

Home-based Businesses: An Exploration of Business Model Heterogeneity

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Abstract

Purpose: Home-based business (HBB) literature identifies variation in the sector, such as differences in technology use, knowledge capital. It also asserts HBB may have specific value for specific groups of business starters. Despite this diversity, HBB is treated as one conceptualisation, as a single business model. Consequently, our knowledge is based on disparate studies with different research agendas and results are inconsistent and sometimes contradictory. This paper outlines a means by which the heterogeneity of HBB can be revealed via a framework within which diversity might be viewed.

Method: Largely conceptual, this paper draws from a study of 30 HBB owners to test the framework using the business model dimension of *in* or *from* home and the distinguishing feature example of *knowledge*. The empirical work was qualitative, based on interviews.

Findings: We find variation in HBB types and distinct business models, exposing heterogeneity. The framework provides a means by which the reality of HBB may be better revealed.

Value: Value lies in the provision of a means by which we might view the diversity of HBB. Using the framework, different research agendas may be serviced and afford sight of issues that affect HBB as they vary by business model. This is of value for research clarity, and also for informing policy and support of small businesses as the needs of different types of HBB will vary.

Keywords: Home-based business, micro firms, SMEs, enterprise, strategy

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Introduction

Most modern economies have a large micro-firms sector and the majority of these firms are home-based businesses (HBBs) (e.g. BIS, 2015; Walker, 2003). In the UK, for instance, 96 per cent of firms employ fewer than 10 people (Ward and Rhodes, 2014), and the business model of more than 70 per cent of these is to use the home as the business base (BMG Research, 2013). The size and potential value of the HBB sector is, therefore, substantial and this has not gone unnoticed by governments. As a cumulative economic contributor and employer, there is much rhetoric about how to grow this sector (e.g. Business Link, (2012), in the UK; Small Business Administration, (2013), in the USA; Porirua, (2013), in New Zealand). Currently, however, within the research and policy literature, little is known about HBB, particularly in terms of its diversity (or not) with regards to business model(s), context and strategies. In fact, throughout the literature, HBBs are treated as homogenous (Danhauer, 1999; e.g. Ruiz and Walling, 2005; Mason *et al.*, 2011); an inference applied to their business models also, such that the HBB business model is treated as an archetype (Massa and Tucci, 2013). As a consequence of this, meaningful information for policy and practice and the opportunity to develop robust theory and research within this proportionately large part of the business sector continues to elude us. To support the sector appropriately and thereby make best use of it as an economic asset, a more sophisticated understanding of HBB business models is required. This study addresses this gap.

The contribution of this paper, therefore, is its examination of the components of HBBs that contribute to the creation and capture mechanisms of HBB business models. Despite the general use of 'HBB' as a homogenous business model form, we find that by recognising HBB as a heterogeneous phenomenon, we enhance our theoretical understanding of the relationship between HBB strategy and business model iterations. Thus, we establish that HBB business models are in fact meta-models (Massa and Tucci, 2013) as a result of the individual owner choices and subsequent consequences for their business. Moreover, we contribute to calls from the research community regarding the value of inspecting and classifying business models (Lambert, 2015).

The paper begins with a review of business model and HBB literature, outlining inconsistencies in ontology and research that are obscuring understanding that might inform knowledge, policy support and practice about and for HBB. In response, a conceptual framework, supported by empirical data, is proposed which aims to improve clarity and understanding regarding the intersection of dimensions with different value creation/capture within the HBB. Finally, the value of this more granular representation of HBB is discussed, including implications for those who support HBB, along with opportunities for further research, including theoretical and empirical engagement with broader study of work in society.

