



## The Interplay of Organisational Resilience and Organisational Culture: A discussion paper

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### Abstract

The literature on organisational resilience (OrgRes) evidence that this phenomenon has experienced increasing attention in recent years. Studies show that understanding of organisations as complex socio-technical systems is important to understanding OrgRes. Often, these studies focus on micro-and macro-perspective that address individuals as actors in systems. Or they address organisational factors that can be improved (for example, employee training, risk management policies, and operational processes) in order to anticipate and respond to various events. Some of these studies suggest the need for a more holistic perspective that includes formal and informal approaches. Building on these insights, here it is argued that understanding and attention to 'organisation culture' provides a lens by which organisations can better prepare for future challenges, especially where contexts of high uncertainty and volatility may prevail. Using the metaphor of an iceberg for organisational culture (OrgCulture), cultivation of resilience within organisations allows for the embedding of a resilience-based approach into the fabric of organisations, such that it permeates organisational values and principles and informs policies and practices. Such conceptualisation of OrgRes will enable the establishment of deep internal ideologies that affect enduring 'ways of thinking and doing' that better prepare organisations for the future.

**Keywords:** organisational resilience, organisational culture, adaptation, transformation, learning

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## Introduction

Organisations are increasingly being challenged by change and uncertainty. Emerging disruptions and volatility present unexpected and confronting events and situations for organisations to deal with. The literature classifies such events into a range of categories, including crises, uncertainty, catastrophes, surprises, disasters, disturbances, incidences, and rare events, all of which shock and threaten organisations (Duchek, 2020; Rahi, 2019). It acknowledges that ‘the unexpected’ may be driven by factors either internal or external to organisations, such as technical malfunctions, lack of talent, technological innovations, intensifying environmental crises, and more recently, the COVID pandemic. Duchek (2020) explains that the extent of the impact of the unexpected is governed by the type of event, its timing, duration, and frequency; and that the effects can severely test an organisation’s resilience and capacity to survive.

Often, in discussions about organisational operations in dynamic environments, mention is made of the need for flexibility and agility. Both concepts are worthy of mention here because while they are related to resilience, there are differences. Flexibility is recognised as “the ability to rapidly adjust to environmental changes” (Duchek, 2000, p. 216), and agility is defined as “the ability to quickly recognise opportunities, change direction, and avoid collisions” (McCann, 2004, p. 47). The emphasis of both flexibility and agility is upon the organisation’s ability to rapidly adjust to change. By comparison, organisational resilience (OrgRes), demands that organisations adapt to the unexpected and that they emerge from the crisis restored, with increased vigour and strength. Adopting a similar understanding, Rahi (2019, p. 89) sums up OrgRes as “the ability of an organisation to deal with disruptive events that cause alteration, degradation or cessation of organisational operations.”

In recent years, the literature on OrgRes has experienced growing attention, but there remains some debate over its conceptualisation. Discussions continue in relation to what OrgRes means and its defining dimensions or elements. Bento, Garotti, and Mercado (2021, p. 1) proffer that resilience is “a concept that derives from socio-ecological studies . . . and refers to a system’s capacity to absorb and return to a stable state after disruption.” This definition suggests that resilience is dynamic in character and requires a shift in the system’s operations in order to adapt to internal and external changes. Studies in this field show that an understanding of organisations as complex socio-technical systems is important to understanding OrgRes. Adding to the above, it is suggested that there are four key aspects to OrgRes: (1) responding to what has happened; (2) monitoring to identify critical problems; (3) anticipation of potential issues; and (4) proactively learning (Hollnagel, 2011). Further, it is becoming increasingly important that organisations recognise

uncertainty is the ‘new norm’, with learning from disruptions and achieving multiple states of equilibrium (Bento et al., 2021) being critical.

