



Emancipation through Digital Entrepreneurship? A Critical Realist Analysis

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Abstract:	Digital entrepreneurship is presented in popular discourse as a means to empowerment and greater economic participation for under-resourced and socially marginalised people. However, this emancipatory rhetoric relies on a flat ontology that does not sufficiently consider the enabling conditions needed for successful digital enterprise activity. To empirically illustrate this argument, we examine three paired cases of UK women digital entrepreneurs, operating in similar sectors but occupying contrasting social positionalities. The cases are comparatively analysed through an intersectional feminist lens using a critical realist methodological framework. By examining the relationships between digital entrepreneurship, social positionality, and structural and agential enabling conditions, we interrogate the notion of digital entrepreneurship as an emancipatory phenomenon producing liberated workers.



Introduction

Entrepreneurial activity is often portrayed as a universal solution to contemporary global socio-economic challenges such as poverty and inequality (Bruton et al. 2013; Tedmanson et al. 2012) and a pathway to personal emancipation (Rindova et al. 2009). In recent years, the widespread adoption of information and computing technologies (ICTs) and mobile Internet has popularised a notion of increased entrepreneurial possibility through online means, as it is argued digital ventures require minimal resources to create and operate (Mason et al. 2011). By facilitating enterprise, digital technology access is expected to reduce under- and unemployment, enabling greater economic participation for socially marginalised people and thus, wider economic benefits (Government Equalities Office 2014; Schmidt 2011; Thompson Jackson 2009). Simultaneously, coverage of successful digital entrepreneurs permeates UK online, news and print media (Bravo 2016; Bownass 2016; Urwin 2017; Walker 2016) while leading digital platforms encourage such activity. Despite this, relatively sparse evidence exists regarding the effects of participating in digital entrepreneurship, particularly for marginalised and disadvantaged people (Sussan & Acs 2017; Martinez Dy et al. 2017) who are more likely to experience structural challenges to employment (Berry & Bell 2012; Healy et al. 2011). The rapid growth of online trading, a key aspect of digital entrepreneurship, is as yet underexplored within the business and management literature (Chandra & Coviello 2010; Nambisan 2016; Williams 2011). Moreover, limited popular or academic attention is afforded to marginalised people acting entrepreneurially online (Giones & Brem 2017; Noble & Tynes 2016). Consequently, there is a lack of empirical support for, or theoretical critique of, the popular claim that digital entrepreneurial activity is a viable solution to socio-economic marginality, and as such, a pathway to emancipation.

This article contributes to this debate by using critical realist (CR) philosophical tools to provide an empirical analysis of digital entrepreneurship in light of social positionality. Our research objectives are to ascertain how social structures can enable or constrain digital entrepreneurship, and to what extent the agentic use of technology enables structural barriers to success to be overcome. Contrary to assumptions that the Internet is a neutral space open to all, it is diverse and unequal (Terranova 2004). Simple access is not enough – successful use is subject to varying conditions (Ignatow & Robinson 2017); this has implications for those who seek to create digital ventures. Whereas the trend within entrepreneurship studies is to neglect structure in favour of agency (Blundel 2007), a CR approach considers both in depth. We also adopt an intersectional feminist stance that attends to the simultaneous and sometimes contradictory effects of multiple social structures, such as gender, race, and socio-economic class (Anthias 2001; Cho et al. 2013), linking this with our CR ontology (Martinez Dy et al. 2014). By juxtaposing the ideological message of digital entrepreneurship with an intersectional CR ontology and our empirical investigation, we demonstrate that expectations of digital entrepreneurial emancipation fail to account for structural conditions and the manner in which they can enable or constrain entrepreneurial action.

To address these issues, the paper is organised as follows: first, we introduce digital entrepreneurship discourse and problematise its ideological message. We then ontologise the phenomenon, critiquing sociomaterialist approaches within extant literature and developing a CR perspective. Next, we present an empirical study of UK women digital entrepreneurs, in which three paired cases from a larger sample are comparatively analysed through an intersectional lens and a CR framework of structure, culture and agency. Through contrastive explanation techniques, we retroduce and discuss the underlying causes of these divergent digital enterprise outcomes. Finally, we present implications and draw conclusions.

Critiquing digital entrepreneurship as emancipatory pathway

Contemporary academic and popular discourse on digital entrepreneurship is grounded in the twentieth-century emergence of the neoliberal state and attendant enterprise ideology. The macroeconomic paradigm shift from Keynesianism towards neoliberalism, and concurrent move from full employment to Natural Rate of Unemployment (NRU) thinking, tied employment rates to the free market (Cook et al. 2003). Central to this shift was the valorisation of entrepreneurial activity, enacted by the heroic individual who, freed from State constraints, could maximise their potential for innovation and wealth creation (da Costa & Silva Saraiva 2012; Mole & Ram 2012). In the twenty-first century, entrepreneurship remains central to global discourses concerning wealth creation, echoed by populist rhetoric (Swail et al. 2014). Consequently, organisations, employees, students, stay-at-home mothers, retirees, the unemployed, et cetera, are encouraged to embrace entrepreneurship, innovation, creativity, and risk: such constructs form the basis of contemporary enterprise culture discourse and ideology (Jones & Spicer 2009; Ogbor 2000; Mallett & Wapshott 2015).

However, the dominant positive discourse surrounding entrepreneurship obscures a number of detrimental effects (Acs et al. 2016; Parkkari & Verduijn 2017; Wright & Zahra 2011). For example, evidence suggests that encouraging entrepreneurial attitudes towards employment fuels widespread under- and unemployment in the form of the 'gig' or 'post-employment' economy (Graham & Shaw 2017). Outsourcing, sub-contracting and privatisation of public sector services has meant low-paying, insecure temporary work for many – a phenomenon cutting across social class, from taxi services to academia (Kendzior 2015). This coincides with contemporary transformations in work, as labouring processes in general have become more individualised and immaterial (Jones & Murtola 2012), while precarious self-employment has replaced many secure permanent jobs (Harvey et al. 2016) but is portrayed as preferable to dependence upon an increasingly punitive benefit system (Dvoulety & Lukes 2016; Marlow 2006). Furthermore, entrepreneurial earnings are highly skewed: the self-employed are overrepresented at both the highest and lowest ends of overall income distribution often falling into the lowest income groups, earning less than equivalent waged work (Carter 2011; Lambrecht & Beens 2005). While entrepreneurship and self-employment do not refer to precisely the same phenomena, it is both expedient and common to conflate the two, though care must be taken in interpreting statistics (Carter 2011); however, illustrative of our argument,

