

People-centred business continuity: a case for inclusive design

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This conceptual paper draws together the seemingly disparate concepts of business continuity and inclusive design with a two-fold overarching aim. Firstly, the paper aims to make a case for people-centred approaches to business continuity planning, particularly in areas of real-time assessment, building agile and resilient organisations, and new value creation. This is fulfilled by tracing recent developments in business continuity thinking and business continuity management practice, that highlight a shift from a purely functional approach, to a more holistic, embedded, dynamic, people-centred and strategic stance. Secondly, the paper aims to propose new applications of inclusive design for business impact in general, and business continuity in particular, thereby extending the business case for inclusive design as outlined in British Standards (BS 7000-6:2005). This is fulfilled by highlighting the rationale, value and emergent opportunities in this area. In bringing the two concepts and their respective theory and practice together, the paper also presents recent discussions on the intersection of design thinking and business continuity, which demonstrate the potential value that a design-led approach can bring to enable people-centredness and inclusion in the domain of business continuity. Additionally, the paper proposes a first-level definition of 'people-centred business continuity' which is considered a steppingstone in the research process for further investigation in both theory and application.

Keywords: business continuity, organisational resilience, inclusive innovation, design thinking, business impact

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Introduction

At the beating heart of every organisation lies its most volatile and valuable resource – people. No business can fully recover from disastrous circumstances without its staff, and this means all of them. (Johnson, 2011, p.691)

The global impact of Covid-19-induced uncertainty has posed uncharted challenges to business continuity (BC). New considerations of redesigning operations overnight, accelerated digitisation, physical relocation, supply chain interruptions, rapid shifts in customer demand and ensuring workforce health and wellbeing, populated pandemic response and risk management, and superseded yesteryear's considerations of cyberattacks and disaster mitigation (Margherita & Heikkilä, 2021). The World Economic Forum reports that as of mid-2020, 93% of the world's workforce resided in countries affected by the pandemic, with companies pivoting rapidly to what is known as 'the largest experiment in mass remote-working in history' (World Economic Forum, 2020). How could businesses continue, recreate, start up, transform and flourish in a near complete virtual environment?

In the UK, the Confederation of British Industry (2021) sees Covid-19 as a 'once-in-a-generation opportunity' to build on the ethos of cooperation and collaboration that has hitherto underpinned crisis management and solutions-finding, and work together towards an inclusive and innovation-led economy. This is also echoed in the UK's Build Back Better¹ campaign which places people at the heart of economic recovery and new futures creation:

Build Back Better is about people. Building implies infrastructure and housing is certainly part of the story. But we also want to build aspiration, build communities and build trust. Building back better means that every community, every person can realise their potential. (Paul Scully (YouTube,2021))

This is particularly important as in recent years we have seen a growth in hybrid employment arrangements, which provide much needed flexibility for people to balance work and changing lives and responsibilities, but have equally presented job security, network-building, business innovation and workforce wellbeing challenges (Lockey & Wallace-Stephens, 2020; Microsoft, 2021; Sokol, 2020). This aligns well with the World Economic Forum's call for organisations 'to update and reset their future of work preparedness agendas for a more relevant and inclusive post-pandemic 'new' future of work for all.' (World Economic Forum, 2020).

To address these challenges, in the UK, the London Recovery Board² is employing an inclusive and collaborative cross-cutting approach of ongoing engagement with stakeholders and communities, to not only deliver long-term economic and social recovery, but also reimagine the city and collectively define aspirations and priorities for business continuity and creation. The realised need for radical new approaches to 'reshape London as a fairer, greener and resilient city than it was before the crisis' has resulted in a recent call by the Greater London Authority (2020) and the UK's Design Council for design-led innovation that will place people's needs at the heart of recovery approaches.

The call for people-centred approaches to economic and societal recovery from government, policy, and global business organisations has offered the main premise of this conceptual paper. It draws together the seemingly disparate concepts of business continuity and inclusive design with a two-fold overarching aim, as follows:

- Firstly, the paper aims to make a case for people-centred approaches to business continuity planning and management;

¹ Whilst Build Back Better (BBB) is the term of choice used by the current UK Government, as well as other countries, in the development of Covid-related recovery policies, the term itself dates back to the mid-2000s (United Nations, 2005). It has been widely used to describe enhancing disaster preparedness for effective response and the development of approaches to recovery that lead to improvements and change above and beyond the state of play pre-disaster (Noy, Ferrarini & Park, 2019; United Nations 2015).

² The London Recovery Board, chaired jointly by the Mayor of London, Sadiq Khan, and the Chair of London Councils, Councillor Georgia Gould, brings together leaders from across London's government, business and civil society, as well as the health and education sectors, trade unions and the police, to oversee the long-term recovery effort in London.

<https://www.london.gov.uk/coronavirus/londons-recovery-coronavirus-crisis/london-recovery-board>

- Secondly, the paper aims to advance understanding and applications of inclusive design within organisational design and transformation in general, and business continuity in particular, thereby extending the business case for inclusive design as outlined in British Standards (BS 7000-6:2005).

In fulfilling the above, the paper will, as a matter of course, also discuss the application of design thinking for business continuity by drawing on recent examples of thought leadership in this area. The purpose of this – without going into debate about the definition and critique of design thinking, which falls outside the scope of this paper – is to demonstrate the potential value that a design-led approach can bring to enable people-centred and inclusive approaches to business recovery and recreation.

Key questions that have guided the review of literature and practice include:

How has the definition, theory and practice of business continuity evolved in recent years?

What are the factors of business continuity planning and business continuity management which the Covid-19 pandemic has highlighted as essential to organisational recovery and rebuilding?