Much of the literature on OrgRes captures facets of organisations that need to be developed, improved and/or maintained. Commonly, such elements relate to the dimensions associated with organisational culture (OrgCulture) and include ‘human capital’, ‘leadership’ and ‘practices’. These commonalities suggest that OrgCulture can inform a deeper understanding of OrgRes and provide insights into how to advance improved and long-term approaches to dealing with disruptions.

This paper begins by presenting an overview of the conceptualisation of OrgRes. It leads on to identifying gaps in contemporary thinking on OrgRes and explaining why a focus on OrgCulture may afford avenues for enhancing OrgRes. The main goal here is to create a platform for the development of ideas for further research.

## Resilience in the Organisational Context

Interest in the concept of resilience in the organisational context emerged with the publication of Holling’s work in the 1970s (Bento et al., 2021). Holling proposed that there were two types of resilience – ‘engineering resilience’ and ‘ecological resilience’ (Rahi, 2019). It is from the engineering conceptualisation of resilience that a systems approach to organisations was adopted. This view allowed for facilitation of the dynamic nature of simple cause and effect of disturbances or events. It led to definitions of resilience as a system’s capacity to absorb shocks and “simply bouncing back” (Barasa, Mbau, & Gilson, 2018, p. 497). By contrast, ‘ecological resilience’ allowed for organisations to be perceived as complex systems with adaptive natures that could change aspects such as their processes, structure or culture to transcend adversities and thrive (Rahi, 2019). Hence, the ecological view is grounded in the notion of systems as ‘complex’ and ‘adaptive’, allowing organisations to absorb shocks, adapt, and transform (Barasa et al., 2018). This perspective “looks beyond the maintenance and restoration of organisational functionality and focuses on the advancement of organisational processes and capabilities” (Duchek, 2020, p. 219).

The evolution of the concept of OrgRes has seen a further extension of this phenomenon to incorporate the notion of ‘expectation’ or ‘anticipation’ into definitions of OrgRes. In the 1980s and 1990s, Wildavsky contrasted anticipation with resilience. He defined anticipation as “the prediction and prevention of potential dangers before damage is done” and juxtaposed this definition against that of resilience, which he defined as “the capacity to cope with unanticipated dangers after they have become manifest, learning to bounce back” (Wildavsky, 1988, p. 77). This perception of resilience lends to an understanding of the term as a form of ‘crisis prevention, a defensive and offensive response to disturbances that

require anticipation of, coping with, and recovery from disruptions.

Further to the work of Wildavsky, one of the first scholars who made an important contribution to the conceptualisation of OrgRes was Karl Weick (Duchek, 2020). In 1993, Weick analysed the fire disaster at Mann Gulch in Montana. His aim was to understand what causes organisations to crumble and how the resilience of organisations can be improved. He engaged the idea of ‘sensemaking’ and proposed four governing principles: improvisation and bricolage, virtual role systems, an attitude of wisdom, and respectful interaction (Weick, 1993). Since Weick’s seminal work, researchers have aimed to understand the role that OrgRes plays in the existence and success of organisations. In their systematic literature review, Barasa, et al. (2018, p. 497) found that there was agreement that OrgRes is achieved by a combination of absorbing the challenges faced and changing by adapting and transforming so as to continue to thrive in the face of challenges. This definition is consistent with that arrived at by Duchek (2020, p. 220), who states, “we define organisational resilience as an organisation’s ability to anticipate potential threats, cope effectively with adverse events, and adapt to changing conditions.”