1 self-employment is uncritically presented as entrepreneurial activity within contemporary enterprise culture
2 ideology. This activity is then portrayed as the means by which to achieve personal and professional
3 liberation, while contributing to national well-being.
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6 The assumed emancipatory potential of entrepreneurship arises from an analytical association between
7 individualism, autonomy and attainment (Dannreuther & Perren 2013) in the context of a de-regulated
8 neoliberal economic system (Marttila 2013). Fundamental to this are notions of voluntary entrepreneurial
9 intention and orientation (Mousa & Wales 2012), or the individual propensity to recognise and pursue
10 opportunities through new venture creation. Indeed, a persistent focus of the entrepreneurship literature is
11 the conundrum of varying levels of entrepreneurial orientation and intention, or why some people act
12 entrepreneurially while others do not (Greene et al. 2013; Parkkari & Verduijn 2017; Wales et al. 2013).
13 Implicit within this enquiry is the notion that entrepreneurship is essentially liberating and meritocratic, and
14 as such, should be desirable and accessible to all. With low entry barriers, no required qualifications and no
15 application process, attainment is assumed to pivot upon the energy, determination and innovation of the
16 individual to identify and enact opportunities; success is, therefore, seen as an indicator of individual effort
17 made manifest through the auspices of neoliberalism.
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26 Critics, however, dispute the notion of entrepreneurship as a meritocracy, arguing that the realisation
27 of entrepreneurial potential through successful new ventures is dependent upon the resource base of the firm
28 (Terziovski 2010; Jones et al. 2013). Attainment is fuelled not by ingenuity nor agency alone, but by
29 resource accrual: entrepreneurs with access to finance, appropriate networks, family support, accessible
30 markets and high rates of human capital are most likely to create successful ventures (Åstebro & Chen
31 2014). Consequently, structural impediments to resource accrual, such as disadvantageous social ascriptions
32 and positioning, can be expected to constrain performance, illustrated by critical analyses of the impact of,
33 for example, class, race, age and gender upon entrepreneurial propensity and achievements (Ahl & Marlow
34 2012; Anderson & Miller 2003; Carter et al. 2015; Jones et al. 2013). As such, there is a stream of
35 contemporary literature that recognises a diverse range of structural influences facilitating or constraining
36 entrepreneurship, countering the evangelical discourse that it is a predominantly agential phenomenon
37 holding emancipatory potential for all (Jones & Murtola 2012; Tedmanson et al. 2012).
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46 Notably, these debates have centred primarily upon entrepreneurs operating in physically rooted firms
47 with a substantive market presence. Digital entrepreneurship, in contrast, is an emergent phenomenon in
48 which new digital artefacts, platforms and infrastructure are being used to pursue innovative and
49 entrepreneurial opportunities, to the extent that the relevance and applicability of traditional understandings
50 of entrepreneurship are called into question (Davidson & Vaast 2010; Nambisan 2016). Its emergence has
51 reignited arguments regarding meritocratic and unbounded opportunities (Martinez Dy et al. 2017), given
52 historic assumptions that virtual exchanges facilitate access by reducing both entry costs and stereotypical
53 discrimination (Daniels 2009; Martin & Wright 2005). This constructs the ideological foundation for a
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‘digital enterprise discourse’ whereby access to digital platforms and encouragement of entrepreneurial behaviour is assumed to empower people to embrace the entrepreneurial promises of freedom and flexibility (Jones 2017), enhance their personal socio-economic circumstances (Thompson Jackson 2009) and contribute to the national economy (Schmidt 2011). Extant business and management literature on digital entrepreneurship implicitly reflects these positive assumptions (Table 1) regarding expected entrepreneurial benefits (Giones & Brem 2017; Sussan & Acs 2017). However, despite the rise of digital entrepreneurship discourse and its obvious relevance to the contemporary economy, the phenomenon itself is still significantly underexplored, with a lack of consensus regarding measurement scales (Bogdanowicz 2015) and a dearth of empirical analyses exploring viability and returns (Jarvis 2010; Nambisan 2016).

[TABLE 1 ABOUT HERE]

As technological advancements are generally understood to be socially beneficial and politically neutral (Wajcman 2010), this leads to assumptions that they can rectify or negate, instead of reproduce or compound, social inequality (Boyd 2009; Daniels 2012; Marwick 2014). If, as presumed, the accessibility and supposed neutrality of digital platforms generally facilitates and encourages entrepreneurship (Mason et al. 2011), such activity is deemed particularly apposite for the socially marginalised. This discourse specifically hails underrepresented, often marginalised and/or disadvantaged populations such as women, youth, and people of colour (Accenture 2014; Genachowski 2011; Government Equalities Office 2014), who are encouraged to use the Internet to overcome entrepreneurial resource and experience deficiencies (Fairlie 2005; Thompson Jackson 2009). Such activity would appear to offer an equalising, even emancipatory, pathway to socio-economic participation. To illustrate, at the 2011 Minority Media and Telecom Council Broadband and Social Justice Summit, US Federal Communications Commission Chair Julius Genachowski (2011) presented broadband Internet access as ‘the great equaliser’, calling it a platform for economic growth and job creation.

We argue that such assumptions arise from a flawed logic; shifting entrepreneurial activity into an online space is expected to ease the required resource burden to creating sustainable ventures while counteracting offline discrimination arising from negative social ascriptions. Yet entrepreneurial activity, regardless of where it is performed, is made possible through the structural distribution, material accrual and agentic mobilisation of resource pools. The rise of the digital space as a stage for entrepreneurial activity may have the scope to transform the manner in which materiality and agency are combined to inform innovative articulations of these constructs. It cannot, however, remove impediments to the accumulation of material resources, or fundamentally alter the social positions and ascriptions fuelling such impediments. While creating digital ventures may not require investment in premises, staff and other fixed costs, it is still a resource-based activity requiring access to, for example, technical knowledge, digital marketplaces, online services, software and hardware. Yet these aspects of the phenomena have not been adequately theorised. We therefore, suggest there is a need to develop an ontology of digital entrepreneurship that recognises

contemporary entrepreneurship theory regarding how agents use structurally distributed resources to enact opportunities (Anderson & Miller 2003; Jayawarna et al. 2014; Jones et al. 2013).

Ontologising digital entrepreneurship

As digital entrepreneurship as a field of study is still in its infancy, the ontologies underpinning extant literature are not yet clearly defined. We argue that current conceptualisations in emergent work are problematically informed by the tendency of most entrepreneurship literature to prioritise agency over structure (Blundel 2007) or to conflate the two (Mole & Mole 2010). Two foundational articles (Davidson & Vaast 2010; Nambisan 2016), based loosely on the Information Systems work of Orlikowski and Scott (2008), draw upon Latour's actor-network theory (Alcadipani & Hassard 2010; Latour 1987) to suggest a sociomaterial approach. In these articles, agency, materiality, and the social world are all explicitly identified as essential to the phenomenon: Davidson and Vaast argue that 'the digital entrepreneur exerts her agency...[and] becomes an element within a complex of sociomaterial practices, embedded in a network over which she may have limited influence' (2010: 4). Nambisan distinguishes between materiality (digital artefacts and their capabilities) and human actors, organizations and institutions (2016: 12), noting that porously bounded, collective agency is a new feature of digital entrepreneurial processes (2016:18). Attention to ontology for such a new field is necessary, and indeed, welcome. Yet, we find that these notions of agency are underdeveloped in that they suffer from methodological individualism, or what Archer (2007) calls 'upwards conflation', in which structure is collapsed into agency. Although Davidson and Vaast's (2010) analysis centres upon what kinds of opportunities individual entrepreneurs choose to pursue, there is no mention of structural or cultural factors that may be constraining (placing barriers to, or limitations upon) or enabling (presenting facilitators to, or simply not impeding) their choices and the actualisation of their agential powers. Similarly, Nambisan's attention to the shift precipitated by digital technologies from individual to networked entrepreneurial agency focuses primarily upon the involvement of additional entrepreneurial actors; his enquiries into how they shape agential beliefs, behaviours and actions omit discussion of wider structural or cultural forces (2016, p.7). Furthermore, the divergent agential powers of dissimilar entities are not distinguished from each other. While Davidson and Vaast, in the actor-network tradition, locate agency in the material as well as in the human actor (2010, p.4), they do not consider how human and technological agency might differ, nor how these differences mean that such agency may be constrained or enabled in completely different ways.