How does current BC literature, thinking and practice consider people-related factors?

What does inclusion mean for business in a Fourth Industrial Revolution and pandemic recovery world? What are the opportunities for inclusive design and design thinking to enable businesses to rebuild, rethink, reimagine, and recreate not only their operations, but also their purpose and futures strategy?

This article is therefore organised in three sections. The first part traces recent developments in business continuity thinking and business continuity management practice, that highlight a shift from a purely functional approach, to a more holistic, embedded, dynamic, people-centred and strategic stance. The second part presents emerging thought on the value and application of design thinking in the domain of business continuity management, which strengthens the case for exploring inclusive design approaches in this domain. The third section outlines specific opportunities for inclusive design to support and enable business continuity thinking and practice.

The People Aspects of Business Continuity

What is Business Continuity?

Business continuity management emerged as a form of crisis management and disaster recovery planning in the 1970s in response to the technical and operational risks that threaten the ability of an organisation to recover from cumulative hazards or sudden disruptions^{3,4} (Foster & Dye, 2005; Herbane, Elliot & Swartz, 2004; Herbane, 2010; Margherita & Heikkilä, 2021). This was driven by the introduction and adoption of information technology and general-purpose business computer systems⁵, which meant that businesses, particularly the finance and banking sectors, now had to pay specific attention to the vulnerability of their electronic data and how it was stored and processed, so that it could easily be recovered in the case of sudden disruption.

Business continuity through organisational culture and strategy: embeddedness

Over time, the objective of business continuity shifted from function-specific and process-centric recovery planning, wherein business continuity would be the outcome of a successfully implemented recovery strategy, to a more holistic and socio-technical approach that centred on preserving the

³ These include natural disasters, e.g., tsunamis and hurricanes; manmade factors and events, e.g., cyberattacks, terrorism; market collapse, corporate crisis; market and supply crises, etc. (Margherita & Heikkilä, 2021).

⁴ A comparative discussion of business continuity management, crisis management and disaster recovery planning, is outside the scope of this paper. Herbane, Elliot and Swartz (2004) explain that disaster recovery planning is more oriented towards information technology failures and natural disasters; and that business continuity management tends to be more business-centric, i.e., focused on the organisation, customers, suppliers, etc., whilst crisis management is socio-centric, i.e., focused on government, public bodies, local community, etc.

⁵ Particularly the technological revolution resulting from the introduction of the IBM 360 in 1965 and IBM 370 in 1970, as Herbane (2010) informs.

organisation's competitive advantage and the 'critical value-generating activities of an organisation' and its stakeholders (Herbane, Elliot & Swartz, 2004; Herbane, 2010).

BCM is not simply a functional process with a limited remit and impact. Instead, it can be considered a capability (i.e. a mix of routines and skills that is observable but not necessarily tangible or transferable) that underpins organisational development in complex environments. (Herbane, Elliot & Swartz, 2004, p.437)

Smith and Sherwood (1995) agree:

[...] there are a host of other factors which need to be considered within the scenario of a computer or communications breakdown. In simple terms, it may be possible to provide stand-by computer facilities, but who is to work them? What about all the manual services which could be affected by the same disaster? What about the less tangible assets which need to be preserved during times of stress, such as public relations, management control, or public confidence in the company's ability to continue function?

To make the case for the convergence of business continuity management in strategic organisational management, Herbane, Elliot and Swartz (2004) highlight 'embeddedness' as one of four critical facets. They argue that the potential for business continuity management to play a strategic role is determined by the level of embeddedness of business continuity processes in the organisation:

BCM is then not merely 'a plan' but constitutes the organisational processes of leadership, commitment to which may be seen operating at individual and group levels. As this process becomes ongoing, BCM is more likely to become aligned with strategic initiatives within the organisation, and as the organisation grows and changes, so does its recovery planning. [...] If the process is not embedded, it cannot contribute to the long-term strategic goals of an enterprise.' (pp.442-443)

This is of particular interest to this conceptual paper and aligns well with other works on integrating business continuity management in organisational culture (Sawala, Anchor & Meaton, 2015) and corporate real estate (Foster & Dye, 2005). Training and awareness campaigns feature widely in the business continuity literature as essential to ensuring the successful management and implementation of business continuity plans, and wider embeddedness within organisational culture (Cornish, 2011; Hiles, 2011; Mcilwee, 2013; Smith & Shields, 2011).

Leadership for resilience and agility

In an organisational context, business continuity management (BCM) has evolved into a process that identifies an organisations' exposure to internal and external threats and synthesises hard and soft assets to provide effective prevention and recovery. Essential to the success of BCM is a thorough understanding of the wide range of threats (internal and external). And a recognition that an effective response will be determined by employees' behaviour during the business recovery process.' (Herbane, Elliot & Swartz, 2004)

This definition highlights an important change in thinking and practice of business continuity management, which aligns with notions of organisational and employee resilience and agility, in order to respond to large-scale disaster scenarios (Herbane, 2010). Fischbacher-Smith (2017) also finds commonalities in this regard between the definition of business continuity management and literature on organisational agility and the development of dynamic capabilities, particularly in relation to knowledge management. The World Economic Forum (2020) agrees:

Developing a culture that is aligned and embodies the very nature of the newly agile organization is vital to ensuring that employees feel empowered to continue doing their jobs while being proud to work at the organization. (p.7)

To enable effective implementation of business continuity plans Herbane, Elliot and Swartz (2004) highlight the importance of the composition and background of the business continuity team, i.e., who they are, which areas of the business they come from, and how they are able to demonstrate the strategic

value and impact of business continuity activities to external stakeholders (the market) and the company's employees:

[For the leaders] continuity processes are no longer designed to be palliative, but to improve resilience. (p.452)

Sokol (2021) asserts that management and self-management of emotional response have become imperative in ensuring workplace wellbeing and psychological safety, with a view to building agile and resilient workplace cultures. The role of the leader in that, as he writes about Fred Thiele of Microsoft, is 'to model key behaviours, coach others through difficult moments and demonstrate genuine care for those they lead'. And for Mike Cordano of Western digital, Sokol further highlights, 'it comes down to empathy, inclusion and collaboration, not just as a leader but to also embed such attributes into culture, strategy and operations.'