Duchek’s (2020) review of the literature on OrgRes, produced a categorisation of definitions into three main areas: resilience as an outcome, resilience as a process, and resilience capabilities. These suggest that resilience is a property of an organisation; something it has. By contrast, Hollnagel and Woods (2006) maintained that OrgRes is a characteristic of organisations, which when summarised by Bento et al. (2021, p. 2) is stated to be something that is “developed or nurtured, using knowledge, competence and resources.” This understanding suggests that OrgRes requires continuous monitoring, evaluation, and learning of ‘how things are done’ in organisations. Hollnagel and Woods (2006) emphasised that adopting this approach is vital for organisations to cope, given the complexities of dealing with problems relating from the individual level to that of the system level. They acknowledge that the associated interactions within and between the organisational levels further compound abilities to cope. These interactions between the entities mean that there needs to be a multiplicity of equilibria points, rather than a single equilibrium point, for sustained adaptability (Bento et al., 2021). It is also argued that sustained adaptability can be characterised as a network of entities at different levels that have the capacity to adapt to unexpected events. Barasa et al. (2018) talk of ‘planned resilience’ and ‘adaptive resilience’ and emphasise that while the former is important, it is adaptive resilience that is effective in producing sustained and long-term survival of organisations.

Consistent with this thinking, Rahi (2019, p. 86) maintains that developing an organisation’s adaptive capacity encourages “learning and development of

responses, in a timely manner, to cope with disruptions”, concluding that organisational transformation occurs through burgeoning of interactions between people (the human constituents) and the environmental elements. Hence, he argues that building a ‘culture of resilience’ is necessary for anticipating, coping, and adapting to disruptive events. Rahi (2019, p. 89) goes even further and asserts that what is required is “a continuous rebuilding of values, processes and behaviors by transforming individuals’ actions into a collective source of strategic advantage: one that empowers over time to manage future disruptive events.” Such thinking is not new. Earlier, Keenan (2015) contended that having an ‘awareness’ of and capacity to detect changes in organisations is important for building an organisation’s adaptive capacity. He reasoned that to do so requires organisations to have appropriate beliefs and perceptions, openness to learning, and processes that evaluate an organisation’s environment.

More broadly, there seems to be a consensus that in order to build OrgRes, it is useful to adopt a process-oriented approach and to think of how organisations respond to adversity before, during, and after such disruptive events. Duchek (2020) has integrated findings from other scholars to present a framework that has utilised this temporal structuring and offers a capability-based conceptualisation of OrgRes. The framework encompasses three phases: anticipation (before), accepting (during), and adaptation (after). The first phase is proactive and builds on prior organisational knowledge to prepare organisations for the unexpected. During the second phase, solutions are developed and implemented for concurrent action. The third phase involves reflection and learning to precipitate change in organisations. The value of Duchek’s framework lies in the bringing together of non-human and ‘social resources’ to build ‘power and responsibility’ and the recognition of the importance of ‘cognitive action’ and ‘behavioural action’.

Such thinking parallels other recent studies that identify the importance of ‘organisational software’ as well as ‘organisational hardware’ in the building and nurturing of OrgRes (Barasa et al., 2018). It is increasingly being recognised that the human (soft) elements of an organisation (such as planning, leadership, employee motivation, governance, human capital) are as equally necessary as material resources; and are vital for enabling the mobilisation of the hardware to enact OrgRes. So, it seems that in order to better understand the phenomenon of OrgRes beyond its normative conceptualisation, there needs to be a deeper exploration of the web of social interactions within organisations. As has been shown, adaptive capacity is a key aspect of OrgRes, and for achieving adaptation in an organisational setting, there is a need for reflection and learning so as to produce new ‘ways of doing’ or patterns of behaviours. Core to such actions is the network of social interactions (formal and informal) that occur within organisations (Bento et al.,

2021). Such thinking brings to mind an integrated socio-technical system. Hence, this paper proffers an enhanced way of conceptualising OrgRes and that is to consider ‘organisational culture’ as a fundamental driver – the engine room, if you will – of the socio-technical system that is the organisation and so, which must be contemplated in the development and cultivation of OrgRes.