Critical realist theorists have problematised the 'constitutive entanglement' of the social and the material featured in sociomaterialist and similar approaches, and highlight their relative inattention to social structures and their effects (Elder-Vass 2017; Mutch 2013). In particular, they critique the flat ontologies that reduce social structures to individual level phenomena (Elder-Vass 2017: 92; Mutch 2013: 36) which we find are implicit in the conceptualisations offered by both Davidson and Vaast (2010) and Nambisan (2016). The dominant view of digital enterprise as an unbounded space in which to realise entrepreneurial

1 potential relies on precisely such a flat ontology (Mole & Mole 2010), consistent with the presentation of the
2 phenomenon in most extant literature (Table 1). In general, the expectations of what the digital can do for
3 entrepreneurial processes are overwhelmingly positive because they fail to account for the unequal structural
4 barriers that agents may encounter.
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7 To present a more nuanced picture, we offer an alternative ontology for digital entrepreneurship,
8 drawing on CR conceptual tools, including a depth ontology, a causal powers framework to which enabling
9 conditions are central, and a model of the social world that focuses on structure, culture and agency (Porpora
10 1998) as they apply to entrepreneurship (Vincent et al. 2014). Adopting a depth ontology (Bhaskar 2008)
11 means we suppose that what exists contains more than simply that which we can observe, such as potentials
12 and absences, and that reality can be analytically stratified into levels, such as the structural and the agential.
13 From a CR perspective, the world is made up of things, which have properties; these properties instantiate
14 causal powers (Fleetwood 2009, p.8). Causal powers and generative mechanisms are sometimes used
15 interchangeably; in this article, we refer to powers at the level of agents and mechanisms at the level of
16 structure, defining both as processes that can produce an outcome, resulting in contingent causality in open
17 systems (Bygstad & Munkvold 2011; Sayer 1992). Things may be sentient beings (such as a human),
18 material (such as a computer) or discursive (such as a belief), with attendant properties and limitations,
19 while powers/mechanisms have three states: in potential, exercised and unactualised, or exercised and
20 actualised (Fleetwood 2009; 2011; Martin 2014 - see Table 2). Specific unities of things, properties and
21 actualised powers (such as a system of computer-human interaction) are thus argued to have particular
22 causal efficacy.
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33 Yet, context is crucial: things must satisfy certain internal conditions and encounter particular external
34 conditions if their powers are to be exercised and actualised (Fleetwood 2009). As such, entrepreneurial
35 opportunities are seen as potentials, or propensities for turning market demand into profits, through the
36 presence of appropriate structural conditions and considerable agential effort (Ramoglou & Tsang 2016).
37 Depending upon properties such as prior experience, knowledge and ability, different agents may or may not
38 have the set of internal conditions needed to undertake digital entrepreneurial activities. If they do, the
39 external conditions needed to fulfil their aims may or may not exist. It is the presence and interaction of
40 appropriate conditions that lead to the development and actualisation of entrepreneurial powers (Leca &
41 Naccache 2006, p.631).
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48 [TABLE 2 ABOUT HERE]
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50 The linking of entrepreneurship and digital platforms, both of which ideologically signal notions of
51 unbounded agency, has led to a popular conception of digital enterprise free from social structures. But in a
52 realist conception of the social world, this is impossible, as structures exist prior to the development of
53 agency, constraining and/or enabling actors who then contribute to their reproduction or transformation
54 (Archer 2007; Porpora 1998). To expand our argument, we combine our CR definition of structures as
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1 systems of human relationships amongst social positions (Porpora 1998) with that of Bourdieusian
2 sociologists (Anthias 2001; 2013; Ignatow & Robinson 2017)¹ who attend to the effect of such dynamic, yet
3 durable, positionality on life chances, resource access and accrual. These are essential to both
4 entrepreneurial processes (Anderson & Miller 2003; Jayawarna et al. 2014) and digital skills development
5 (Ignatow & Robinson 2017). Actors have agency, or the ability to choose amongst various courses of action,
6 and do so while embedded in systems of thought, belief and ideology – cultures – that profoundly shape
7 their internal conversations and concerns (Archer 2007); entrepreneurial agency, then, is tied to the cultures
8 and structures of particular communities (Vincent et al. 2014). Furthermore, digital inequality mirrors
9 offline resource inequality (Ignatow & Robinson 2017), and social positionality affects the realm of digital
10 entrepreneurs: for example, high-tech digital entrepreneurs originate from the highest echelons of the paid
11 earnings distribution, offering numerous advantages, including greater access to financial resources and
12 powerful social networks (Braguinsky et al. 2012; Dashti 2010). Broadening our analysis to include
13 structure and culture thus illustrates that digital enterprise pursuits are not purely agential, and that their
14 outcomes and emancipatory potential will be subject to external constraint and enablement.

23 Finally, a realist ontology of digital enterprise must account for, and distinguish between, not only the
24 structural and the agential, but also the physical and the virtual. Digital enterprise activities are enacted by
25 embodied humans whose physical bodies are, again, subject to constraining and enabling social structures
26 and cultures. Despite assumptions about digital disembodiment making the online space more egalitarian
27 and democratic, race and gender are still salient online (Noble & Tynes 2016; Smith-Prei & Stehle 2016). In
28 addition, while some aspects of digital entrepreneurial activity are loosed by the online nature of the
29 transactions, other aspects remain tied to the physical world – so for instance, although an e-retailer may
30 wish to ship internationally, the physical distance between the source and the destination of the goods could
31 cause shipping prices to increase substantially. Furthermore, some activities, goods and services will be
32 hybridised; attention to both physical and virtual aspects is essential if we wish to accurately consider how
33 enterprise activity is shifting due to the digital context, as well as any associated implications for
34 emancipation. Therefore, despite the popularity of the notion that the Internet ‘levels the playing field’ and
35 widens the scope for entrepreneurial success, these assumptions cannot be taken for granted. In fact, the
36 heterogeneity of the means itself and resource differences across users mean that these benefits may not be
37 actualised. We now turn to an empirical investigation to illustrate our analytical critique.

48 **Methodology and method: CR intersectional feminist contrastive explanation**

50 Our CR perspective is complemented by an intersectional approach (Collins 2015; Martinez Dy et al.
51 2014) that attends to structural and cultural mechanisms emergent from the historical social meanings
52 attached to co-constituted categories of gender, race, and socio-economic class. Such categories are
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56 ¹ While there are some notable differences between Bourdieusian and Bhaskarian perspectives, a stream of sociological literature
57 has attempted to integrate aspects of these two approaches; it is this tradition which we draw upon here (Decoteau 2016; Elder-
58 Vass 2007; Vandenberghe 1999).

1 understood as social ascriptions, or abstractions (Gunnarsson 2011) corresponding to positions in established
2 social hierarchies and thus, structural relationships of power with material consequences (Anthias 2001).
3 These are understood to operate simultaneously and in concert in entrepreneurial (Essers et al. 2010) and
4 digital (Ignatow & Robinson 2017) processes. At the structural level, they shape life chances, social
5 conditions, and resource distribution (Anthias 2001), while at the agentic level, they shape constellations of
6 concerns, internal conversations, and courses of action (Archer 2007). Following Anthias (2013, p.129), we
7 assume first, that the effect of a position in a certain hierarchy may be stronger and more manifest than
8 another at a particular point in time, and second, that positions in different hierarchies may potentially be
9 mutually reinforcing, or dialogical and contradictory, resulting in nuanced complexes of privilege and
10 oppression. Finally, we combine intersectional and CR insights to assert that while the array of hierarchies
11 forming social reality are ontologically co-constituted, they are analytically separable (Gunnarsson 2011;
12 2015; Martinez Dy et al. 2014).