Finally, Mcilwee (2013) reminds us of the political nature of all companies and the importance of including managers from across organisational functions because of the area-specific knowledge they bear:

Remember that all companies and business are political and office politics will play a part, so other managers should be involved as equals – a facilities manager didn't get to be the manager by not knowing the job, and business continuity management is all about teamwork, both in the setup stages of program management and in the stress-filled environment of a full invocation of a business continuity plan.

Business continuity factors highlighted by Covid-19

The recent Covid-19 pandemic has made the case for building agility and resilience from within the organisation stronger than ever. This entails entraining people and integrating business continuity capabilities into day-to-day business culture and technology (Alesi, 2008; Corrales-Estrada, Gómez-Santos, Bernal-Torres & Rodríguez-López, 2021; Margherita & Heikkilä, 2021; Smith & Shields, 2011; Sokol, 2020). The IBM Institute for Business Value (2020) highlights enterprise agility as one of six top capabilities that business executives need to prioritise in order to effectively respond to crisis and change; and further assert that 'the human element is key to success' – referring to both workforce training and customer experience management.

Margherita and Heikkilä's (2021) recent framework of pandemic-response actions undertaken by 50 Fortune Global 500 companies, strongly supports this. Four of the five core areas of organisational activity centre around human factors, namely:

- **Customer experience and support**, e.g., redesigning the buying experience both online and in store, development of training for customer teams, ensuring effective customer outreach and communication and redefining brand strategies, and notably, extending emotional support to customers, etc.;
- **Workforce and human capital**, e.g., ensuring employee physical and emotional safety, ensuring work continuity and job productivity, managing shifting and new patterns of work, creating training and upskilling opportunities, etc.;
- **Leadership and change management**, e.g., enabling leadership and response teams to proactively manage risks, developing positive scenarios and maintaining trust, effective communication to assure stakeholders of company preparedness, etc.;
- **Community and social engagement**, e.g., working with external stakeholders to alleviate the social impact of the pandemic, strengthening public and private collaborations for emergency response, participating in open innovation initiatives by disclosing knowledge and IP, etc.

Moreover, Margherita and Heikkilä (2021) see the recent pandemic, and emergencies in general, as an opportunity for companies to innovate and create new business value and impact, and aver:

Whereas business continuity is generically aimed to preserve the value that an organization provides with current activities, with business model innovation the organization is deliberately altering the core elements of its model as a way to develop a new-to-business model.

The authors give the example of Toyota, who took the pandemic as an opportunity to transform its business model from a vehicle manufacturer to a resource and service provider for a connected city. And whilst production decreased during Covid-19, the company was able to maintain employment, invest in R&D of electric cars, create new customer interaction through virtual showrooms and social media. Margherita and Heikkilä (2021) accredit Toyota's success in navigating through the pandemic to the company's adoption of a product- and customer-centric approach, which focused on 'the after-emergency in terms of new societal and market needs.'

Similarly, Fischbacher-Smith (2017) has previously highlighted that above and beyond a value preservation role, business continuity is more concerned with a holistic view of business health, success and prosperity. 'A resilient organization is one that not merely survives over the long term, but also flourishes – passing the test of time' (Howard Kerr, Chief Executive of BSI (British Standards Institution, 2016)).

The evolution of business continuity thinking and business continuity management practice over the last 20 years, and in response to the Covid-19 pandemic specifically, towards a more holistic, strategic, socio-technical and dynamic approach – wherein agility and resilience become embedded capabilities within organisational design and culture – outlines a case for a people-centred approach to business continuity which is the core premise of this conceptual paper. The following section delves deeper into the concept of people-centred business continuity to further map and understand the people-related business continuity groups and factors which would be of interest to the domain of inclusive design.

Coping with People in Recovery

This section borrows its title from the eponymous appendix (Johnson, 2011, pp: 674-691) which appears in the third edition of 'The Definitive Handbook of Business Continuity Management' edited by Hiles (2011). The purpose of the appendix was to set out 'the non-trivial people-oriented issues that come with serious and disturbing incidents,' and to inspire a change in business continuity management practice towards a focus on the needs of people coping with extreme situations.

People first: physical and psychological safety

Johnson (2011) states that when a traumatic incident happens in the workplace, senior management has both a legal and moral duty of care to their staff. This includes addressing the post-traumatic reactions directly relating to the event, where it is important to recognise that no two people will have the same emotional response, attitude or physical reaction; as well as negative reactions born by how management has dealt with the situation. The latter can have long-lasting impact on the business due to decreased morale, diminished loss of productivity, staff resignations, and overall damage to the company's reputation if not seen as 'a caring employer.'

People represent the key to business and to business recovery. By thinking through what is required of them and how they are expected to undertake their tasks and what it means to them personally, you may end up with measures that are worthwhile and an appreciation of how we humans deal with difficult circumstances. (Johnson, 2011, p.688)

Mcilwee (2013) agrees:

The health and welfare of staff should be at the top of the list. Staff are a key resource, their knowledge of the business and processes and what their business's customers require make them indispensable.

