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# Digital Futures of Small Businesses and Entrepreneurial Opportunity

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**Abstract.** This introduction to the Special Issue discusses the status quo of the literature on digital entrepreneurship and digital economy highlighting the neglect of a significant and growing segment of the small business sector whose futures have remained under-researched: self-employed workers and freelancers who run one-person or micro-businesses and home-based businesses that operate largely or exclusively online. Their digital futures and opportunities cannot be understood in simple dichotomies such as ‘necessity’ versus ‘opportunity’ or ‘use’ versus ‘non-use’ of digital technologies. Instead, it is suggested to consider the spatial and social contexts of these more ‘ordinary’ or ‘unexceptional’ businesses. Attention is drawn to networks and social capital and their spatial embeddedness in complementing human capital. Concepts of the second digital divide, digital generations, entrepreneurial bricolage and spatial proximity and entrepreneurial ecosystems are discussed to make suggestions about the possible digital futures of small businesses and entrepreneurial opportunity.

## Highlights

- Digital futures of small business and entrepreneurship are not bipolar.
- Spatial and social contexts matter for digital entrepreneurial opportunities.
- City ecosystems may be weakened but could also be strengthened.
- Young bricolage entrepreneurship may rise as a response to crisis.

## *The multiple and ambiguous implications of digital technologies*

Digital technologies and digital platforms are transforming existing industries and blurring their distinction. The implications of digital technologies for businesses and entrepreneurship include new business models, new products, new forms of innovation and the transformation of established businesses to adopt their business operation and strategy to the digital economy (Nambisan et al., 2019). Digital

transformations are also changing the spatial and social boundaries of entrepreneurial activities and entrepreneurial agency (Nambisan, 2017). One implication is that the rise of digital business has challenged the resource-based view of the firm and the demarcating and defining of firms' resources themselves (Kraaijenbrink et al., 2010) and instead highlights the role of social, cultural, and spatial aspects of entrepreneurial processes and outcomes.

Information and communication technologies (ICTs) have provided some small businesses with the opportunity to combine the independence and flexibility of being small with the scope and access of large companies, and thereby overcoming some of the liabilities of smallness.<sup>1</sup> Specifically, new technology and mobile technology have enabled small businesses and one-person businesses to cooperate, collaborate, and coordinate with independent workers and companies separated by geography (Warren and Fuller, 2010; Matlay and Westhead, 2005). The development of new local-global connections of firms with other firms or customers is a key dimension in the digital transformation of business and entrepreneurship (Galloway et al., 2011)

There are a number of ambiguities associated with the digital transformations of business and entrepreneurship. The digital age is often claimed to be an enabler of more entrepreneurial and inclusive societies as fast ICTs have become widely available, more and more tasks are outsourced by large firms and in many industry sectors start-up capital has fallen with the emergence of open source software, digital platforms and cloud computing (OECD and European Commission, 2019; Evangelista et al., 2014). The overwhelming majority of new business start-ups, however, is still in non-ICT industries. Start-ups in the ICT sector including ICT-dominated segments in manufacturing, wholesale and retail, still only accounted for ca. 8% of all new firm start-ups in the EU in 2016/2017 (European Commission, 2017).

Moreover, there is increasing recognition of the 'dark-sides' of the 'platform-centric economy' and crowdsourcing that has been created by digitisation. One dimension is the power of incumbent digital platforms to dislodge incumbent companies and

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<sup>1</sup> As illustrated by the famous New Yorker cartoon "On the Internet, nobody knows you're a dog". [https://en.wikipedia.org/wiki/On\\_the\\_Internet,\\_nobody\\_knows\\_you%27re\\_a\\_dog](https://en.wikipedia.org/wiki/On_the_Internet,_nobody_knows_you%27re_a_dog)

triumph over new entrants or absorb them into their ecosystems either through acquisition or dependence (Kenney et al., 2019). Another is the exploitation of labour (Bergvall-Kåreborn and Howcroft, 2013; Tremblay and Genin, 2010) and reflected in current debates on the growth of the 'gig economy'.

One of the key themes in the digital transformation narrative is that digital technologies improve productivity at firm-level and contribute to economic performance and competitiveness of firms, regions and nations (Tranos et al., 2020; Martinez-Caro et al., 2020; Norris 2020; Bertschek et al., 2013). Digitisation has often been regarded as a means to decrease regional and national disparities in economic growth and wealth. For example, many countries and supranational organisations have supported digital strategies to empower people and firms (e.g. the Digital Strategy of the European Commissions). However, there are firm size effects with larger firms benefitting more from ICT adoption (Destefano et al., 2018), while small businesses often lack the capacity or human capital to exploit the opportunities of the digital economy (Bouwman et al., 2019; Grimes, 2003). At regional level, digital technologies and infrastructure would seem to complement agglomeration benefits rather than compensate for their absence (Craig et al., 2017), and therefore they have the tendency to exacerbate spatial inequalities rather than closing the gap between economically leading and lagging regions (Jones and Henderson, 2019; Camagni and Capello, 2005).