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14 We undertook a qualitative study consisting of semi-structured, in-depth interviews with twenty-six
15 women digital entrepreneurs based in England and Scotland. Capturing participant perceptions of digital
16 entrepreneurship, and whether discursive expectations and policy objectives are realistic, is possible through
17 interpretivist methods such as interviews (Ackroyd 2004; Sayer 2000), supplemented with demographic
18 questionnaires to capture data, such as age, racial ascription, start-up capital, annual income, generation to
19 attend university, and job title at last paid employment, to support a comparative analysis. Although the
20 sample was composed of women only, the intersectional perspective we adopt assumes heterogeneity within
21 groups of women; as such, the structural advantages and disadvantages arising from various dimensions of
22 social positionality were explored. The criteria for inclusion were that they identified as a woman, had a
23 digital business, and had begun trading. Initial contacts were obtained through a women's business incubator
24 in the northwest of England, and the sample was selected in a non-probabilistic, snowball and purposive
25 way focused upon adequacy, saturation and knowledge of the research topic (Bowen 2008; Guest et al.
26 2006). Participants were located across England and Scotland in rural, suburban and urban areas, and were
27 engaged in a range of digital entrepreneurial activities at various stages: start-ups, early-stage, and
28 established businesses. They had a diversity of financial resources, education and employment histories, as
29 well as varying knowledge of business processes, digital skills, and digital entrepreneurship in particular.
30 The amount of accessible start-up capital ranged from less than £500 to more than £50,000. In this paper, we
31 examine in depth six cases from the full sample: women digital entrepreneurs, from diverse demographic
32 backgrounds, occupying contrasting social positionalities, presented as a set of three paired comparative
33 case analyses.

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35 The outcome of CR research requires a causal explanation of the phenomena at hand, which involves
36 identifying powers/mechanisms that are operating as well as those that have the potential to operate, and
37 whether they are enabled or constrained. The DREI(C) method underpins this methodological approach, and
38 guides theoretical explanation (Bygstad & Munkvold 2011; Danermark et al. 2002). It requires describing

1 the object of enquiry (D), through, in this case, examination of extant literature and discourse on digital
2 enterprise discourse, considering theory-practice contradictions or anomalies. The next step is to retroduce
3 (R) the likely (active or passive) causal powers in operation, the potential causes influencing a context, and
4 how participant accounts offer insight into causal processes. We combined thematic (Braun & Clarke 2006),
5 intersectional (Byrne 2006; Healy et al. 2011) and contrastive (Lawson 2003; Mussell 2016) analytical
6 techniques to inform our comparative case method (Kaarbo & Beasley 1999) and assist in retroduction.
7 Using a thematic intersectional analysis, we sought to identify the most relevant structural and cultural
8 mechanisms in an iterative way, beginning with deduction. A start list of broad codes based on key concepts
9 from the literature included: gender, race, class, resources, and entrepreneurial benefits and challenges of the
10 digital environment. Data was coded in three rounds: during transcription, after importing into NVivo10,
11 and an additional round of line-by-line coding for more detailed themes. These focused upon the personal,
12 social, and technical experiences of digital entrepreneurship, business outcomes, and the constraining and/or
13 enabling effects of social position and resource access. The constant comparative method was used
14 throughout (Bowen 2008); newly gathered data was systematically and continually compared with
15 previously collected data and their coding.

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25 Next, paired cases were selected (Kaarbo & Beasley 1999) through identifying relevant variables
26 based on theory (aspects of social positionality) and comparable dimensions (digital entrepreneurial aims in
27 the same industry sector). Drawing upon Lawson's contrastive explanation technique (2003, p.231), first, we
28 identified differences between the outcomes of the paired participants and second, comparatively examined
29 the cases to identify the causes responsible for the difference. By iteratively using theory to explore cases,
30 and using cases to explore and refine theory (Kaarbo & Beasley 1999), we accounted for the presence or
31 absence of relevant core and countervailing agential powers and structural or cultural mechanisms,
32 considering their differently weighted interactions (Ackroyd & Karlsson 2014; Kessler & Bach 2014). Our
33 overall analytical aim was to ascertain the key structural and agential aspects of social positionality that
34 shaped experiences of digital entrepreneurship and achieve an explanatory critique of the interplay between
35 them. While no analysis can explain the complete causal conditions of any social phenomenon, we focused
36 upon key mechanisms by considering specific differences that explained why similar outcomes were not
37 achieved in each pair (Lawson 2003, p.231). Finally, a retroductive causal explanation must also include the
38 elimination of competing explanations (E) (in this case, the veracity of the claims within digital enterprise
39 discourse), followed by inference (I) and confirmation (C) of the causal powers at work. We offer further
40 detail in the discussion section regarding the manner in which this analysis was undertaken.

51 **Comparative Cases: Fashion Designers, Social Media Experts, and Vintage Wear Retailers**

52 *1. The Fashion Designers*

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55 Rebecca was a white British woman in her early twenties who graduated with an MA in pattern
56 cutting, part of fashion design, in a city in the English Midlands. She worked part time for minimum wage
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1 as a restaurant server, was single with no children, and belonged to the first generation in her family to
2 attend university. Encouraged by her tutor, she began designing clothing and set up a fashion label. Her
3 father, a web designer, built a transactional website through which she sold handmade clothing; she wrote a
4 business plan and conducted some competitor research, but had no previous business experience and
5 between £500-1000 start-up capital. Her limited financial resources led to a piece-work business model in
6 which she produced a sample, took photographs, uploaded them to the website and then produced to order.
7 She worked with local networks of photographers, models, and a seamstress whom she met through
8 university. The main traffic to her page came through Google AdWords; Facebook was ‘good for getting to
9 people to look’ at her site but did not result in many sales. Promotion and marketing were the most difficult
10 aspects of her business. In particular, she found it extremely challenging to work on the business in addition
11 to her job, through which the business was funded. If she worked more hours, she had more money for the
12 business, but less time; if she worked fewer hours, she had more time, but less money. Eventually, Rebecca
13 moved back to her northern hometown and lost the access to the creative sector network she had built
14 through university. Approximately eighteen months after inception she decided to close the business due to
15 a lack of sales and because, as she put it, her ‘heart was no longer in it’.

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25 Jasminder, a British Asian (Indian) woman in her mid-thirties, was a second-generation university
26 graduate and trained optician in a large city in the English Midlands. She was married with a young
27 daughter. Since childhood, she wanted to own a business, but her family strongly discouraged this, giving
28 her only four options: doctor, pharmacist, dentist, or optician; she became an optician ‘to keep them happy’.
29 In addition to her career, for eight years she and her husband ran two digital businesses, one in property and
30 the other matching UK investors with Indian entrepreneurs. This experience proved extremely useful when
31 she founded a solo digital venture designing and selling professional women’s clothing. She had an intern,
32 no employees, and more than £20,000 start-up capital. Her husband did the photography and graphic design
33 work, and she outsourced web development and maintenance for £1,500 per month, ensuring the site had a
34 professional appearance and consistent functionality. To produce her designs, she travelled to China to
35 identify a suitable factory. It took approximately six months to gain a critical mass of customers, during
36 which time she maintained her full-time work as an optician, gradually reducing her working hours as her
37 fashion business increased. Dedicated technology was employed to closely track customer behaviour on her
38 site, assessing it in terms of targets, real-time version testing, and overall strategy. While her husband was
39 supportive of her entrepreneurial activity, his family, which she described as ‘traditional’, were not. As they
40 disapproved of her desire to be an entrepreneur, she hid her business from them and so, was unable to take
41 advantage of the childcare they would have provided under different circumstances. Their opposition to her
42 entrepreneurial activity and lack of support for her business pursuits was an ongoing issue of great concern.
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2. *The Social Media Experts*