Similarly, the guidance and recommendations on the human aspects of business continuity published by The British Standards Institution (PD 25111:2010) advocate for 'a process that enables those responsible for the human aspect of business continuity to ensure that the needs of everyone who could be affected are taken into account' and aver that 'prioritising the welfare and safety of people above other business concerns greatly enhances the organization's brand and its staff's motivation and morale' (p.3).

To fulfil this, BSI recommends that business continuity planning includes a 'human impact analysis' as part of the wider business impact analysis. Key considerations that underpin all stages of business continuity management, i.e., immediate effects of the incident, continuity phase, and support after recovery, include:

- ensuring the wellbeing and welfare of staff
- clear communication

- mobilisation of support services, which also includes effective leadership and ensuring that all staff 'remain motivated and positively disposed towards the organization.'

The next iteration of the BSI 'Guidelines for people aspects of business continuity' (PD ISO / TS 22330: 2018) further strengthens the case for a people-centred approach by stressing that the mismanagement of the people aspects would lead to the organisation being unable to prepare, respond, recover and restore to full capacity. The guidelines promote that such an approach would ensure that the workforce is mobilised during adverse conditions, particularly in enabling staff to return to work through dedicated people-focused response teams and roles.

External stakeholders and factors

In addition to management of staff and human resource, Smith and Sherwood (1995) assert that business continuity planning should deal more broadly with preserving essential customer and support services; ensuring customer, shareholder and employee confidence; and maintaining the public image of the company. This has been particularly evident during the Covid-19 pandemic, wherein the agility to quickly and successfully adapt to the shifts in customer demand, new modes of service provision and overall changing marketplace has been essential to business survival.

Similarly, Annex A of the BSI's PD 25111:2010 lists external stakeholder groups that might be directly or inadvertently affected by a disruptive event, which include contractors, visitors, customers, family and media. For all these groups, the role of effective and clear communication takes precedence. Furthermore, Sokol (2021) maintains the importance of trust in times of uncertainty as it shapes how we perceive information to be credible:

Trust must exist between leaders and employees, between companies and their suppliers and their customers. [...] In times of uncertainty it is who and what we trust that shapes what data and information we believe credible.

Smith and Sherwood (1995) discuss some of the negative outcomes of ineffective business continuity planning, such as loss of market reputation, loss of customer confidence, loss of employee confidence, loss of investor confidence and loss of management control. Notably, Annex A of the BSI's PD 25111: 2010 stresses the importance that is placed on communicating a 'people-first' approach in dealing with disruptive events, in order to preserve the company's reputation:

Remember that the organization's reputation might be at stake: "people first." (British Standards Institution, 2010:19)

This however, begs the following question – which design will attempt to answer in the following sections of this paper – How might we use design to ensure that a 'people-first' approach is holistically embedded in business continuity practice, as opposed to becoming a tick-box exercise for the purpose of *being seen to be doing the right thing?*

Vulnerable groups

Finally, there is one area of particular interest to this paper which appears in Annex F of the BSI's PD 25111: 2010. Annex F lists a group of vulnerable people and / or associated behaviours that would warrant careful consideration in business continuity planning and its implementation. These include: the elderly; medically frail people; pregnant women, mothers and babies, children; displaced people; people who have experienced significant loss; and those with physical and mental disabilities, to name but a few. No guidance is provided as to what the specific requirements of these groups might be, or any actions which could be taken in adverse situations. These groups fall right within the remit of inclusive design whose ethos is to ensure the inclusion of marginalised or overlooked groups into mainstream design, planning and policy consideration. A simple example of application here would be the development of accessible business continuity plans and guidelines, to communicate effectively to people with a range of sensory, cognitive and physical abilities and needs.

However, before we proceed with a more detailed discussion of the value and applications of inclusive design and design thinking in addressing the above, this paper proposes a definition of *people-centred business continuity* which is based on the review of literature thus far.

To preface this, the following two diagrams summarise key people-related business continuity groups (Figure 1) and internal and external outcomes and impact factors (Figure 2). Together, the two figures

highlight where inclusive design and design thinking could support and enable business continuity thinking and practice.