### Why the Focus on Organisational Culture?

The work-to-date on OrgRes captures various facets of an organisation’s culture. For example, in their literature review, Barasa et al. (2018) identified ‘leadership practices’, ‘human capital’, ‘planning’, ‘information management’ and ‘governance processes’ as key aspects of importance to OrgRes. Similarly, Shela et al. (2021) focused on ‘human capital’ and mentioned associated elements such as ‘training and development’, ‘optimism’, ‘confidence’, and ‘employee commitment’. There are commonalities between these facets and the dominant accepted frameworks for OrgCulture. While there is a lack of consensus on a specific set of facets/dimensions that constitute OrgCulture, the frameworks present valuable insights into the nature of organisations and the understanding of relating phenomena, such as OrgRes. Pryce (2021) presents a discussion on the dimensions of OrgCulture that captures its holistic nature. Dimensions include organisational philosophies, values, leaders, team spirit, communication, commitment, power, processes, planning and change.

In 1951, Elliot Jacques presented a detailed depiction of the informal social structures at the Glacier Metal Company (London, UK). His book, *The Changing Culture of a Factory*, was one of the seminal works on OrgCulture. Since that time, various scholars have contributed to the study of OrgCulture through an exposé of theoretical definitions and conceptual frameworks (Nieminen et al., 2019). Notable amongst these scholars is Edgar Schein, who defined the process of formation of OrgCulture as “the shared patterns of thought, belief, feelings, and values that result from shared experience and common learning . . . [that] results in the pattern of shared assumptions” (Schein, 2010, p. 73). In 1992, Schein described culture as “the accumulated learning of the past” (Schein, 1992, p. 6).

This focus on learning resonates with the literature relating to OrgRes where repeatedly, scholars emphasised that ‘reflection and learning’ are key to achieving transformation in and of organisations if they are to realise

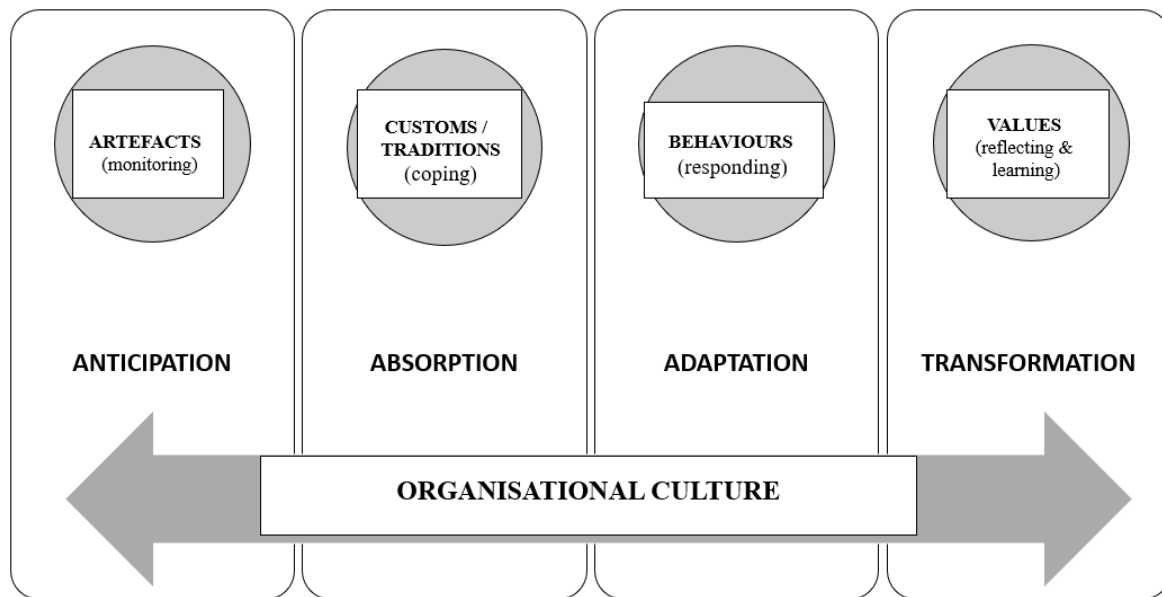
long-term viability. Hence, the relevance of OrgCulture to OrgRes is noteworthy.