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2 Sebi was a Black British woman of Nigerian heritage living in south-east London; she was in her early
3 fifties, married, with teenage children. A third-generation university graduate, she was employed in the
4 public sector for twenty-five years, and during the UK austerity cuts of 2010-2011, took voluntary
5 redundancy with severance pay. She did not apply for another public sector job because of what she
6 perceived as the ultimate ineffectiveness of the numerous regeneration programmes of which she had been a
7 part. She described being a Black woman in employment as ‘soul destroying’ and ‘tiring’, with experiences
8 that ‘eat away at your confidence ‘cause you start to think well, something must be wrong with me.’ Sebi
9 knew many unemployed Black women of a similar age, and attributed their unemployment to the combined
10 racism and sexism experienced by Black women, which has been termed misogynoir (Durham et al., 2013),
11 as well as discrimination based on her age. She identified that older Black women face significant barriers
12 when they are ‘up against what is most desirable, which is white male, then white female, and young.’
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20 As such, she believed entrepreneurship was a pathway to economic security and autonomy. Her
21 experience was in the area of business coaching and mentoring, so she began a coaching business, then
22 joined a small social media business, and later began another social media business in partnership with her
23 sister. The first business was unsuccessful, while her partner in the second business recommended that she
24 ‘whitewash’ her online profile by adopting a typically white name and using pictures of white people on
25 their website, which she refused to do. Despite being skilled in the area of social media, and having £10-
26 20,000 to fund the business at start-up, she found it difficult to obtain clients, despite doing ‘all the things
27 they say you should do.’ Business networking meetings were ineffective because ‘everybody was there to
28 sell.’ To address these issues, she engaged in additional self-funded training, but to no avail; she perceived
29 that the stereotype of Nigerian people being linked to fraud was a likely reason for difficulty obtaining
30 clients, because despite being ‘very Anglicized,’ she says, ‘I’ve got a Nigerian name and a black
31 face...Forget it! Literally, people don’t give you a chance.’
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40 Louise, a white British woman in her forties, lived in an English seaside town; she was divorced with
41 adult children and grandchildren. She did not attend university, having built a career in sales and marketing
42 as a manager for a large property company based in Spain. After the 2008 recession, she moved back to the
43 UK and began working in sales for a company in the water treatment industry. Exploring social media, she
44 had a surprise success securing a large number of contracts via Twitter, and her company created a new
45 position for her as social media manager. When the company downsized, she volunteered for redundancy
46 and used her redundancy pay to start a social media management business. After researching training
47 options, she paid for a lifetime membership for online social media training with two mentors
48 (approximately £140 each). Within six months, she had ten clients, which she acquired primarily by
49 networking and word of mouth. As her client base grew, they asked her to undertake other public relations
50 and marketing work for them, so she took additional online courses and expanded her business to include
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1 these services. She specifically targeted clients whose businesses reflected her interests and in which she
2 could envision herself as a customer, and measured success by customer satisfaction. All clients were white
3 British except one, whose business is Indian cuisine. She found it challenging to market this business
4 because she does not 'like spicy food.'

7 3. *The Vintage Wear Retailers*

9 Melanie, a Black British woman of Afro-Caribbean heritage lived in a small English Midlands city;
10 she was in her fifties, single, with an adult daughter. She was a qualified hairdresser and previously owned a
11 hair and beauty salon that closed due to issues with the tenancy. At the time of the interview, Melanie was
12 on Jobseeker's Allowance and worked ad-hoc as a hairdresser. At the job centre, she was advised of a now-
13 defunct government scheme, Get British Businesses Online (GBBO). The scheme provided seed funding of
14 £200, and a domain name and web hosting for two years; however, she had to build the website herself. It
15 also provided a small amount of income support money for six months. Her limited experience using
16 Internet technology, unfamiliarity with selling online, and a lack of finance were significant barriers to
17 progression in her business. Before she built the website, she tried unsuccessfully selling a few pieces of
18 clothing on eBay; it was only after all the seed funding had been spent on stock that she realised funding
19 was required for advertising, without which the stock could not be sold. Not having sufficient stock to make
20 the website look full, and then learning she was not legally allowed to use copyrighted photographs of her
21 stock, was problematic, particularly as she could not afford professional photography. The basics of digital
22 entrepreneurship were overlooked: her domain name was complicated, the website was confusing to
23 navigate, and although she was aware of some principles of online marketing, she did not know how to
24 implement them, relying instead upon her daughter to assist with website-related issues. Despite this,
25 Melanie was averse to outsourcing and delegation. Even if she were to have sufficient funds to hire
26 assistance, she felt this might prevent her from knowing how to problem-solve. Consequently, the business
27 had reached a number of structural impasses. She was attempting to set up a business networking group to
28 try to overcome these challenges, but prospects were not promising.

30 Lucy, a white British woman in her thirties, was a third-generation university graduate in a large
31 English city. She had five years of management experience in large fashion retail chain stores and lived with
32 a domestic partner. While employed, she test traded vintage fashion items on eBay, and began selling at
33 local vintage fairs a year before she left her job. Financial support was available from her partner if required;
34 in addition, she had savings. Access to these resources positively influenced her decision to leave
35 employment and create her own venture. She also had experience in retailing, sewing, dressmaking, and
36 photography, skills regularly employed in her business activities. Unsure about setting up a new business,
37 she contacted a local women's business incubator, which provided significant support with the legal and
38 practical aspects of venture creation, such as developing a business plan and taking courses on marketing
39 and online presence. She spent around £1000 in start-up costs and described this as a 'low financial risk'.
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1 Along with selling at vintage fairs, she sold through eBay and in time developed a Facebook sales page. It
2 took two and half years to establish the business, described as ‘quite a slow process.’ Lucy did not use an
3 independent website as she deemed it ‘too costly’ but identified a number of advantages of selling primarily
4 through Facebook: frequency of customer use, legitimacy of platform and facilitation of a more ‘personal’
5 relationship with customers, which she felt were the key to her business growth. She described her typical
6 customer profile as very similar to her own: ‘professional woman between about 25-30, 25-35, white,
7 potentially...I don’t think a really high income, maybe £20-25,000-ish, quite confident in her own style.’
8 Seventy percent of her customer base is in the local area, and Lucy hoped one day to eventually expand
9 throughout the UK and possibly into Europe.
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15 **Discussion: Deepening Digital Enterprise Discourse through Intersectionality and Critical Realism**

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17 The challenges to entrepreneurial success detailed in these accounts of digital enterprise activity will
18 not be unfamiliar to scholars of entrepreneurship more generally, as the knowledge and resource constraints
19 participants describe are well rehearsed (Sarasvathy 2001; Shane 2008). Yet this resonates with the
20 argument that contrary to popular expectation, the digital context does not necessarily ameliorate or help to
21 overcome structural disadvantage (Ignatow & Robinson 2017). Digital tools offer the potential for
22 improvements in work efficiency and scalability, but crucially, do not fundamentally alter the basic resource
23 requirements demanded by new venture creation processes. Resource needs have instead shifted – while
24 rental costs for physical premises may be reduced, costs for developing and maintaining web presence,
25 shipping products, and digital advertising are taking their place. Furthermore, offline inequalities, resulting
26 in the absence of appropriate experience, networks, skill and information deficits, are quickly compounded,
27 as Internet use reproduces structural hierarchies and exacerbates differentials (Boyd 2009; Marwick 2014).
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35 We now discuss the findings. Through an intersectional feminist lens supported by a critical realist
36 framework of structure, culture and agency (Martinez Dy et al. 2014), what emerges is a complex array of
37 core and countervailing agential powers, and structural and cultural mechanisms, resulting in comparatively
38 weaker or stronger positions as digital entrepreneurs. The paired cases and contrastive analytical approach
39 (Kaarbo & Beasley 1999; Lawson 2003) showed that specific differences of socio-economic class and race
40 in particular, accompanied by corresponding resource access or lack thereof, precipitate the presence or
41 absence of powers and mechanisms that explained the divergent outcomes of each pair.
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47 *1. The Fashion Designers*