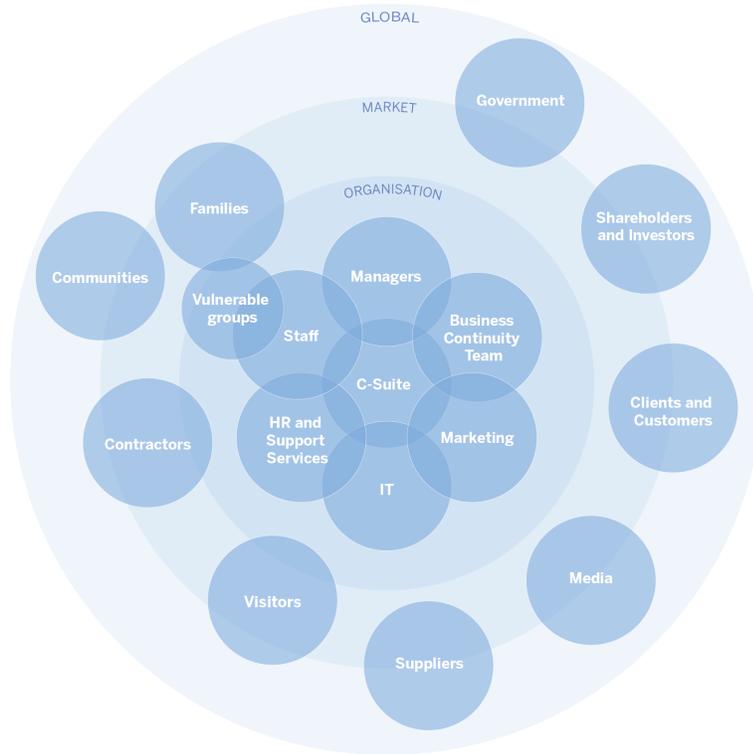


Figure 1. People-related business continuity groups

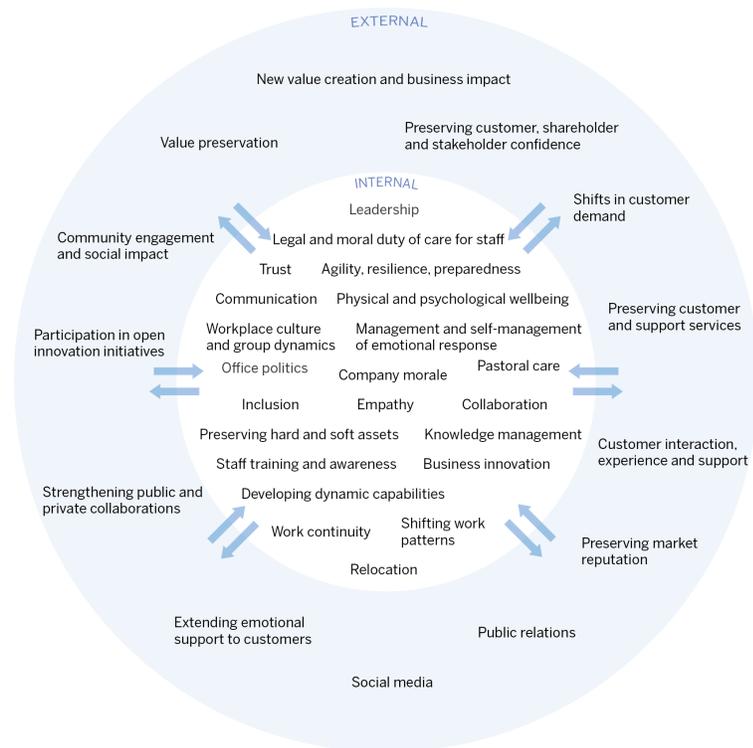


Figure 2. People-related business continuity impact factors and outcomes

People-centred Business Continuity

'What About the People?' writes Andrew Hiles in his edited volume of the 'Definitive Handbook of Business Continuity Management (2011, p.303) to demonstrate a point about the value of people as the bearers of knowledge in an organisation, without whom no business continuity plan could have successful implementation and impact. The people aspects of business continuity presented in the previous two sections have highlighted a gap and an opportunity to formalise a definition of *people-centred business continuity*. This is considered a steppingstone in the research process in order to provide 'a jumping off point for further investigation' (Haynes *et al.*; 2015) in both theory and application.

As a term, *people-centred business continuity*⁶ has occasionally been used to imply a people-first, or people-focused approach to business continuity management and planning, but in all cases an explicit definition has not been provided. For example:

- In Shah (2022), 'The author hereby sharing their people centered business continuity plan and their impact as a case study.'
- In an interview with Ellis Jones⁷ for WBCDSD Communications (2020):

Our organization already had a very robust and people-centered business continuity process that turned to be critical in our response to the pandemic. For us, it was always about putting the safety and health of our associates first.

- In Needham-Bennett (2018):

Bush (2000) noted that the 'comprehensive' nature of business continuity planning can be achieved through staff training. He advocated, "people centred business continuity training ranging from staff awareness to...realistic disaster simulations" (p.18)

- In the Business Continuity Institute (2018):

What sets a people-centric approach to business continuity planning apart is the recognition that humans are the greatest asset for any organisation: both in terms of potential for disaster and potential for recovery.

In pursuing a definition of *people-centred business continuity*, there are two further definitions related to business continuity that stand out:

- In the British Standards Institution's PD ISO/TS 22330:2018, the people aspects of business continuity are defined as:

Elements associated with the management of people involved in, or affected by, a disruptive event in order to minimize distress, maximize productivity and recovery, and achieve the recovery objectives of the organization's business continuity programme. (p. 2)

- The definition of business continuity management as developed by the Business Continuity Institute and The British Standards Institution (BS 25999-1:2006):

[A] holistic management process that identifies potential threats to an organization and the impacts to business operations that those threats, if realized, might cause, and which provides a framework for building organizational resilience with the capability for an effective response that safeguards the interests of its key stakeholders, reputation, brand and value-creating activities. (p.1)

From the above, this paper proposes the following definition of *people-centred business continuity*:

⁶ In both British English and American English spelling; and with and without hyphen

⁷ Vice President Environmental, Health, Safety and Sustainability and Business Continuity, The Goodyear Company

Table 1. People-centred business continuity: definition – Version 1

An approach to business continuity thinking, planning and management that considers holistically the needs, aspirations, value and capabilities of people in preparing for, responding to, recovering and recreating from adverse events. It, first and foremost, ensures the physical and psychological wellbeing of all staff, their families and affected communities, with due consideration of those who are most vulnerable. It is a business continuity approach that takes a proactive attitude to embedding agility, resilience and preparedness within organisational processes and workplace culture, through real-time assessment, training and development of dynamic capabilities. To ensure work continuity, it capitalises on attracting, preserving and growing talent, knowledge and soft assets. Inclusive leadership is imperative to maintain trust, confidence and effective communication with internal and external stakeholders alike. Moreover, people-centred business continuity recognises the innate creativity and diverse human capital of the organisation, in order to not only recover, but create new value, business and societal impact, in response to sudden or systemic, internal or external disruptions.