Business Models

According to Porter (1996), firms must seek continual value creation/capture opportunities in order to remain sustainable. The e-commerce era saw the development of interest in business models (Magretta, 2002), in particular in terms of scrutinising the effects on value creation and capture in firms (value most often understood as financial profit Osterwalder and Pigneur, 2002a; Hedman and Kalling, 2003; Teece, 2010). A firm's business model articulates its primary purpose (e.g. Amit and Zott, 2001; Sirmon *et al.*, 2007; Pitelis, 2009; Demil and Lecocq, 2010) and acts as an expression of firm strategy (Hedman and Kalling, 2003). Most simply, Margretta (2002) describes a business model as the story of an organisation; its "core logic" (Seddon *et al.*, 2004, p.426; also Shafer *et al.*, 2005), as it expresses the interrelations and configuration of organisational components (Baden-Fuller and Morgan, 2010). Key features of a business model include a firm's its inward (Seddon *et al.*, 2004) or outward-looking orientation (McGrath, 2010); the approach to sustained or temporary competitive advantage (Kujala *et al.*, 2010; McGrath, 2010, respectively); the intersection or separation of the creation and capture of value (Amit and Zott, 2001; Osterwalder and Pigneur, 2002a); and links "a firm's resources and functions and its environment" (Mansfield and Fourie, 2004, p.39). Thus, the business model of a firm allows it to operate optimally within regards to its specific contextual conditions. While all business models include the same components (Osterwalder and Pigneur, 2002b), Baden-Fuller and Morgan

(2010) consider them to be organisational specific, thus heterogeneous by their very nature (also Teece, 2010; Leavy, 2010; Chesbrough, 2010).

Furthermore, innovation, which is vital to firm creation and survival and for value creation/capture to occur (Chesbrough, 2010), may drive new business model configurations (Pitelis 2009). As such, business models are flexible (McGrath, 2010) especially in dynamic business environments (Pitelis, 2009) and are refined over time (Teece, 2010; Morris et al., 2005). Refinement in particular occurs in circumstances of macro-environment change, in industries/sectors with stiff competition, when entering new markets (London and Hart 2004), and when maximum value configuration is required (Demil & Lecocq, 2010). Moreover, although strategy and business models are not synonymous (Casadesus-Masanell and Ricart, 2010), they are highly integrated as a firm's strategy often informs business model creation and development (Osterwalder *et al.*, 2005; Gambardella and McGahan, 2010).

However, business models remain poorly understood (e.g. Morris *et al.*, 2005; Johnson *et al.*, 2008; Kujala *et al.*, 2010), and particularly so amongst microbusinesses. In the context of HBBs – the focus of this paper – to date there is no specific exploration of business models. This paper provides some initial contribution towards addressing this gap, and it is to the extant literature on HBBs and, in particular factors related to business models, that we now turn.

Heterogeneous or Homogenous? The Issue of Business Models in Home-Based Business

The world of work and where it occurs is changing. Examples of this include an increase in teleworking and greater availability of flexible working (Cifre *et al.*, 2002; Garrett and Danziger, 2007; Vilhelmson and Thulin, 2016). Self-employment and independent business activities are also increasing, and this includes a rise in HBB; recent figures from Scotland, for example, show an increase in HBBs of more than 20 per cent between 2012 and 2015 (The Scottish Government, 2015). As a consequence, HBB has begun to emerge as a field of increasing interest, both to researchers (Beach, 1993;

Deschamps *et al.*, 1998; Van Gelderen *et al.*, 2008; Kapasi and Galloway, 2016), and to policy makers (e.g. Jones, 2012; Enterprise Nation, 2014), reflecting an interest in developing and supporting the sector, and encouraging this particular mode of self-employment and business.

Empirical studies exploring HBB have been conducted in several, generally Western, economies, for example, (e.g. USA Loscocco and Smith-Hunter, 2004; Canada Bryant, 2000; Australia Nansen *et al.*, 2010) in Australia. Most prolific are studies based in the UK. These studies cover a range of research themes, including the effects of technology diffusion (Daniel *et al.*, 2014; Ruiz and Walling, 2005); urban or rural context (Dwelly *et al.*, 2005; Newbery and Bosworth, 2010; Reuschke and Mason, 2015); housing stock (Reuschke, 2016) and gender (Ekinsmyth, 2013; Thompson *et al.*, 2009). Whatever the focus however, HBBs are largely treated as homogenous entities in empirical studies. The location of where HBB activity occurs provides an exemplary illustration.

