Resilience and COVID -19 - A Multi-Disciplinary Perspective

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ABSTRACT

COVID-19 has been a cornerstone event rekindling the interest in business survival strategies. As businesses seek to find solutions to the current pandemic situation, the fundamental question remains the same. What makes certain businesses successful than others under difficult circumstances? From a historical standpoint, there have been significant challenges for many businesses at a global scale going through economic crisis, political turmoil as well as natural disasters to name a few. In this paper, by using a multidisciplinary perspective we aim to tackle the understanding of the concept of resilience. Resilience primarily explored in the psychology literature at its early stages, has evolved today to become a growing phenomenon crossing multiple fields of study. The main purpose of the paper is to conceptually identify key takeaway themes from a variety of subject areas related to resilience as well as devise certain conditions or prerequisites necessary for an organization to become 'resilient' irrespective of the industry in the business environment such as the COVID-19 global pandemic.

1. INTRODUCTION

The COVID-19 environment has not only created vulnerabilities in the socio-economic structures but has impacted the globalisation process of many enterprises (Ranasinghe et al., 2020). The virus that was first discovered in China has spread globally at the current stage, forcing many states to implement lockdown as well as social distancing protocols (Yuki, Fujiogi, & Koutsogiannaki, 2020). Apart from the immediate health and safety threats, the pandemic has created even deeper cracks in the global economy and the business landscape. Key business ventures have been forced to close down and the effect is being felt heavily in sectors such as aviation, tourism as well as hospitality, creating an unprecedented disruption in most industrial and commerce sectors (Craven, Liu, Mysore, & Wilson, 2020; Donthu & Gustafsson, 2020). The situation has led to a saturation point for most organizations that are hanging by a thread for survival or seek for alternative paths towards product diversification or innovation (Seetharaman, 2020). However, diving into the human evolution literature, we could reflect on the Darwinian understanding of the survival of the fittest and their respective traits (Balady, 2002; Gimeno, Folta, Cooper, & Woo, 1997). This allows us to understand of the current world pandemic through a renewed lens. COVID-19 has given an opportunity for certain businesses to push their limits and operate in an innovative as well as a resilient business environment (Verma & Gustafsson, 2020). The conceptual paper aims to understand the phenomenon of resilience from a multidisciplinary perspective and based on a systematic literature analysis to synthesize the key takeaways from respective fields. In doing so the paper aims to provide some key conditions that are required to be developed in an organizational setting to ensure the business is able to develop their survival skills to mitigate risks from volatile market conditions such as the current global pandemic.

2. LITERATURE REVIEW

2.1. Resilience

How well-performing organizations tend to survive in the market whilst the poorly performing ones tend to exit or disappear, at least in the long run, is a frequently debated topic (Gimeno et al., 1997). The increased complexity of the modern-day has raised the prominence of resilience as an aspect desired by individuals, organizations, communities as well as societies (Kantur & İşeri-Say, 2012). A concept derived from ecology as well as child psychology, resilience can be identified as the ability of a complex system to return to stability after going through disruption (Kantur & İşeri-Say, 2012; Winnard, Adcroft, Lee, & Skipp, 2014). The concept of resilience in the existing literature spans across several fields ranging from individuals to a population. In psychology, resilience is expressed via individuals and their resilience in a life course, engineering resilience is understood as the vulnerability of people to hazardous environments, giving resilience a variety of definitions across multi disciplinaries (Pike, Dawley, & Tomaney, 2010) In a business context, resilience can be identified as the ability of an enterprise to survive, adapt and grow in the face of volatile change (Dahles & Susilowati, 2015). It's pivotal for businesses to have the ability not only to be flexible in the face of change but more importantly, to overcome exogenous shocks and still remain competitive. This is why the concept of resilience is crucial and is more relevant than ever in present competitive markets. Resilient businesses have the ability to portray higher degrees of adaptive capabilities, even to the extent of changing the overall business concept (Dahles & Susilowati, 2015).

Resilience in the existing literature spans across a number of fields (Table 1)

Table 1. Definitions of Resilience

Author	Area	Definition
(Bodin & Wiman, 2004)	Physical systems	The speed at which a system returns to equilibrium
(Walker, Holling, Carpenter, & Kinzig, 2004)	Ecological systems	The capacity of a system to absorb disturbance and reorganize
(Walker1a et al., 2002)	Socio-ecological systems	The magnitude of disturbance a system can tolerate
(Luthans, Avolio, Walumbwa, & Li, 2005)	Psychology	The ability to rebound from adversity
(Bruneau et al., 2003)	Disaster management	Ability to mitigate hazards and carry out recovery
(McDonald, 2006)	Organizational	Ability to adapt to the requirements of the environment
(Hollnagel, 2009)	Engineering	Ability sense, recognize, adapt and absorb to changes