The following two sections aim to demonstrate the value and opportunities for applying design and inclusivity thinking and practice to support a people-centred approach to business continuity. This sits within a wider agenda of establishing the strategic value of design for business and organisational transformation.

Business Continuity meets Design Thinking

Design thinking is described by Brown (2008) as ‘a discipline that uses the designer’s sensibility and methods to match people’s needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity’. Utilising a unique set of thought processes, emotional sensitivity and practically entrained skills, ‘designers are particularly well equipped to understand, appreciate, and innovate within the complex dynamics of multiple interacting systems’ (Bilson, 2022). The strategic value and role of design thinking across business management, innovation, culture and resilience building, in addressing complex and systemic challenges, and enabling organisations to achieve wider economic, environmental and social impact has been well established over the last decade (Brown, 2019; Celaschi, Celi & García, 2012; de Mozota, 2008; Gheerawo, 2018; Martin, 2009).

More recently, the dynamic capabilities of design have captured the attention of business continuity practitioners, particularly in ensuring that business continuity becomes embedded and intrinsic to an overarching and cross-cutting business strategy. Sokol (2021) advocates:

Business continuity management itself has to become an agile process, responsive to the diversity of situations, geographies and customer groups. We need to apply design thinking for rapid testing, refinement and deployment of new ideas that help people and business perform.

Similarly, Erdebil and Gregory (2020) discuss ‘how design thinking and change management provide a structure for the planning and execution of business continuity, not only with regards to systems and processes but, also, the people component’. Erdebil explains that normally, business continuity planning is associated with events that are short-term, sudden, isolated to a specific location or group function, and largely focused on systems and processes, rather than people. In order to shift the focus of business continuity planning towards the impact on people, namely employees, customers and clients, Erdebil and Gregory propose the use of design thinking and its empathic stance.

Much like in the design of any product or service, empathy enables an understanding of what stakeholders need and expect from a business continuity plan. The iterative nature of the design thinking process, i.e., define – ideate – prototype – test (as per the model used by Erdebil and Gregory), ensures the inclusion of people in devising, refining and implementing a business continuity plan. Paired with change management around empathy, Gregory explains, the two processes enable people to shift and adapt from a current state of doing things to a future state.

And finally, Erdebil and Gregory (2021) highlight a three-point call to action that delineates a direct application for design thinking and inclusive design principles in business continuity planning:

- Understanding who will be impacted by the business continuity plan and what their goals, fears, challenges and opportunities are;
- Considering whether everyone understands the ‘why’ of the plan, their role in it, and the potential negative outcomes if people are not included;
- Devising a business continuity plan that addresses the two aspects above.

Furthermore, Reshma Block, Innovation & Technology Executive, offers a perspective on the intersection of business continuity and design thinking in continually innovating and reimagining business – a proposition closely linked with the definition of business continuity management as an ongoing capacity-building and new-value creation activity, particularly in large-scale and long-term impact crises, such as the Covid-19 pandemic (Digital FastForward, 2020). Block asserts that,

‘[...] the intersection [of business continuity and design thinking] is the innovation required to really stay in business, to really understand how to be agile and flexible, and to really modify your business model on demand.’

She poses that the reason behind companies not being able to cope with the disruption of the recent pandemic, is ‘a failure of imagination’ not about how to restart operations, but how to rethink and reimagine what business could look like moving forward. She sees this as an opportunity to bring together design and systems thinking to redefine business continuity planning towards ensuring that the organisation can continually adapt and innovate, as opposed to being reactive to disruptive events.

Figure 3 presents a summary of Block’s proposition for a new agile approach to business continuity planning, which aligns well with people-centred business continuity considerations outlined earlier. Of note, is the focus on building continual, real-time assessment and utilising design thinking ‘to be able to turn on a dime to where the customers or employees need you the most.’ The innovation opportunities that are listed support the key opportunity areas for design-led approaches identified by Sokol (2021) and Erdebil and Gregory (2020).

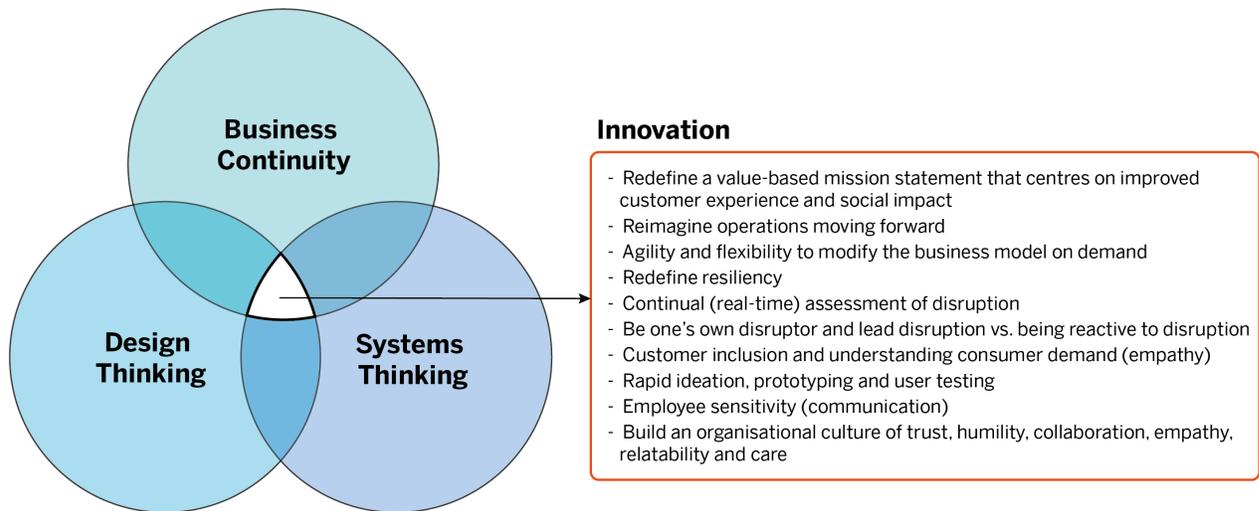


Figure 3. Intersection of business continuity, design thinking and systems thinking based on Block (in Digital FastForward, 2020)