Empirical examination of the location of HBB business activity is subject to disparate sources of data and definitions of HBB. To illustrate, three empirical studies are described, though this is not exhaustive. First, Thompson *et al.* (2009) use Global Entrepreneurship Monitor data, basing their measurement of HBB on nascent and start-up activities in the home. Elsewhere, Felstead *et al.* (2000) base their study on the 1998 Labour Force Survey that explores those who work mainly, sometimes or partially at home (both employed and self-employed), thus not separating employment and self-employment status. Finally, Dwelly *et al.*'s (2005) longstanding definition of an HBB still underpins much research (e.g. Ekinsmyth, 2011; Mason and Reuschke, 2015). Here HBB is defined as “any business or self-employed person that uses a residential property as a base from which they run their operation – consciously doing so instead of running a separate workspace/shop/office” (Dwelly, *et al.* 2005, p.4). Here the home is described as a *base* rather than the location of the work. As a consequence of definitional discrepancies, research findings tend to vary considerably by study, and these inconsistencies can refer to the businesses, the owners, or both. Each of these issues is explored in turn below.

Business components

There are some commonalities between studies of HBB. Loscocco and Smith-Hunter (2004) and Walker (2003) report concentration of HBBs in business services for example. Additionally, HBBs are found in several studies to have low levels of initial capitalisation, have lower growth ambitions than other firms, and are likely to have few or no employees (e.g. Newbery and Bosworth, 2010; Thompson *et al.*, 2009; Walker, 2003). These commonalities are also found for micro-firms generally (e.g. Young, 2013), and so it is no great surprise that these apply in the HBB context. Other findings throughout the HBB literature diverge though.

First, there is variation in the value capture of HBBs. Studies such as Mason *et al.* (2011) and Ekinsmyth (2011) find that income generated in a HBB is unlikely to be the only or main source of household income, instead being supplementary to households. Alternatively, Walker (2003) finds that the HBB was the major income source for 72 per cent of the male operators and 50 per cent of the female operators in her Australian sample. Second, value creation based on the *type* of work conducted in HBBs, further reveals disparities. For example, several studies report a predominance of either knowledge work (Ammons and Markham, 2004; Crosbie and Moore, 2004; Jurik, 1998) or low-skilled activities (Office of the Chief Economic Advisor, 2015; Newbery and Bosworth, 2010; Walker, 2003). Findings about the importance and use of technology for HBBs as a value creation component are also mixed. For example, Wyncarczyk and Graham (2013) conclude that technology has “reframed the concept of ‘home economics’” (p.451), whereas, Kapasi and Galloway (2016) and Mason *et al.* (2011) report that in many cases technology use is resisted and the importance of e-commerce is overstated.

In addition, location of the firm (i.e. *at* or *from* home) emerges as a diverging business model component. In many cases, business *in* and *from* home are not discrete, with some work conducted in the home, such as accounts and marketing, and other work, such as transaction or service, provided outside the home, as is the case for tradespeople, for example. Elsewhere, at the other extreme, for some the home *is* the business; several authors focus on the experiences of B&B owners for example (e.g. Di Domenico, 2008; Felstead and

Jewson, 2000; Newbery and Bosworth, 2010). Fundamentally, therefore, we can see that both *in* and *from* home emerge as potential distinguishing features of disparate HBB models.

Owner components

HBBs are often operated in a self-employment capacity to ‘employ’ one person: the owner. Consequently, in the case of HBBs, the owner is ‘embedded’ in the business model of their HBB. For example, there is some assertion that HBBs are a desirable employment option for some group. Women with dual responsibilities for domestic and economic life are one such group, where the flexibility of HBB can afford the ability to service both roles (Walker and Webster, 2004); White, 2008; Kirkwood and Tootell, 2008). The competing demands of home work and market work will have an impact on the business model adopted.

Human capital, when applied to HBB activity, is another largely unexplored feature of HBB ownership, despite research finding that HBB owners have higher levels of educational attainment than non-HBBs (e.g. Jurik, 1998; Felstead *et al.*, 2000; Mason *et al.*, 2011). Referring to both formal and informal acquisition of knowledge and skills, the level of human capital *required* of a business will have an effect on the business model applied. Some studies find HBBs to be knowledge-intensive (Walker, 2003), thereby requiring high levels of human capital. Other studies find that HBBs are characterised as businesses that require low levels of human capital (Newbery and Bosworth, 2010), implying lower knowledge and skills requirements.