Source – Adopted from Bhamra et al. (2011)

2.2. Resilience in Business and Management

In the field of social sciences, the concept of resilience is not used as frequently as other fields and has emerged as a more recent phenomenon (Davies, 2011; Martin, 2012). Even though organisation resilience is becoming an even important research area, Kantur & İşeri-Say (2012) highlights the literature gap with regard to conceptualising work around organisational resilience as well as the need to synthesise and linking the growing body of literature in this area. Looking back at the current literature of organisational resilience, studies have focused on

understanding the principles of resilience, sources of resilience as well as identifying characters contributing to resilience, lacks a comprehensive theoretical framework focused on resilience in a firm setting (Kantur & İşeri-Say, 2012). As previously highlighted, though resilience has a variety of interpretations in a wide array of fields, Kantur & İşeri-Say (2012) highlights there is a lack of consensus of the definition of resilience and more importantly contrasting views in conceptualizing resilience as a personality trait or a dynamic process. However as Dahles & Susilowati (2015) points out resilience in a business context can be identified as the ability of an enterprise to survive, adapt and grow in the face of volatile change.

It is crucial to understand as highlighted by the literature, what resilience means in terms of survival, adaptation and growth in depth. As per Scott and Laws (2006), resilience can be identified in three key perspectives which include a return to a previous state of 'normality', the capacity to recover from a crisis by restoration and rebuilding markets and finally visualising crisis bringing about fundamental change. As highlighted above, survival is critical for any business and is relied upon the businesses' ability to ensure its operations continue in a manner that satisfies its stakeholders (Fleming, 2012).

Secondly, adaptation is an equally important element of resilience as per scholars. Burnard and Bhamra (2011) shows adaptation as this ability to evolve to newer capabilities and resources as the mechanism in which resilience is delivered. There are a few key aspects as highlighted by the scholars as to how an organization develops its adaptive capabilities. These include preparation with the awareness of risks, planning in advance, mitigation through reaction as well as recovering with restoring efficacy (Winnard et al., 2014).

Finally, the third key element of growth highlighted under resilience plays an equally important role in the business context. As per Winnard et al.(2014), businesses that aim to continue delivering high-quality benefits to its stakeholders doesn't necessarily identify resilience as only a matter of survival, but also to have a flourishing business

2.3. Resilience in Ecology

The concept of resilience first introduced into ecology by Holling in 1973, was valuable in understanding the non-linear dynamics of ecosystems (Gunderson, 2000). Similar to what was previously stated, resilience from an ecological perspective also highlights the importance of different ecological system's ability to cope with external shocks as well as face irreducible uncertainty successfully (Walker1a et al., 2002). This means irrespective of the changes happening, a resilient ecological system has the ability to reorganize itself under disturbance driven circumstances. As highlighted by Evans (2011), resilience has attracted significant attention with amongst policymakers in ecology as its identified as a key mechanism to achieve sustainability. The ecology literature points out two key definitions of resilience, one which explains achieving an equilibrium state and the other explaining resilience as a more dynamic process. However, the crucial underlying factor here is the consistency in which resilience from an ecological perspective is identified as to achieve different aspects of stability (Gunderson, 2000).

2.4. Resilience in Engineering

As the concept of resilience has a multi-disciplinary range, the field of engineering is similarly highlighted by scholars. As per Zhao et al. (2013), resilience in an engineering sense refers to a system's ability to return to a state of equilibrium after volatility which is a city context refers to its ability to recover from disturbance and rebound. A key concern in terms of the broader concept of resilience as discussed previously in the ecological literature is the two main definitions of resilience. As per Holling (1996), one definition of resilience focuses on unpredictability, persistence and change, aspects celebrated by biologists from an ecological perspective. The second definition of resilience that emphasizes efficiency, consistency and predictability that is more traditional and focused on stability is understood as the foundations of

engineering resilience. Therefore, this is a key factor in differentiating two of the key areas of the literature of resilience where an ecological view highlights a dynamic view of resilience in contrast to the more traditional engineering approach towards resilience of achieving stability and restoring equilibrium

2.5. Resilience in Psychology

The concept of resilience and its roots can be traced to the field of child psychology alongside the work of ecology where it emerged as a key concept (Kantur & İşeri-Say, 2012). Lyons et al. (2015) further highlight how resilience has been a crucial construct of the field of psychology and is defined as a dynamic process in which individuals display adaptation capabilities despite adversity and traumatic conditions. Essentially this means the individuals have the ability to bounce back quickly from a negative situation as compared to others who are caught in their negative streaks. Therefore essentially resilience from a psychological perspective can be identified as the ability to cope and adapt effectively although faced with hardship, loss and adversity (Tugade & Fredrickson, 2004). Similar to what was seen in the engineering literature, resilience in a psychological perspective highlights maintaining an equilibrium without loss of normal functionality after facing trauma (Lyons et al., 2015). However, this understanding differs when looking at resilience from the ecological perspective as explained earlier. Kantur & İşeri-Say (2012) summarises resilience in psychology as the toughness as well as persistence to overcome negative consequences in contrast to the ecological understanding which stresses on system integrity and preserving organization functionality without major volatility.