The growing awareness for the need of a holistic ‘people-first’ approach to business continuity, to ensure that the individual and uniquely different needs and expectations of both internal and external stakeholders are considered in the development and implementation of business continuity planning, focuses in on a specific opportunity to consider what inclusive design, alongside design thinking, could offer to enable this in practice.

A New Case for Inclusive Design

What is Inclusive Design⁸?

The term 'inclusive design' entered design parlance in the mid 90s as a people-centred, comprehensive and integrated design approach to ensure that people with diverse abilities and needs were included in mainstream design consideration. It was framed by Roger Coleman at the 12th Triennial Congress of the International Ergonomics Association in Toronto, Canada in 1994. Coleman argued 'that needs and abilities change throughout the life-course and that by taking account of this in the design process, products, services and environments can be improved for the majority of customers in ways that are not associated with negative perceptions of age or ability' (Coleman, 1994).

Whilst originally inclusive design was framed around the inclusion of people of various abilities and across life stages in design (Moore 1985; Myerson & Lee, 2010; Clarkson, Coleman & Keates, 2013; Clarkson & Coleman, 2015), Waller, Bradley, Hosking and Clarkson (2015) propose that population diversity can be broadened to include a diverse range of real-world contexts, environmental factors, lifestyles, aspirations, gender, culture and past experiences. This aligns well with the shift in the definition of disability from a medical model, wherein people are seen as disabled by their own physical or mental limitations, to a social model, in which disability is born by 'inadequate design, inconsiderate services and environments and cultural stereotypes' (Clarkson & Coleman, 2015). In keeping with the social model of disability, the particular example of manmade or natural disasters, in which every individual – irrespective of background, ability, age or other demographics – could be placed under extreme conditions with unforeseen impact on their physical and psychological ability, paves the way for inclusive design methods and applications in the domain of business continuity.

In 2005, when inclusive design was written into British Standards, a case was made for including people with diverse needs and aspirations as 'a key element in an inclusive business strategy' (The British Standards Institution, 2005), with the following rationale:

- Better understanding of changing consumer needs;
- Profitability based on better alignment between offer and market;
- Competitive advantage through effective people-centred design that guards against dissatisfaction due to limitations in usability, thereby minimising cost of servicing and returns;
- Enhanced innovation opportunities and brand value;
- Closer association between staff, investors, corporate values and mission: maintaining workforce loyalty, improving efficiency, enhancing motivation and ensuring that companies retain talent.

Whilst the above have found many successful applications in the design of inclusive products, services, technologies, environments and experiences across private and public sectors over the last 30 years (Clarkson & Coleman, 2015; Donahue & Gheerawo, 2009; Eikhaug & Gheerawo, 2010; Mieczakowski, Hessey & Clarkson, 2013; Myerson & Lee, 2010; Myerson, 2021) the applications of inclusive design in business redesign and transformation remain under-explored.

Inclusion and Innovation for a 4IR and Post-Pandemic World

Business and industry are rapidly changing as a result of the Fourth Industrial Revolution (4IR) and the Covid-19 pandemic, posing a challenge for global leadership to face the volatile, uncertain, complex and ambiguous (VUCA) nature of this world. The 4IR, whilst being driven by the impact of technologies on the future of work, business, communications and global economies, has more than ever established a need to develop new people-centred strategies to organisational change and the future of work. In that inclusion, and by extension inclusive design, transcends and integrates disparate conversations in the areas of accessibility, disability, diversity and social equality.

Coleman avers that central to an inclusive approach 'is the challenge of understanding and quantifying the numbers of people adversely affected by decisions made during the specification and design process' (Coleman & Lebbon, 1999). If we take the organisation as the design canvas, and a business continuity plan as the brief at hand, inclusive design becomes an approach to ensure that the needs, challenges and

⁸ Whilst the author recognises that Inclusive Design sits within a wider academic discourse and social agenda of Universal Design and Design for All and evolving areas of design, e.g., design for social innovation and design justice, a thorough discussion of the field is outside the scope of this paper, but rather a focus on what the principles of inclusive design can offer to the domain of business continuity as outlined in the previous sections.

requirements of all relevant stakeholder groups, including those who would be rendered most vulnerable, will be considered in the development of strategies, processes, solutions and innovation opportunities that are respectful of, equitable, and beneficial to as wide a group as possible.

A white paper published by the World Economic Forum (2019) has proposed a framework of six key imperatives for a people-centred future of work, that speak directly to the people-related business continuity aspects illustrated in Figure 2, p.9. These include:

- Developing new leadership capabilities for the 4IR – with a focus on driving organisational culture and shaping innovative people-centred strategies for the future of work;
- Managing the integration of technology in the workplace – to ensure that the combination of human and automated work achieves optimal positive impact;
- Enhancing the employee experience – which has growing importance given the changing nature and complexity of work during the pandemic;
- Building an agile and personalised learning culture – with HR playing a key role in fostering a culture of life-long learning, unlearning and relearning;
- Establishing metrics for valuing human capital – and making a compelling case for it as a key performance driver for business impact;
- Embedding diversity and inclusion – a profound shift in organisational thinking to promote equality and prosperity for people of all ages, abilities, genders, cultural and economic background, etc.