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49 The primary structural mechanism informing the divergent entrepreneurial outcomes of Rebecca and
50 Jasminder was the effect of socio-economic positionality on work experience and accumulated resources. As
51 a digitally savvy, highly educated creative person, Rebecca was an ideal subject of the digital enterprise
52 discourse, and would be expected to succeed. Yet, she was underemployed with few options for gaining
53 more financial or temporal resources. In comparison, Jasminder had a number of class-related socio-
54 economic advantages. With a professional career and experience of running three previous businesses, two
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online and one offline, Jasminder had much greater tacit business knowledge, such as in-depth awareness of how online tools offer insight into customer behaviour. She also had a much higher-paying job, commensurate to her skillset, where she could work flexibly, which allowed her both to outsource the production of her designs and to travel internationally to do so. Consistent with the argument outlined by Jayawarna et al. (2014) that those who face a higher opportunity cost for foregoing employment will start businesses with higher earnings prospects, Jasminder had high aims for her business, including intentions for international growth. Although caring responsibilities limited her availability, she was able to reduce her working hours when she chose without significantly constraining financial resources for her business. Rebecca, by contrast, had very little relevant work experience, and worked for low pay with little flexibility. In addition, her youth combined with her gender were arguably also a disadvantage; she mentioned that she had been treated like a 'little girl' in a number of business situations. Making clothes by hand was time and labour intensive, and her lack of experience and poor access to financial and temporal resources hindered her ability to outsource production and to better exploit the online space to market her business. This led to structural impasses she could not overcome and the business' eventual closure.

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However, attention to cultural mechanisms adds additional nuance. Although Jasminder was privileged in the area of social class and had access to more useful resources overall, she was somewhat disadvantaged by an intersection of gender and culture. While Rebecca had the agency and privilege to pursue her entrepreneurial endeavours with encouragement by her father and tutor, Jasminder, although supported by her husband, had to contend with the disapproval of his family. In response, she maintained an unwanted silence around her entrepreneurial activities in order to avoid attracting negative attention, and her agency to pursue entrepreneurial activities was somewhat constrained as a result. The family's stance, informed by conservative notions of femininity and traditional female ethnicity (Essers et al. 2010), meant their perception of Jasminder was contrary to her own: she considered herself a modern entrepreneurial woman rather than limiting herself to the role of mother and employee, as they wished. This supports Jayawarna et al.'s (2014) conclusion that gendered divisions of household labour affect capacity to apply class-structured privilege to entrepreneurship, and highlights how race and ethnicity complicate the notion of entrepreneurship for women of colour (Knight 2016). However, the countervailing cultural mechanism emerging from this intersection was evidently too weak to prevent her from pursuing her entrepreneurial venture, albeit within the outlined constraints.

48 2. *The Social Media Experts*

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In Sebi and Louise's divergent experiences, geographical location arguably plays an important role. Louise is based in a small city with less competition, evident in the number of people she described encountering with no social media components to their business, and therefore, room for her to enter as social media manager. In contrast, Sebi is based in London, where the competition is much higher and more intense. However, this competition is clearly compounded by the constraining effect of racial discrimination,

1 a generative structural and cultural mechanism negatively affecting people of colour and immigrants.
2 Racism was a key feature of Sebi's employment experiences, and influenced her decision to enter
3 entrepreneurship, reflecting the findings of Knight (2016) that entrepreneurship may hold for Black women
4 the promise of an escape from racist and sexist workplaces (Van Laer & Janssens 2011). For these reasons,
5 she viewed entrepreneurship as more secure than waged work (Hytti 2005). Although both elected to take
6 redundancy as a result of downsizing due to the economic recession, there was arguably more of a push
7 factor for Sebi, who was dissatisfied with her previous employment due to experiences of racial and sexist
8 discrimination as well as with the overall ineffectiveness of the programmes with which she had been
9 involved. Accordingly, she was looking for a means of economic security in which she would not be subject
10 to such discrimination. Yet, she perceived that everyday interpersonal and online racism, due to her name,
11 skin colour and country of birth, prevented her from obtaining clients. This is despite the fact that she has a
12 degree, extensive industry experience, and more training than Louise, which could normally be expected to
13 result in a better outcome.
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21 In comparison, Louise experiences white privilege (Acker 2000; Frankenberg 1993) which, due to the
22 normativity of whiteness in the UK context, serves as a vital entrepreneurial resource. Louise is unconcerned
23 with issues of race, except when confronted with clients who are culturally different to herself; she can
24 expect that her race will generally not be a hindrance to obtaining clients, and she can choose to work only
25 with clients that are 'like her' without narrowly restricting her potential client base. White privilege can also
26 stand in for qualifications: although she does not have a degree, she is still perceived as qualified. Since
27 whiteness is an invisible norm, as a white entrepreneur she will not be grouped with others, as Sebi is
28 grouped with other Nigerians; instead, she can expect to be judged as an individual on the basis of her
29 character, work and accomplishments. Thus, we identify that in this context, white privilege comprises part
30 of a generative mechanism through which entrepreneurial agency is arguably more recognised and enabled
31 by society (Ogbor 2000).
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40 White privilege also increases the likelihood of being able to link into influential social networks.
41 Although Louise was from a working-class background, a number of individuals within her predominantly
42 white social network were themselves entrepreneurs, which Anderson and Miller (2003) note is extremely
43 beneficial. Members of these networks, some of whom were positioned relatively high in the local
44 occupational strata, recommended her to potential clients with whom they came into contact. It is possible
45 that the impact of these recommendations would be amplified in a smaller city with less competition; this
46 was how she obtained the recommendation to the management of a large tourist attraction that became one
47 of her top clients. Sebi was middle class, but as a Black resident of a large UK metropolitan area, she did not
48 have the same level of network influence. Overall, Sebi was from a significantly higher socio-economic
49 position and possessed extensive human capital, but faced overt and subtle racial discrimination (Van Laer
50 & Janssens 2011) in a difficult geographical market that left her struggling to gain clients. In this case, her
51 agential powers were severely constrained by strong countervailing mechanisms emergent from both
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1 structure and culture. Further, the encouragement to whitewash her identity is reminiscent of a similar
2 phenomenon whereby women working in technology or as digital entrepreneurs are encouraged to adopt a
3 male persona or use only their initials on job applications to avoid discrimination (Greathouse 2016; Sample
4 2016). This is based on the problematic assumption that individual behavioural change is a viable solution to
5 structural inequality. While Louise had significantly less human capital and came from a lower socio-
6 economic position, a combination of higher social capital in an area with less competition alongside her
7 white privilege enabled her to gain clients successfully. In her case, structural and cultural mechanisms were
8 seen to enable the successful exercise of agency. The dialogical and contradictory effects of social
9 categories of difference (Anthias 2013) are thus evident in these complex experiences.