In the employment context, the human capital level of individuals tends to correlate with the human capital requirements of their job (Burton-Jones, 2001). In concert with this, throughout the HBB literature the human capital requirements of firms are assumed to be in line with the human capital of owners. Kapasi and Galloway (2016) however, find this assumption unsafe since there was evidence of a lack of correspondence between *human capital attainment* and *human capital requirements* amongst some of the HBBs included in their UK sample, with some, particularly lower human capital-based firms, run by people with high levels of educational and skills attainment.

In addition to the possible business and owner components of HBB business model(s), we propose that various and disparate antecedents to, and outcomes sought of, HBB will also contribute to the business model employed. These antecedents may be internal (i.e. related to the individual or business decisions) or external (i.e. related to environment or context), and some examples are given below.

Internal antecedents

People who start a business or become self-employed in response to a perceived market opportunity may choose to base their business – at least initially – at home. There is some evidence that in initial stages, many firms base their firms at home for cost-saving reasons (Herrington and Kew, 2017); a value component significant to business model development (Malmstrom and Johansson, 2017). Upon establishment and a period of sustainability some of these business may move on to an external location, but others may continue to locate at home. In addition, the establishment and operation of a business from home can provide for some a flexible work option. In addition, as noted already, people with caring responsibilities, and mothers in particular, have been identified as a group whose caring and work roles can be facilitated by this model of business as it allows them to combine their dual roles (Ekinsmyth, 2011). Other groups with competing home/life priorities, such as people with long-term health issues, might be similarly motivated to HBB.

External antecedents

Employment norms in some industries are based on the HBB model; consider the employment context of farming, some forms of hospitality, or most of the building trades for example (ONS, 2014). These norms can shift over time and indeed, some sectors have increased their proportion of self-employment, and particularly that based at home, as a consequence of structural changes in the employment market (Baldry et al., 2007); Perrons (2003) finds an increase in contractual home based employment in her study of new media for example. Additionally, as employment has become increasingly precarious throughout the last few decades – as ‘jobs for life’ have been replaced by ‘portfolio careers’ in many industries (Templer and Cawsey, 1999) – the ‘gig economy’ has emerged. Friedman (2014) describes the gig economy as that

characterised by a series of gigs – short-term contracts, periods of employment and self-employment. Similar to the idea that work is now more akin to a series of projects, the gig economy is likely to involve greater use of resourcefulness for work, including the use of the home for reasons of cost and convenience alongside lack of alternatives (Wynarczyk and Graham, 2013).

These disparate rationales for HBB may have specific effects on operations and performance, but have not received systematic investigation in the literature. Instead, our knowledge of the sector is inferred from a range of studies of HBB that have been prompted by different research agendas, and HBB is still referred to as if it is a single business type, operating as a distinct business model. Consequently, the potential for understanding value creation and capture within this large sector of many economies remains hindered.

We argue, therefore, that a central problem in terms of understanding HBB is the treatment of it as an archetype business model, even where there is acknowledgement of heterogeneity in the rationale underpinning empirical work (e.g. Mason *et al.*, 2011). Consequently research outcomes, whilst considered implicitly generalizable, are in fact limited at best. This in turn compromises ability to inform policy and practice, and indeed, scholarly enquiry. In particular, the distinction between *in the home* and *from the home* is a critical one. Other distinguishing features of the value capture and creation approach are also likely to have an impact on encouragement, support and resource needs and on the capacity of a HBB to prosper and grow. These may include the extent to which technology might enable the business, the personal lifestyle needs of the owner, the knowledge capital of owners, and the knowledge requirements of the businesses.

A means of exploring the heterogeneity of business models amongst HBBs is thus required, and in the next section we propose a framework to that end. This is not the first attempt to draw distinctions between types of HBB. For example, Newbery and Bosworth (2010), Reuschke (2016), Walker and Brown (2004), and Shaw et al. (2000) have all identified that differences between HBBs exist. These previous categorisation approaches have all focused on demographic or industry sector categories though, such as variation by

gender or within agriculture. They have not explored HBB within the wider economic landscape. Our framework is described in the next section.

