entrepreneurship and Small Business Research – a European Perspective", *journal of small business and enterprise Development*, Vol. 9 Iss: 2, PP.172 – 222
- Id, O. (2020). *Canan Eryigit*,. 6718(3), 106–119.
- Jha, A., Jha, R. (2020). *India's response to COVID-19 crisis* [Australia South Asia Research Centre Working Paper 2020-05]. Australian National University.
- Jha AK, Jha R. *India's Response to COVID-19 Crisis*. *The Indian Economic Journal*. 2020;68(3):341-351. doi:10.1177/0019466220976685
- Latham, S. 2009. "Contrasting Strategic Response to Economic Recession in Startup versus Established Software Firms." *Journal of Small Business Management* 47 (2): 180–201.
- Lumpkin, G. T. and Dess, G.G. (1996), "Clarifying the Entrepreneurial Orientation Construct and Linking It to Performance", *Academy of Management Review* 21, 135-172.

- Jaklič, A., & Burger, A. (2020). Complex internationalisation strategies during crises: The case of slovenian exporters during the great recession and covid-19 pandemic. *Teorija in Praksa*, 57(4), 1018–1041.
- Jeffrey, W. (2020). 10 Smart Startups. *Mechanical Engineering*, 142(07), 34–39. <https://doi.org/10.1115/1.2020-jul1>
- Jürgen Brünjes & Javier Revilla Diez (2013) ‘Recession push’ and ‘prosperity pull’ entrepreneurship in a rural developing context, *Entrepreneurship & Regional Development*, 25:3-4, 251-271, DOI: 10.1080/08985626.2012.710267
- Herbert, R. F. and A. N. Link (1989) In Search of the Meaning of Entrepreneurship, *Small Business Economics* 1, 39-49.
- Kalogiannidis, S. (2020). The Impact of COVID-19 on Human Resource Management Practices and Future Marketing. *International Journal of Industrial Marketing*, 6(1), 43. <https://doi.org/10.5296/ijim.v6i1.17994>
- Kalogiannidis S. & Fotios Chatzitheodoridis.(2021), Impact of COVID 19 in the European Start-up Business and the Idea to Re-energise the Economy, 12(2), <https://doi.org/10.5430/ijfr.v12n2p55>
- Khan, D., Yadav, S., & Kapley, A. (n.d.). Clinical Images and Medical Case Reports Impact of COVID-19 pandemic on the current status of solid waste management in India.
- Knight Lapinsky, Maria & Rimal, Rajiv N. (2005) An explication of Social Norms, *Communication Theory*, 15-2, pp. 127-147.
- Kaiser, U., & Müller, B. (2013). Team heterogeneity in startups and its development over time. ZEW-Centre for European Economic Research Discussion Paper, (13-058).
- Korber and McNaughton (2018) Resilience and Entrepreneurship: a systematic literature review. *Int. J Entrepreneurial Behav. Res.* 24, 1119-1154
- Kirzner, I. M. (1998) “Creativity and/or Alertness: A Reconsideration of the Schumpeterian Entrepreneur.” *The Review of Austrian Economics*, 11(12): 5–17.
- Kuckertz & et al.. 2020. “Startups in Times of Crisis—a Rapid Response to the COVID-19 Pandemic.” *Journal of Business Venturing Insights* 13: e 00169.
- Latham, S. 2009. “Contrasting Strategic Response to Economic Recession in Startup versus Established Software Firms.” *Journal of Small Business Management* 47 (2): 180–201.
- Ling, S. S., & Ali, A. (2021). a Conceptual Paper on Working. December 2018.
- Linnenluecke, 2017, Resilience in Business and Management Research: a review of influential publication and a research agenda . *Int.J Manag. Rev.*19 4-30
- Mahajan and J.A. Hirsch(2020). Novel Coronavirus: What Neuroradiologists as Citizens of the World Need to Know, *American Journal of Neuroradiology* April 2020, 41 (4) 552-554; DOI: <https://doi.org/10.3174/ajnr.A6526>
- Mandl, C., Berger, E.S.C., Kuckertz, A., 2016. Do you plead guilty? EXploring entrepreneurs’ sensemaking-behavior link after business failure. *J. Bus. Ventur. Insights* 5, 9–13.
- Martinelli, E., Tagliazucchi, G., Marchi, G., 2018. The resilient retail entrepreneur: dynamic capabilities for facing natural disasters. *Int. J. Entrepreneurial Behav. Res.* 24, 1222–1243.
- Maritz, A., A. Perenyi, G. de Waal, and C. Buck. 2020. “Entrepreneurship as the Unsung Hero during the Current COVID-19 Economic Crisis: Australian Perspectives.” *Sustainability* 12 (11): 4612.