15 3. *The Vintage Wear Retailers*

17 When considering the differences between the cases of Melanie and Lucy, the foremost differentiating
18 structural mechanisms are the constraining or enabling effects of lower or higher socio-economic class
19 positionality, respectively, which accounts for their marked difference in access to financial, human and
20 social capital. Melanie was in a precarious economic position, working intermittently in a low-margin
21 service industry, her digital venture was prompted by access to a government scheme aimed at unemployed
22 people, and financial resources were limited to £200 seed funding. With no experience selling the product,
23 she was still encouraged to do so by the GBBO scheme representatives at the Job Centre. She therefore
24 exemplifies the marginalised and vulnerable individuals who are exhorted to be entrepreneurial and create a
25 digital business, even in an area where they have little or no experience. Engaging with the scheme does,
26 however, ensure they no longer claim welfare benefits and are repositioned as self-sufficient providers. As
27 she lacked the relevant digital skills, Melanie could not even begin test-trading in the GBBO programme's
28 allotted six month period.

36 In contrast, Lucy was from a higher socio-economic background with savings and her partner's back-
37 up income. With significantly more human and social capital in fashion retail management in a large
38 company, as well as experience selling vintage wear online via eBay, Lucy had essentially been test trading
39 for a few years. Only after this period, when she was confident in generating sufficient income through her
40 vintage retailing, did she leave employment. Unlike Lucy, Melanie did not have the support of an incubator,
41 nor did she have professional friends able to offer business advice. The GBBO scheme provided Melanie
42 with some information, but no specific training regarding sales and marketing unlike that which Lucy
43 accessed. It is evident that the effects of higher social positions and access to more effective social networks
44 were critical differences that benefited Lucy and disadvantaged Melanie. Although the effect of
45 disadvantaged racial positionality does not clearly emerge as a deciding structural mechanism in their
46 entrepreneurial experiences, past experiences of racism, in the case of Melanie, and white privilege, in the
47 case of Lucy, doubtlessly shaped the life chances of these women (Anthias 2001). In this case, Melanie
48 believed she was denied bank funding to support her hair salon business on account of her race, while Lucy,
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1 similar to Louise, did not have to even consider race as her stakeholders – whether advisors or customers –
2 were her social peers. This is illustrative of tacit privilege as the advantage of credibility and familiarity
3 enhances rather than constrains her potential client base. Thus, both structural and cultural mechanisms are
4 seen to enhance Lucy’s agency (Porpora 1998).
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7 These findings offer qualitative support to the conclusions of Jayawarna et al. (2014) that privileged
8 class backgrounds enable resource acquisition through mobilisation of labour market privilege. Although
9 Melanie’s previous business ownership may have been expected to benefit a digital venture, her experience
10 as a hair salon owner was not relevant to the new business, while her lack of financial resources combined
11 with fear of the online environment hindered access to advice and relevant training. Her participation in the
12 GBBO scheme arguably diverted time and energy from job-seeking to a digital venture with little potential
13 for success, in which her entrepreneurial agency was heavily constrained by low positionality and the related
14 absence of appropriate human and social capital.
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20 *The value of a CR perspective and method*

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22 Extant literature (Davidson & Vaast 2010; Giones & Brem 2017; Nambisan 2016) presents digital
23 entrepreneurship with a flat ontology; this suggest success factors are not analysed as potentials, so whether
24 certain powers are exercised or actualised remains unexplored. Neither is there a conception of structural
25 conditions necessary for their attainment, as they are generally analysed primarily at the level of the
26 individual. In contrast, a CR analysis encourages us to explore enabling conditions at both levels, which we
27 did following the DREI(C) method (Bygstad & Munkvold 2011; Danermark et al. 2002). First, we described
28 (D) the expected benefits suggested by extant literature (Table 1) of using the Internet for enterprise
29 activities. Through contrastive case analysis (Kaarbo & Beasley 1999; Lawson 2003), we identified various
30 barriers preventing disadvantaged entrepreneurs from availing of these supposed benefits (Table 3),
31 illustrating how digital entrepreneurial activity is constrained by poor resource access. Second, we
32 considered the entrepreneurs who were successful in establishing profitable, sustainable businesses and
33 retroduded (R) the enabling conditions that must have existed in order for them overcome such barriers.
34 Assuming the relevance of both various external and internal resources to successful entrepreneurial activity
35 (Jayawarna et al. 2014; Jones et al. 2013) and following established critical realist method (Bygstad &
36 Munkvold 2011; Danermark et al. 2002), we organised and theoretically redescribed these conditions into
37 two groups. First, social resource access (external or structural): material, financial, cultural and temporal
38 resources accumulated over the life course and second, individual know-how (internal or agential): tacit
39 knowledge such as digital and business skillsets, problem-solving skills and auto-didactic ability. Higher
40 positionality were associated with high levels of social resource access, albeit in different combinations, as
41 illustrated in the cases of Jasminder, Louise, and Lucy, in whose business outcomes the effects of expected
42 benefits were evident. This is in contrast to the cases in which entrepreneurial exploitation of the technology
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1 was constrained by lower positionalities and low social resource access, as illustrated by the experiences of
2 of Rebecca, Sebi, and Melanie.
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4 [TABLE 3 ABOUT HERE]

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6 Third, we considered competing explanations (E), such as the possibilities implicitly suggested within
7 digital enterprise discourse that the disadvantaged entrepreneurs were not properly exploiting the
8 technology, or alternatively, were not working hard enough to achieve their intended goals. But the data
9 consistently showed that structurally distributed social resource access, alongside individual know-how and
10 hard work, preceded digital entrepreneurial success. Participants who possessed relevant knowledge and
11 showed evidence of hard work, but lacked social, cultural, and material resources, struggled in comparison.
12 Although a high degree of specialised technical knowledge could lead to better employment opportunities
13 and valuable business experience, it did not ameliorate a basic need for social resource access. In contrast,
14 those who had access to wider resources, but lacked technical knowledge, were able to mobilise those
15 resources to develop the internal conditions by learning, or alternatively, learning to manage the outsourcing
16 of, necessary skills. This enabled us to infer (I) that relevant structurally distributed resources created
17 external enabling conditions with causal efficacy for digital enterprise.
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21 However, in keeping with the CR goal of explanation over prediction (Bygstad and Munkvold 2011),
22 we do not claim that the presence or absence of these conditions is deterministic. Instead, we argue their
23 presence contributes, alongside other factors, to a causal explanation of digital entrepreneurial success.
24 When external enabling conditions are inaccessible, as is often the case with marginalised or disadvantaged
25 entrepreneurs, impediments to success abound. As confirmation (C) of our analysis, we found that the
26 negative effects of the absence of these conditions were, in various combinations, evident across our sample
27 group. A key example is those who worked in low-waged service roles, had no management experience and
28 little financial savings, found that their life conditions generally did not endow them with the necessary
29 resources to effectively build or sustain a digital venture. To fund their businesses, hours in employment had
30 to be increased. As such, time was not flexible or elective in the way it was for professional-level earners
31 and their capacity to develop the business was severely undermined. Accordingly, our CR perspective offers
32 an empirical critique of entrepreneurial emancipation as agential-level phenomenon.
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45 **Implications for Theory, Policy and Practice**