A Home-Based Business Strategy Framework

The framework presented in Figure 1 is framed within the entrepreneurship paradigm, distinguishing independent business operation from employee status. Relating the framework to entrepreneurship seems reasonable based on the interpretation of 'entrepreneurship' as business ownership or self-employment, as per studies such as the Global Entrepreneurship Monitor (for example Xavier *et al.*, 2013). In concert with Felstead and Jewson (2000), Newbery and Bosworth (2010) and Wapshott and Mallett (2012), the framework makes a distinction between *in* and *from* the home. This dimension is a crucial factor in the value capture of a HBB business model.

Figure 1 presents on its X-axis the distinction between work *in* the home and work *from* the home. HBBs may be categorised here as a point on a range, rather than as a binary choice between *in* and *from*, to acknowledge the diversity of experience between these points. A B&B for example is entirely based in the home, while an accountant may do some work in the home and some work in external locations (e.g., clients' offices). A self-employed translator might do all their trade in external locations (e.g., hospitals) but use the home as the business address and manage accounts and marketing, for example, in the home. The Y-axis refers to some feature for inspection within HBB contexts. The framework thus affords sight of distinct models of HBB from which to

engage in further inspection. Figure 2 provides an example framework based on the distinguishing business model component of *knowledge required for the business*. Given that previous HBB literature reports HBBs as operating within the knowledge/services sector (Walker, 2003; Dwelly *et al.*, 2005; Newbery and Bosworth, 2010), knowledge (attainment and requirements) appears to be a central constituent of the HBB construct.

The framework illustrated in Figure 2 provides four related but distinct quadrants for inspection of HBBs in terms of their business-offering knowledge requirements. Lines between quadrants are not rigid; rather they are permeable to illustrate the non-arbitrary nature of the distinctions between each, that the framework incorporates ranges rather than categories. Using this framework it is possible to observe variables within. To exemplify we draw from a study of 30 HBBs. In this case, we use the framework illustrated in Figure 2 that distinguishes *knowledge requirements for the business* by the *in* or *from the home* business model. The methodology we employed to test this framework is described in the next section.

Methodology

The data used here to test the framework was collected as part of a larger study of UK HBBs. The sample was purposively sourced in order to assess the differing components of HBB business models with particular reference to the *at* or *from* home aspect of business operation. Personal networks, social media and national business centres and some subsequent snowballing were employed to reach the sample. As per Stake (2010), qualitative data was collected



Figure 1: Basic HBB model framework

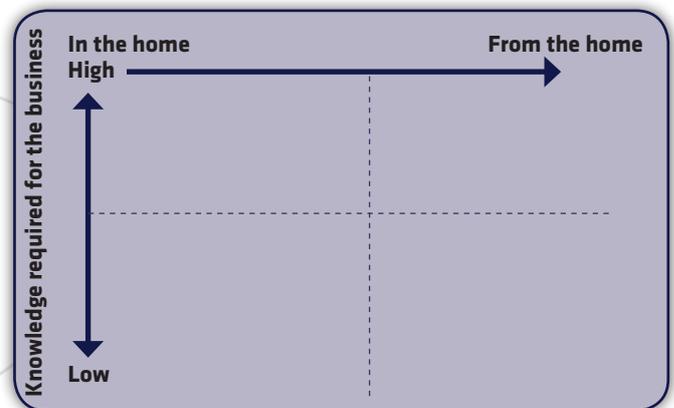


Figure 2: In/from the home by knowledge requirements

through in-depth, semi-structured interviews, which lasted between 30-75minutes, and included information about both the owner and the business. Interviews were conducted at mutually agreed locations and times, and interviewees were assured confidentiality and anonymity. The sample included 30 participants of whom 13 were male and 17 female. This was a well-educated sample, with 24 participants having first degree or higher levels of qualification. Summary data about the participants is given in Table 1.