2.6. Resilience in Disaster Management

Similar to other areas mentioned above, resilience is widely discussed in the disaster management literature (Kantur & İşeri-Say, 2012). The 2005 World Conference of Disaster Reduction was a key stage in which the concept of resilience found more space in both theoretical and practical sense in the disaster management literature (Manyena, 2006). Resilience is understood more or less to cope with dangers and the ability to bounce back. A key point here is to understand the concept explains events that cannot be anticipated after it occurred but also resilience is made relevant for instances where there is a certain level of preparation (Kantur & İşeri-Say, 2012). Therefore from a hazardous literature perspective resilience could be identified as a concept that is spanning through both pre-event measures that seek to minimize damage and losses as well as post event strategies designed to minimize the various disaster impacts (Bruneau et al., 2003).

Based on the above understanding of resilience from multiple bodies of literature, we have devised the following figure to highlight the key themes emerging from the bodies of literature.

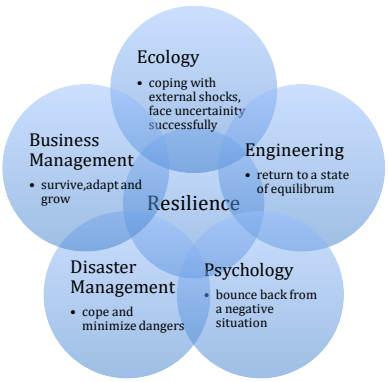


Figure 2. Resilience from a Multidisciplinary Perspective

3. RESILIENCE IN AN ORGANIZATIONAL SETTING

Even though resilience is conceptualised and defined in a variety of ways across a number of subject fields as shown above, one of the key highlights by many authors is that resilience is explained as a dynamic process and an elastic one rather than a static set of characteristics (Sutcliffe & Vogus, 2003; Valero, Jung, & Andrew, 2015). With the identification of the above themes from a multidisciplinary perspective it is important to see how they could be incorporated into an organizational setting based on literature. This is why to understand resilience in an organization setting, there is a need to identify what

dimensions or prerequisites need to be present for a certain organization to be considered 'resilient'. The statements that we have identified are universal statements irrespective of the industry or a particular context.

Based on the literature review few of the following statements are identified. This is further justified by the following literature.

Organizational resilience statements:

1. Resilient organizations take steps to prepare for the worst circumstances and develop routines to take rapid responses in unforeseen situations (Sullivan-Taylor & Wilson, 2009)
2. Resilient organizations are able to deliver excellent performance against current firm goals and effectively innovate against rapid market changes (Robb, 2000)
3. Resilient organizations stress on employee empowerment and broadening the decision making ability in responding to unforeseen circumstances (Mallak, 1998)
4. Resilient businesses are able to face exogenous shocks and remain competitive (Williams & Vorley, 2014)
5. Resilient organizations consists of resilient individuals capable of absorbing change and improvise solutions for survival (Kantur & İşeri-Say, 2012)

Based on this the figure 2 presents this work.

In terms of the proposed research key emphasis is placed upon the notion of organizational resilience which is identified as the capability for businesses to continuously avoid disturbances in the business environment and ultimately reach organizational goals successfully (Kantur & İşeri-Say, 2012). However, given that the literature on resilience in an organizational setting has been addressed in multiple ways, a conceptual framework is developed to delineate and identify the key constructs that could be developed in an organizational setting to face situations like the Covid-19 in a comprehensive manner.



Figure 3. Prerequisites in Achieving Resilience in an Organizational Setting

4. CONCLUSION

COVID-19 could be identified as a turning point in the human history which has allowed both scholars and practitioners to have a renewed interest in the concept of resilience to understand what makes certain organizations succeed under difficult circumstances. Resilience has multiple definitions and the paper aimed to summarize some of the key ideas of the concept based on a variety of subject fields. In doing so, the paper aimed to identify certain key conditions or prerequisites with complementary theoretical understanding that would assist in identifying a 'resilient business' from an ordinary one which could help to understand what makes it successful in uncertain conditions such as the current global pandemic.

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