### *Digital inequalities*

Different literatures have identified inequalities in the access and use of digital technologies and infrastructures (e.g. the Internet and fast broadband) and the opportunities provided through these to workers, firms and the wider population. Geographically, the greatest digital division has been associated with the urban-rural divide (Townsend et al., 2013). This refers to what has been termed the 'first-level digital divide' – the unequal physical access to ICTs.

However, a growing number of studies have found that it is a 'second level divide' which is even more relevant for contemporary understanding of the social aspects of digital inequalities of ICT use (Park, 2017; Evangelista et al., 2014; Malecki, 2003) and

the differentiated effectiveness of its usage including digital skills (Blank et al., 2018). In other words, even if digital technology is available its use may remain low (Townsend et al., 2013). For example, Blank et al. (2018) show that in the UK the spatially unequal Internet use can be fully explained by the geographically unequal distribution of socio-demographic and socio-economic characteristics of residents, in particular age, employment rate and education. Similarly, Kolko (2012) found that improvement in the provision of broadband access has little connection with the geography of homeworking, both telecommuting of employees and home-based business, and that the improvement of Internet access is not attracting more people who work from home.

It is also estimated that digital start-ups made up around 15% of all start-ups among women in 2018 with no increase on 2016 (OECD and European Commission, 2019) highlighting that the inclusionary power of digital technologies for business start-ups and entrepreneurship clearly has limits. The emancipatory narrative of digitalisation is also challenged by Martinez Dy et al. (2018) who suggest that digital outcomes on enterprise are facilitated or hindered by wider structural and cultural influences.

Together these findings underline that the social and spatial dimensions of digital inequalities cannot be considered in isolation from each other. Despite the ever-increasing importance of digitisation and automation – the Fourth Industrial Revolution – the implications of digital technologies are complex and not always as predictable as suggested by technology-deterministic views of the impact of ICTs on business and entrepreneurship.

### *Researching and understanding digital futures*

Current debates in the literature about digital futures of small business and entrepreneurship are frequently portrayed in ‘bipolar’ terms along categories of ‘necessity’ versus ‘opportunity’ and ‘good’ versus ‘bad’ work. However, as studies on the second-level digital divide make clear, the understanding of the digital futures of small businesses and of entrepreneurial opportunity need to be based on conceptualisations that “go beyond the binary distinction between use and non-use” (Büchi et al., 2016, 2706). This implies, as Slaughter (2018) argues, the need to understand technology not merely as “stuff” or a container but to consider the social

reality “beneath the surface” (p. 116). Specifically, for small business and entrepreneurship this means not only considering the measurable economic resources of businesses but also what is often discussed as ‘context’ in the entrepreneurship literature (Welter, 2011), which includes environmental/locational aspects and the social/household dimensions of business start-up and operation.

Increasingly, entrepreneurial opportunities have been studied spatially as entrepreneurial ecosystems that have emerged as a new type of spatial cluster through the exploitation of digital affordances (Autio et al., 2018). This emerging literature has highlighted the interconnection between digital affordances and spatial affordances. The focus in this literature, however, has been on high-growth entrepreneurship (Spigel and Harrison, 2018) which has led to an empirical focus on ‘successful’ cases of high-tech entrepreneurship, Silicon Valley in particular – at the expense of ‘ordinary’ or ‘unexceptional’ cases.

Micro-businesses (with zero to up to nine employees) and the sole trading self-employed are the ordinary businesses that comprise the base of the enterprise population. However, these types of business have often been neglected in studies of digital businesses and entrepreneurship that have tended to focus on innovative start-up firms, larger SMEs and knowledge-intensive firms. Over recent years, the increased contribution of the SME sector to the value-added of all enterprises is almost entirely due to micro-businesses (European Commission, 2019). Within the SME sector, micro-businesses have outperformed small and medium-sized businesses with 10-249 employees in terms of employment and value-added over recent years in the European Union (ibid.). Digital technologies have been related to the growth of self-employed individuals in many countries who run small/micro businesses as sole traders or are active in incorporated businesses or partnerships (European Commission, 2017). This requires research to consider the individual-level in conjunction with the business-level as the sole trader business cannot be disconnected from the individuals who run such business.

#### *Objective of the Special Issue and contributions*

The objective of this Special Issue is to consider alternative future possibilities beyond simple dichotomies and explore emerging forms of the digital economy. While

previous studies and conceptualisations of digital entrepreneurship have tended to focus on high-growth entrepreneurship or knowledge-intensive firms, this Special Issue instead has the objective to provide new conceptual and empirical insights into a significant and growing segment of the small business sector whose futures have remained under-researched: self-employed workers and freelancers who run one-person or micro-businesses and home-based businesses that operate largely or exclusively online.