- McDonald, R. M., and K. M. Eisenhardt. 2020. “Parallel Play: Startups, Nascent Markets, and Effective

- Business-Model Design.” *Administrative Science Quarterly* 65 (2): 483–523. 0001839219852349.
- Melissa Contreras( 2013). interpersonal entrepreneurial traits, ISBN 978-87-403-0405-3
- Miles, R. E., & Rosenberg, H. R. (1983). The human resources approach to management: Second-generation issues. *Organizational Dynamics*, 10(3), 26- 41
- Mukul, K. and Saini, G.K. (2021), "Talent acquisition in startups in India: the role of social capital", *Journal of Entrepreneurship in Emerging Economies*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/JEEE-04-2020-0086>
- Mustafa, S., Jayadev, A., & Madhavan, M. (2021). COVID-19: Need for Equitable and Inclusive Pandemic Response Framework. *International Journal of Health Services*, 51(1), 101–106. <https://doi.org/10.1177/0020731420967630>
- Munoz et al (2019), Living on the slopes: entrepreneurial preparedness in a context under continuous threat. *Entrepreneurship and Regional Development*, 31(5-6): 413-434
- Reeves, Lang, and Carlsson-Szlezak (2020). *Lead Your Business Through the Coronavirus Crisis*, BCG Henderson Institute
- Runyan, 2006, Small business in the face of crisis: Identifying barriers to recovery from a natural disaster. *Contingencies crisis management Journal* 14, 12-26
- Nag, Anirban (2020). “India jobless rate swells above 23%amid coronavirus lockdown, survey shows” <https://economictimes.indiatimes.com/jobs/india-jobless-rate-swells-above-23-amid-coronavirus-lockdown-survey-shows/articleshow/75023958.cms>. Viewed on 09/05/20.
- N Bhooshan, A Kumar(2020) , How Did Agri-start-ups Fare during the OVID- 19 Pandemic?, - *Economic & Political Weekly*, 2020 - [researchgate.net](https://www.researchgate.net)
- Neumann, Nico (2020). “Bringing an Analytics Mindset to the Pandemic”. Viewed on 06/05/20 <https://hbr.org/2020/04/bringing-an-analytics-mindset-to-the-pandemic>.
- Nohria,Nitin (2006). “The Organization: Survival of the Adaptive”. Viewed on 04/05/20 <https://hbr.org/2006/05/preparing-for-a-pandemic>.
- Noronha, Gaurav.,Sikarwar, Deepshikha(2020).“GDP will contract in the first quarter:KVSubramanianCEA”. Viewed on 07/05/20
- Okrah, J., Nepp, A., & Agbozo, E. (2018). Exploring the factors of startup success and
- Pedersen, lund., Ritter, Thomas(2020). “Preparing Your Business for a Post-Pandemic World”. Viewed on 06/05/2020<https://hbr.org/2020/04/preparing-your-business-for-a-post-pandemic-world>.
- Pedersen, lund., Ritter, Thomas(2020). “Preparing Your Business for a Post-Pandemic World”. Viewed on 06/05/2020<https://hbr.org/2020/04/preparing-your-business-for-a-post-pandemic-world>.
- Petr Sedláček, Vincent Sterk , Startups and employment following the COVID-19 pandemic: A calculator, *VOX EU CEPR*, 25 April 2020
- Pham, D. D. T., Paillé, P., & Halilem, N. (2019). Systematic review on environmental innovativeness: A knowledge-based resource view. *Journal of Cleaner Production*, 211, 1088–1099. <https://doi.org/10.1016/J.JCLEPRO.2018.11.221>
- Quarantelli et al, 1988, Disaster Management: s summary or research findings. *Manag.Stud.*25, 373-385
- Ritchie, J., & Richardson, S. (2000). Smaller business governance: exploring accountability and enterprise from the margins. *Management Accounting Research*, 11(4), 451-474.



- Roma, Priya (2020). "Survival strategies for businesses during COVID-19 lockdown"
- Salamzadeh, A. (2015 a). Innovation Accelerators: Emergence of Startup Companies in Iran. In 60th Annual ICSB World Conference June. UAE (pp. 6- 9).
- Sarasvathy, S.D., 2001. Causation and effectuation: toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Acad. Manag. Rev.* 26, 243–263.
- Sedlacek, Petr & Sterk, Vincent, 2020. "Startups and Employment Following the COVID-19 Pandemic: A Calculator," CEPR Discussion Papers 14671, C.E.P.R. Discussion Papers.