In the UK, innovation has become the central tenet of 'build back better' campaigns and the UK's Innovation Strategy 2021 (HM Treasury, 2021) which is about leading the future by creating it. The recently launched Design Innovation Network (as part of the UK Government's innovation agency Innovate UK) is a further testament to the growing recognition of the potential of design to address global and systemic challenges (Flory, 2022) and to enable a transition to 'a future economy that offers quality of life for all, as well as protecting our environment and preserving the Earth's resources.' (Ben Griffin in Innovate UK, 2022)

The above creates scope to reimagine business models and processes towards building agility, innovation capability, personal and organisational resilience, and preparedness, and to take a people-centred and inclusive approach to business continuity planning, real-time assessment, and new futures creation. As Sokol (2021) states, 'It's time to be a steward of a future of which we can be truly proud of.'

The author has previously argued for a role and place for design for business impact and post-pandemic recovery, in integrating inclusivity thinking and practice in the entire chain of solutions-findings and realisation for business continuity and recreation pan- and post-pandemic. In October 2020, a panel discussion with experts from across innovation, technology and neuroscience, hosted as part of the Helen Hamlyn Centre for Design's first Inclusive Design Week, explored the role of design in evolving business models and processes during the pandemic (Ivanova, 2020). The panellists highlighted inclusive design as an approach for business to better understand itself and its stakeholders, to boost and entrain innovation capacity from within the organisation, and opened up questions about the value of empathy-led interdisciplinary approaches in creating new pathways for design, business, technology and innovation. This directly addresses the World Economic Forum's call for smart, clean and inclusive approaches to addressing business risks, such as stagnation of advanced economies, collapse of small businesses, widening the gap between major and minor companies and reducing market dynamism, which have all been amplified by the pandemic (Franco, Kuritzky, Lukacs & Zahidi, 2021).

Inclusive Design for Business Continuity

The strength of inclusive design lies in its potential to enable an empathy-led and equitable platform for co-creating contextually relevant, multi-perspective, inclusive and innovative solutions, applications and pathways. In the areas of workplace design (Bichard & Myerson, 2008; Ivanova, Gheerawo, Poggi, Gadzheva & Ramster, 2020; Myerson, 2008; Myerson, Greene, Privett, Ramster & Thomson, 2017; Myerson, 2021; Napell, 2022) and more recently leadership (Gheerawo, Flory & Ivanova, 2020) – which speak directly to the business continuity agenda, and the role of which has become even more prominent during the pandemic – inclusive design has evidenced its potential in:

- Prioritising the wellbeing, emotional and sensory needs of workers over efficiency and streamlined processes

- Developing contextual spaces that are flexible and community oriented, e.g., spaces for collaboration, contemplation and concentration (Myerson, 2008) and ‘to adjust the workspace in response to behavioural requirements’ (Myerson, 2021, p.82)
- Designing inclusive workplaces that holistically address human, technological and environmental factors in a way that recognises and celebrates the diversity of workplace culture
- Working towards redefining employee-centred and aspirational key performance indicators (KPIs) to recognise and celebrate staff’s loyalty and dedicated work, and to enhance motivation
- Highlighting a role for Inclusive Design in the workplace and built environment to support resilience and preparedness
- Bringing a values-based approach to leadership and innovation, underpinned by the inclusive, empathic and creative stance of design
- Through the intersection of design and neuroscience, developing new methods and materials ‘to educate and train individuals and groups in being change-ready, intelligently adaptable, responsive and leading change and innovation’ (Flory in Gheerawo, Flory & Ivanova, 2020).

Based on the arguments presented thus far, Figure 4 outlines thirteen opportunity areas for inclusive design approaches in business continuity. The list is not exhaustive but rather presents a starting point for practitioners from across disciplines, and between academia and industry, to come together, build on subject-specific knowledge and lessons learned during the pandemic, and co-create the next chapter of inclusive design thinking, tools, processes and applications.



Figure 4. Inclusive design applications in business continuity

Conclusion

In 1994, in his seminal paper on the case for inclusive design, Roger Coleman wrote:

The concept of Inclusive Design coupled with story-telling and scenario-building techniques can turn what is often considered as a branch of design for disability into an exciting gateway to product innovation and a more user-friendly future for all. (Coleman, 1994)

Nearly three decades on, in today's global context of pandemic, war, climate and environmental emergency, and collective action towards equality, diversity and inclusion, the need for inclusive design, or inclusion by design, could not be more evident and clearer. The call for stakeholder-inclusive approaches to economic and societal recovery from government, policy, business and management organisations, has created scope to employ inclusivity thinking and design-led approaches as a mechanism for stakeholder engagement and inclusion in the creative solutions-finding for business continuity and recreation. This aligns well with the latest business continuity thinking and practice, which places people at the heart of business recovery strategies and approaches, particularly in areas of building preparedness, real-time assessment, and new futures creation in response to changing stakeholder behaviours and market dynamics and needs. In that, the value of inclusive and people-centred design thinking and practice is in enabling an equitable platform for visioning, planning and co-creating contextually relevant, multi-perspective, inclusive and innovative solutions, applications and pathways. The next stage for inclusive design in business, sees us working with companies of all scales and across domains, from the sole entrepreneur to global corporations, to co-create and deploy design thinking and inclusive innovation processes towards a robust, yet malleable rebuilding of a prosperous, equitable and sustainable economy.

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