Within this overall objective, the first aim is to address relevant current debates on social and spatial digital inequalities and inclusivity of digital entrepreneurship. The second aim is to integrate business, entrepreneur and contexts through exploration of the motivations and experiences of one-person and home-based businesses in the digital economy and how digital and spatial affordances play out for these under-researched entrepreneurs and small business types.

The risks of social exclusion associated with new digital technologies have been discussed in previous critical accounts of the digital economy and society (Slaughter, 2018). *Martinez Dy's* (2019) conceptual paper adds to this literature through scrutinising the inequalities of digital entrepreneurship, and in particular the case of marginalised and/or underrepresented people in entrepreneurship including women. She criticises the predominant techno-centric perspective (digital applications, platforms and infrastructure) on digital entrepreneurship in the existing literature and argues that social and economic contexts need to be considered alongside technological aspects for understanding who is exercising agency in digital entrepreneurial environments. She identifies technological knowledge and skills (human capital), access to resources and investment (financial and social capital) and social structures (e.g. occupational gender segregation) as important dimensions of digital entrepreneurship that need to be considered together rather than in isolation from one another. This framework facilitates study of various types of entrepreneurial activities enabled by the digital environment including those of the self-employed and individuals running businesses from home.

Home-based businesses and the extent to which they are more likely to trade online than 'mainstream' small businesses that are based in commercial premises is the

focus of the empirical analysis of *Reuschke and Mason (2020)*. Their findings for Scotland (United Kingdom) confirm the greater engagement in the digital economy of home-based businesses and hence the enabling role of digital technologies for running such businesses. However, their finding that only a small proportion of businesses use online business models challenges the transformative nature of digital technologies and online marketplaces for small businesses and entrepreneurial opportunities including in rural and remote locations.

The empirical study by *Zenkteler, Darchen, Mateo-Babiano and Baffour (2019)* investigates home-based businesses and remote working in Australia in the context of residential neighbourhoods. With the focus on the residential preferences of homeworkers, they highlight the importance of a designated workspace in houses and of residential amenities for homeworking and home-based businesses. The homeworkers in their study support local coworking facilities and flexible house designs to enable the growth and value creation of home-based work. The need for local coworking spaces is due to the lack of both social/meeting spaces in residential neighbourhoods and access to certain technological facilities (e.g. printing).

Collaborative workspaces are the focus of the empirical study by *Clifton, Fúzi and Loudon (2020)*. They focus on self-employed individuals, freelancers, and remote workers whose workplace is 'place-independent' on account of digital technologies and the benefits they can derive from coworking spaces. Analysing data for Wales (United Kingdom), they show that social factors are as important as environmental ones (i.e. those based on hard/technological infrastructure) for the motivation of entrepreneurs and remote workers to work in coworking spaces and for their working experiences in these spaces. They conclude that in the digital economy coworking spaces may become more important in the future as a capacity-builder for informal networks and social capital.

*Afutu-Kotey and Gough (2019)* show how important existing skills and networks are for accessing and mobilising resources in the mobile telephony sector. Their empirical study contrasts with the other empirical contributions in this Special Issue and with previous studies on digital entrepreneurship in that they do not focus on how the Internet or digital platforms are used by entrepreneurs, but how young entrepreneurs



in Ghana are creatively using the sales of mobile phones and the provision of related services to build and sustain a business. They employ the concept of bricolage to conceptualise the informality of the business, the constraints faced by the individual entrepreneurs in terms of local economic/environmental conditions and the limited resources for value creation, to highlight the different solutions and precarity involved in overcoming these various constraints.

### *Conclusion*

The collection of papers in this Special Issue provides a critical and nuanced discussion of entrepreneurial opportunities, alongside the risks and potentially inaccurate or incomplete visions of digital futures for small business. The papers contribute to literatures in multiple disciplines that have highlighted the importance of the second-level digital divide in the digital economy and society. While previous studies have drawn attention to the role of human capital for the use of digital appliances, platforms and infrastructures, conceptual frameworks and empirical findings provided in this Special Issue draw attention to networks and social capital and their spatial embeddedness in complementing human capital. Rather than being considered in isolation, social structures and national, regional and local economic/environmental contexts need to be considered in conjunction with human capital and the access to and use of digital technologies.

What has emerged across the papers with their focus on under-researched entrepreneurs and small businesses is that for one-person businesses, home-based businesses and remote workers, location and local/regional context afford networks and social capital, alongside opportunities for trade and value creation. Relevant preconditions for inclusive entrepreneurship at the scale of localities and neighbourhoods are the availability of digital technologies and the facilitation of micro-enterprise relationships through the integration of both economic development and urban/residential planning.