- Scholz, M., & Reydou, T. A. (2009). Organizational ecology: No Darwinian evolution after all. A rejoinder to Lemos. *Philosophy of the Social Sciences*.
- Schumpeter, J.A., 1949. Science and ideology. *The American Economic Review*, 39(2), pp.346-359.
- Shrivasa A, Singla HK (2020) Analysis of interaction among the factors affecting delay in construction projects using interpretive structural modelling approach. *Int J Constr Manag* <https://doi.org/10.1080/15623599.2020.1728486>
- Spillan, J., Hough, M., 2003. Crisis planning in small businesses: importance, impetus and indifference. *Eur. Manag. J.* 21, 398–407.
- Smallbone, D., Deakins, D., Battisti, M., Kitching, J., 2012. Small business responses to a major economic downturn: empirical perspectives from New Zealand and the United Kingdom. *Int. Small Bus. J.* 30, 754–777
- Staples, Jeffrey (2006). "Grist: A New Type of Threat". Viewed on 04/05/20
- Sulaiman, K. M., Muhammad, T., Muhammad Rishad, A. P., & Afsal, K. (2020). Trace, quarantine, test, isolate and treat: A kerala model of Covid-19 response. *Demography India*, 49(July), 120–131. <https://doi.org/10.1101/2020.06.15.20132308>
- Szirmai et al. (2011), *Entrepreneurship, Innovation, and Economic Development: An Overview* DOI:10.1093/acprof:oso/9780199596515.003.0001
- Tanha, D., Salamzadeh, A., Allahian, Z., & Salamzadeh, Y. (2011). Commercialization of university research and innovations in Iran: obstacles and solutions. *Journal of Knowledge Management, Economics and Information Technology*, 1(7), 126-146.
- Tech in Asia. 2020. "Korea's Response to Covid-19 was Widely Praised. Startups had a Lot To Do with It." Last accessed 2 April 2020. <https://www.techinasia.com/korearesponse-covid19-praised-startups-helped>
- TechCrunch. 2020. "Investors Tell Indian Startups to 'Prepare for the Worst' as COVID-19 Uncertainty Continues." Last accessed 2 April 2020.
- Tripathi, S. (2021). Mental Stigma due to Communication Crisis in the age of COVID-19 : A Study (Issue July 2020).
- V. Chamola, V. Hassija, V. Gupta and M. Guizani, "A Comprehensive Review of the COVID-19 Pandemic and the Role of IoT, Drones, AI, Blockchain, and 5G in Managing its Impact," in *IEEE Access*, vol. 8, pp. 90225-90265, 2020, doi: 10.1109/ACCESS.2020.2992341.
- Van de Ven, A. H., Hudson, R., & Schroeder, D. M. (1984). Designing new business startups: Entrepreneurial, organizational, and ecological considerations. *Journal of management*, 10(1), 87-108.
- Wahl-Jorgensen, K. (2021). Precarity in community journalism start-ups: The deep story of sacrifice. 1–22.
- Walsh & Cunningham (2016), *Business failures and Entrepreneurship: emergence, evolution and future research*. *Trends in Entrepreneurship* 12, 163-285

- Wennekers, A.R.M and Thurik, A. R., (1999), "Linking Entrepreneurship and Economic Growth", *Small Business Economics*,13, PP. 27-55.
- Williams, T.A., Shepherd, D.A., 2016. Building resilience or providing sustenance: different paths of emergent ventures in the aftermath of the Haiti earthquake. *Acad. Manag. J.* 59, 2069–2102.
- Williams et.al (2017), Organizational Responses to adversity: fusing crisis management and resilience researchstreams. *Acad. Manag. Ann* 11, 733-769
- Williams, N., Vorley, T., 2015. The impact of institutional change on entrepreneurship in a crisis-hit economy: the case of Greece. *Entrepreneurship Reg. Dev.* 27, 28–49
- Y Combinator. 2020. "YC Companies Responding to COVID-19." Last accessed 2 April 2020. <https://www.ycombinator.com/covid>
- Zuo Y, Yalavarthi S, Shi H, Gockman K, Zuo M, Madison JA, Blair C, Weber A, Barnes BJ, Egeblad M et al (2020) Neutrophil extracellular traps in COVID-19. *JCI Insight* 5(11):e138999. <https://doi.org/10.1172/jci.insight.138999> - DOI - PMC
- Zhu, N. et al. China Novel Coronavirus Investigating and Research Team. A novel coronavirus from patients with pneumonia in China, 2019. *N. Engl. J. Med.* 382(8), 727–733 (2020). - PubMed - PMC - DOI