Gender	M=Male F=Female
Age group	Y= under 45 O= over 45
Knowledge capital (owner)	H=Higher Education N=No Higher Education
Examples	Male under 45 with higher education = MYH1 Male over 45 without higher education = MON2

Table 2: Key to figure 2

Participant	Gender (M/F)	Age (Y= >45; O= <45)	Business
1	F	Y	Translation
2	F	Y	Jewellery manufacture
3	F	O	Translation
4	F	O	Artist
5	F	O	Pilates instructor
6	F	Y	Toy manufacture
7	F	Y	Mobile hairdresser
8	F	Y	Retail
9	F	Y	Artist
10	F	O	Retail
11	F	O	Food manufacture
12	F	O	Spiritual advisor
13	F	Y	Accountant
14	F	Y	Accessories manufacture
15	F	Y	B&B
16	F	O	Retail
17	F	Y	Training consultancy
18	M	Y	Translation
19	M	Y	Media freelancer
20	M	Y	Retail
21	M	Y	Management consultant
22	M	Y	IT
23	M	O	Management consultant
24	M	Y	Software developer
25	M	O	Training consultancy
26	M	Y	Property rentals
27	M	O	Telecommunications
28	M	U	Social media advisor
29	M	O	Draughtsman
30	M	Y	Musician

Table 1: Summary sample information

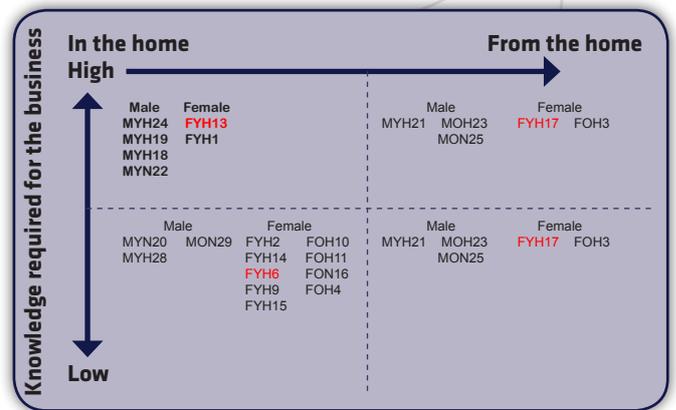


Figure 3: Mapped sample In/from the home by knowledge requirements

The 30 HBBs from which participants were drawn are plotted in Figure 3 and a broad idea of demographics, while not intended to imply representativeness, is provided for information by the use of nomenclature described in Table 2.

Analysis

While the data required for plotting within a framework comprises specific, discrete features (such as age, gender, education attainment level), interview content was also of use. Eisenhardt (1989) stresses the use and utility of qualitative data to afford insight and theoretical development. In line with this, while discrete items were important in terms of the plotting of different HBBs and HBB owners into the framework, the interviews provided rich and nuanced context to each case. Figure 3 affords us some sight of the nuances of different HBB models in terms of the knowledge requirements of the firms.

While this study was entirely qualitative and so none of the data plotted in Figure 3 can be said to be representative of the HBB sector, it does illustrate several things about the sample. First, HBBs span a wide range of industries and heterogeneity is observable (as demonstrated by information in Table 1). This sample is also illustrative of older and younger, male and female HBB ownership. In terms of knowledge requirements for the firms, there is a clear range, from technology and professional knowledge required through to low knowledge requirements (as illustrated by the spread of business types mapped in Figure 3). In this sample it is clear that there is no direct link between knowledge capital of the owner and knowledge requirements for the business; in particular, amongst those firms with least knowledge requirements we have owners with high levels of knowledge capital, and indeed, some representation of the opposite, with an unqualified IT consultant operating in this high tech knowledge sector for example (as defined by Standard International Trade Classification (United Nations, 2006). This may suggest a research agenda concerning the use of self-employment to mitigate lack of formal qualifications in knowledge sectors (where it may be difficult to obtain employment without requisite education). There is certainly a research agenda implied in terms of exploring why some highly educated people develop HBBs in low knowledge sectors.