The empirical contributions have highlighted the young demographic profile of entrepreneurs and one-person businesses employing digital technologies (Clifton, Füzi & Loudon, 2019; Afutu-Kotey & Gough, 2019). The low incidence of online small businesses (Reuschke & Mason, 2020) may therefore relate to a demographic digital

divide. With the aging of the 'digital generation' – children and young people who grew up with the Internet and digital/mobile technologies – it appears likely that the future will see far-reaching digital transformations in how entrepreneurs and small businesses use digital technologies and online marketplaces for value creation and growth. This said, who will benefit from these digital entrepreneurial opportunities and environments is much less clear. Research has shown that gender inequalities in Internet use (extent and types of use) are almost negligible amongst young people, whereas among middle-aged and older generations women use the Internet significantly less often than men (Helsper, 2010). This generational change may signal the future growth of female digital entrepreneurship.

The futures of digital entrepreneurship and small business are changing amidst the global Coronavirus pandemic and its aftermath. The Coronavirus pandemic has dramatically disrupted existing supply chains and challenged some traditional business models during national and regional lockdowns (stay-at-home-orders) in many parts of the world. With people being encouraged or required to stay at home, online transactions for retail shopping and various types of personal services have soared, prompting existing off-line businesses to pivot their business models.

Online technologies have been central in the COVID-19 crisis in how businesses have quickly adapted their business models when faced with external discontinuities and disruptions. Across all sectors, COVID-19 disruptions intensified existing trends, leading to technological development in ICTs which some global high-tech companies and online retailers quickly capitalised on. These disruptions have also created opportunities for some small businesses through the discovery of new products, new supply sources and new combinations of resources that have been highlighted by anecdotal evidence (Rose, 2020). However, in the short term, much of the self-employed workforce has experienced great disruption, resulting in a dramatic reductions in the aggregate hours worked and income (Reuschke et al., 2020). During the pandemic, with regional or local lockdowns and hence restrictions for some sectors, the ongoing economic difficulties of the self-employed became a major challenge. If this was to result in a sustained reduction in the level of self-employment, this risks leading to a loss in entrepreneurial capacity in national and regional economies.

With respect to adaption processes and strategies, commentators refer to the concept of bricolage to capture the need of entrepreneurs and businesses to deal with new constraints and to change existing resources (Shepherd, 2020; Ketchen and Craighead, 2020). But whether, for example, the new 'supply chain bricolage' (Ketchen and Craighead, 2020) and other changes that business have undergone will bring about enduring changes, is still unknown. The International Labour Organisation (ILO) has warned about the emergence of a 'lockdown generation' of young people who have been disproportionately affected by the crisis in multiple ways. Young people were more likely to work in hospitality and retail when the pandemic spread, sectors that have experienced significant job loss and business closures. They have also been affected by the disruption in vocational education and on-the-job-training (ILO, 2020). This prompts the suggestion, following Afutu-Kotey and Gough (2020) in this Special Issue, that this might lead to an increase in young bricolage entrepreneurs in rich economies such as the UK and USA that have been particularly hard hit by the economic recession resulting from COVID-19.

This collection of papers also tells us that the alternative and possible digital futures of small business and entrepreneurial opportunity in the light of the COVID-19 pandemic may be 'ordinary' in multiple ways. Online trading is becoming more commonplace – not only as exclusive online business model but for previously customer-oriented and face-to-face businesses complementary to their traditional ways of doing business. Rather than being primarily about enabling the creation of new global connections, online trading is likely to become more embedded in local and regional trading. Digital technologies are also likely to foster local connections among small businesses, as we have seen in the COVID-19 pandemic as a strategy of local businesses to provide an alternative to global trading businesses such as Amazon.

The COVID-19 pandemic has threatened traditional face-to-face businesses and reshaped the role of digital technologies for the future resilience of business, entrepreneurship and local economies. This, in turn, raises fundamental questions about the possible futures of cities and the importance of spatial proximity. Will big cities continue to dominate entrepreneurship and innovation, as was before COVID-

19, or will the power of spatial proximity lose its strength? Remote working enables companies to more easily hire workers from around the world and individuals are no longer restricted to working for companies that are physically located in the same region. Moreover, it gives start-up entrepreneurs the possibility of moving from established high cost ecosystems to smaller hubs with a high quality of life without losing access to talented staff (Mason and Hruskova, 2021). These developments could lead to the weakening of large city ecosystems and stimulate the growth of entrepreneurial activity in smaller cities and rural areas by enabling businesses in such locations to overcome resource constraints by accessing resources from distant locations. But the outcome could equally be to strengthen the position of large cities at the expense of smaller cities and towns by enabling them to access their resources – especially talent – at the expense of local businesses.

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