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47 Contemporary discourse on empowerment through digital entrepreneurship cannot ignore the
48 relevance of social positionality and life conditions upon both digital skills and entrepreneurial activity. The
49 sociological literature demonstrates how family background and life chances affect experiences of
50 education, employment, and digital skills development (Anthias 2001; Ignatow & Robinson 2017); we
51 extend this analysis to consider how experiences of digital entrepreneurship are similarly shaped. If the
52 distribution of antecedent social resources is favourable, there will be fewer challenges to acquiring further
53 resources, accessing critical business networks, and obtaining the financial and temporal resources necessary
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1 to experiment entrepreneurially and learn from failure. The precise technological competencies required for
2 digital enterprise, then, become secondary and can be developed as the venture progresses. While our thesis
3 that key digital entrepreneurial resources are structurally distributed, rather than agentially obtained, may not
4 resonate with myths of the heroic entrepreneur (Ogbor 2000), our findings resonate with literature streams
5 that critique the notion of entrepreneurship as meritocracy by emphasising the influence of class and life
6 course pathways on the accrual of entrepreneurial resources (Anderson & Miller 2003; Jayawarna et al.
7 2014), and examining performance constraints arising from disadvantageous ascriptions of gender, race, and
8 intersections thereof (Carter et al. 2015; Knight 2016; Marlow & McAdam 2013). They also reflect cyber-
9 and techno-feminist perspectives which suggest that technological development has the potential not only to
10 improve, but also exacerbate existing structural inequalities (Daniels 2009; Wajcman 2010). Our theoretical
11 critique of the assumed benefits of the Internet for entrepreneurship, and empirical identification of
12 structural and agential barriers and enablers, thus advances interdisciplinary discourse on the phenomenon.
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20 To assess the extent to which the Internet enables people to enact entrepreneurship, we must first
21 acknowledge what it does not do: critically, it does not grant entrepreneurs easy access to political, social,
22 material or cultural resources. Likewise, it does not guarantee funding or network connections to key
23 industry players. Finally, while it is an incomparable source of information, independent learning or
24 outsourcing is required, which takes time, tacit knowledge and/or financial resources. The implications of
25 such arguments for practitioners, business support providers and policy makers are considerable; it may be
26 that policy efforts aiming to teach technical skills to potential digital entrepreneurs – for example, the Do
27 More Online campaign, which encourages micro-businesses and sole traders to ‘go digital’ (BIS 2014) are
28 founded upon a false promise of expected achievement. People following these avenues may see their time,
29 resources and energy unnecessarily diverted from more appropriate courses of action. Moreover, many new
30 entrants encouraged by this discourse may have little realistic potential for success and no support
31 mechanisms in place in case of failure. Although we are not suggesting that only individuals in higher social
32 positions will succeed in this domain, we stress that they are more likely to have balanced resource
33 portfolios with which to build sustainable digital ventures. Thus, to support potential digital entrepreneurs
34 from marginalised populations, greater access to socially distributed material, cultural and financial
35 resources should be facilitated: for example, business mentorship and internship matching programmes and
36 substantial, yet competitive, seed funding. In addition, a concerted effort must be made to reduce
37 discriminatory push factors, such as workplace sexism, racism, ageism and ableism, so that entrepreneurship
38 is not a last resort for people who would otherwise prefer employment. To ignore these considerations
39 means risking setting the most vulnerable up to fail, with extremely damaging consequences.
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53 **Conclusion**

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55 We advance the emergent literature upon digital entrepreneurship with the argument that the
56 possibilities for emancipation through undertaking digital entrepreneurial activity are constrained or enabled
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1 by social positionality. Using a CR framework, intersectional feminist approach and contrastive case study
2 method, we identify external and internal enabling conditions for digital enterprise and provide theoretical
3 and empirical support for the notion that digital entrepreneurship is beholden to many of the same resource
4 requirements as traditional or offline entrepreneurship,. As such, the use of digital platforms for
5 entrepreneurial activity does not in itself ameliorate the negative effects of low or marginal social
6 positionality. Digital entrepreneurial outcomes are neither primarily agential nor meritocratic, but are
7 substantially facilitated or hindered by wider structural and cultural influences. This evidence further
8 suggests that not only are familiar inequalities exacerbated with the phenomenon of digital enterprise, but
9 also that new dimensions of inequality are emergent, such that the socially marginalised and resource-poor
10 cannot be expected to find it an effective route out of marginality. Thus, the Internet is no leveller for
11 entrepreneurial activity: instead, greater structural social equality is needed if we wish to support aspiring
12 digital entrepreneurs, who still require substantial investment of a variety of resources to build their
13 businesses over time. Finally, it is the responsibility of those who publicly promote such activity to turn
14 away from the uncritical assumptions of typical discourse and recognise the structural, as well as agential,
15 conditions that underpin digital entrepreneurial success.
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Table 1: Expected Benefits of Digital Entrepreneurship

Expected Benefit	Literature Source
Access to market research, business data and networks	(Hair et al. 2012; Kollmann 2006; Thompson Jackson 2009; Shoham 2006)
Wider reach and lower cost of client-facing operational functions, e.g. advertising, communications, distribution	(Fairlie 2006; Hull et al. 2007; Hair et al. 2012; Nambisan 2016)
Lower cost of internal operational functions	(Thompson Jackson 2009; Nambisan 2016)
E-creation of value	(Kollmann 2006; Sussan & Acs 2017)
Customer relationship building through social media	(Fischer & Rebecca Reuber 2014; Hair et al. 2012; Nambisan 2016)
Use of existing sales channels	(Chandra & Coviello 2010; Hair et al. 2012; Reuber & Fischer 2011)
Creation of new sales channels	(Mahadevan 2000)
New platform development, existing platform transformation	(Chandra & Coviello 2010; Giones & Brem 2017; Mahadevan 2000; Nambisan 2016)
Locate, contact and develop reputation with investors	(Chandra & Coviello 2010; Reuber & Fischer 2011; Shoham 2006)
Creation of economies of scale	(Giones & Brem 2017; Nambisan 2016; Reuber & Fischer 2011; Sussan & Acs 2017)

Table 2: Causal Powers Framework**(adapted from Fleetwood, 2011 and Martin, 2014)**

State of Causal Power	Social Manifestation	Enabling Conditions Met
1. Unexercised (potential)	Set of powers that may or may not be developed	None
2. Exercised but unactualised	Powers possessed but not used, or used without intended effect	Internal
3. Exercised and actualised	Powers possessed and used to intended effect	Internal and External

Table 3: Barriers for Digital Entrepreneurs

Expected DE Benefit	Barriers Experienced	Case Outcomes
Access to market research and business data	Information overload Lack of digital business knowledge Poor digital skills	- Melanie + Jasminder, Louise, Lucy, Rebecca, Sebi
Wider reach and lower cost of client-facing operational functions, e.g. advertising, communications, distribution	Market saturation and low/no visibility Resource, investment and skill requirement	- Melanie, Rebecca + Jasminder, Louise, Lucy, Sebi
Lower cost of internal operational functions	High start-up costs (e-retailers) High site maintenance costs High manufacturing costs	- Melanie, Rebecca, Lucy, Sebi + Jasminder, Louise
E-creation of value	Cannot keep up with dynamic tech environment Lack of digital business knowledge Liabilities of newness/legitimacy issues	- Melanie, Rebecca, Sebi + Jasminder, Louise, Lucy
Customer relationship building through social media	Always-on environment Need for multi-channel presence Racialised discrimination	- Melanie, Rebecca, Sebi + Jasminder, Louise, Lucy
Use of existing sales channels	Converting visitors into sales Cannot keep up with dynamic tech environment Market saturation and low/no visibility	- Melanie, Rebecca, Sebi + Jasminder, Louise, Lucy
Creation of new sales channels	Converting visitors into sales Resource, investment and skill requirement	- Rebecca, Melanie, Sebi + Jasminder, Louise, Lucy
New platform development; existing platform transformation	N/A	N/A – all
Locate, contact and develop reputation with investors	N/A	N/A – all
Creation of economies of scale	Cost of outsourcing manufacturing/production No time to grow the business	- Rebecca + Jasminder N/A – rest

Note: (-) denotes cases where these barriers were not overcome; (+) denotes cases where they were; N/A denotes cases where this activity was not pursued