Formally, OrgCulture has been defined as “the values, beliefs, and assumptions that are held by members of an organisation and which guide behaviour and facilitate shared meaning” (Nieminen et al., 2018, p. 5). Schein (1992) recognised that founders and senior leaders are pivotal to the creation of OrgCulture. Their personal beliefs and values permeate organisations and over time, their behaviours and actions embed these fundamental values and beliefs into the fabric of the organisation so that there eventuate ‘ways of thinking’ and ‘ways of doing’ that are endemic to an organisation.

In 1976, Edward T. Hall presented an iceberg analogy of culture. He argued that like an iceberg, there were some aspects of culture that were visible (such as artefacts, behaviours, traditions, and customs) and others that are hidden beneath the surface (perceptions and attitudes), with some deep below the surface (such as values and beliefs). The fundamental values and beliefs are said to be the causes of the visible aspects of culture. Over the years, the iceberg analogy has been adapted to organisations, and it is understood that to effect organisational change requires a shift in those fundamental facets of culture. Schein (1992) recognised that lasting culture change is sustained because founders and senior leaders themselves affect change and have in fundamental ways changed their perspectives, attitudes, and values.

The OrgRes literature has shown that responding to disruptive events often requires a change in the fundamental characteristics of organisations. OrgCulture provides a vehicle for effecting change that is transformational and affords a sustained OrgRes that can tackle the unexpected. The creation of an OrgCulture that embraces and builds OrgRes is not new. The above has observed various facets of OrgCulture incorporated into discussions of OrgRes. Beyond those discussions, what is novel in this paper is the proposal that a holistic perspective of OrgCulture be engaged when addressing OrgRes because it is only when OrgRes is embedded in the core values and beliefs of the organisation that the operational mechanisms can be integrated within the complex socio-technical system that is the organisation, to address challenges and disruptions of the unexpected.

In an attempt to conceptualise the interplay between OrgCulture and OrgRes, the layers and facets of OrgCulture (artefacts, customs/traditions, behaviours, and values) are mapped against the phases of OrgRes that have been identified in the literature (anticipation, absorption, adaptation, and transformation), as per Figure 1.

**Figure 1 – Conceptualisation of the interplay between organisational resilience and organisational culture**

Source: Author's interpretation

Figure 1 highlights that OrgCulture encompasses all phases of OrgRes. It is the underlying current that directs every aspect of an organisation, from vision to strategies to operational activities. Understanding the principles and nature of OrgRes, the mechanisms of OrgCulture, and the interplay between the two can advance an environment that integrates all facets of organisations in the quest to deal with the unexpected.

Future research should therefore aim at exploring OrgRes through the lens of OrgCulture. One approach could utilise the dimensions of OrgCulture to examine how OrgRes is embedded in the organisation. Such an approach will unveil the OrgRes of an organisation and highlight where shifts in the OrgCulture need to happen for a stronger OrgRes to be developed and nurtured. Further research could extend this approach to understanding resilience in organisations as complex systems and so explore it through a multi-level analysis to capture resilience from the individual level to the organisational and systems levels. More broadly, such research could include the community level. For example,

by adopting Bronfenbrenner's Ecological Systems Theory (Bronfenbrenner, 1989), it can be possible to examine resilience at various levels, from the individual to the community, to better understand responses to unexpected disruptions. This research could lend insights into OrgRes as an aspect of broader community resilience.

## Conclusion

As disruptive events compound, an organisation's capacity to survive becomes increasingly reliant on its OrgRes. This paper has shown that OrgRes is intertwined with OrgCulture and that to build and nurture OrgRes requires an understanding of and engagement with OrgCulture. Here, it is proposed that OrgCulture can be used to facilitate transformation in an organisation and potentially create healthy levels of OrgRes, allowing for organisations to experience sustained and prosperous futures.

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