To illustrate further heterogeneity and to engage with the theory that HBB is particularly suited to those who require flexibility of home and work life, a 'common group' was selected for particular inspection. This group was 'mothers', and the choice of these was based on assertions throughout the research and policy literature that HBBs are a convenient and useful way of combining the dual roles of motherhood and work (Walker and Webster, 2004). To explore this, we applied an 'ideal types' analysis. Weber (1904) proposes that ideal types inform typologies and represent abstract concepts that derive from the characteristics and elements of the object of study. To this end, by selecting one instance of the 'type' from each quadrant, diversity can be revealed, and theoretical development enabled (Eisenhardt, 1989; Eisenhardt and Graebner, 2007). In this case, the ideal type selected from each quadrant had the common characteristics of being female, having higher education and being the primary carer for young children. A vignette for each is presented below.

Case 1 – High knowledge/skills requirement + In the home

FYH13 is a qualified and chartered accountant with several years of experience working for one of the largest accountancy firms in the UK. She decided to become self-employed when she found commuting too inconvenient and time-consuming as she tried to manage full-time work and looking after her children. She chose to create a HBB because it is possible to do this in her industry and it would reduce her commuting time.

Case 2 – High knowledge/skills requirement + From the home

FYH17 is an environmental consultant and auditor with two young children. She is educated to Master's degree level. Consultancy is a norm within her industry sector. Her self-employment registered address is her home address, however, she conducts all of her customer facing work in the buildings of the contracting organisation. She chose to start a HBB because this was the most cost effective business model available and would allow her to spend more time at home with her family.

Case 3 – Low knowledge/skills requirement + In the home

FYH6 is educated to degree level and has had several jobs in industry in the field of marketing. She makes memento toys for parents from the outgrown clothes of their babies and children, a business selected on the basis that she could operate it at home while caring for her two young children. The HBB model also allows her to keep costs low.

Case 4 – Low knowledge/skills requirement + From the home

FYH8 is a mother of two with a Masters qualification in Human Resource Management. After graduation she found it hard to find work and was turned down for several positions. Shortly after she had her first child, she became self-employed in order to balance childcare with the continued requirement to work. Consequently, she began selling household cleaning products door-to-door, and she manages her accounts and other administrative functions from the home. The HBB model enables her to keep costs low, she can choose her hours flexibly, thereby suiting her life requirements.

Discussion

The proposed framework offers both theoretical and practical contributions. First, from a theoretical development perspective, this study advances a HBB business model framework which elucidates the importance of two key dimensions that are integral to the value creation and capture components of HBB: *in* and *from* the home, and the example variable of *knowledge requirements of the business*. This advancement of HBB theory may be especially valuable in light of changes to work in society norms. The framework also allows that causal relationships between dimensions may be tested. This offers potential to inspect how changes to work in society norms affect 'working' behaviours and expose (possible) unintended aspects of these, with particular reference to the importance of environmental factors for business model development and innovation (Mansfield and Fourie, 2004; Pitelis, 2009). The dimensions, which refer to value creation/capture components, made visible by the framework provide conceptual clarity in order to see a diversity of issues, experiences and needs within the heterogeneity. For example, based on findings in the employment literature, an increase in the numbers of HBBs in the *high knowledge/skills requirement outside the home* quadrant might be anticipated in response to structural change such as increased contractualisation of knowledge workers (e.g. Baldry et al., 2007). Equally, an increase in HBB owners may also be expected in the *low skills outside the home* quadrant as a result of changing industry norms such as the 'gig economy', that is, temporary short-term engagements with organisations. These two broad contexts of HBB have different support requirements, and implications for policy and scholarly research.

Inspection of *low knowledge requirements within the home* businesses provides a clear example of the value of the framework developed in this paper. Previous research has found that those opting for the kinds of businesses included in this group may do so due to low barriers to entry (Loscooco and Smith-Hunter, 2004; Mason et al., 2011; Thompson et al., 2009). In addition, these businesses operate in highly competitive markets and may have "little power to determine payment and deadlines, and are often reliant on a small number of clients" (Thompson et al., 2009, p.228). Consequently the importance of understanding this

quadrant is considerable given that competitive advantage is central to firm survival (Porter, 1996), and this is facilitated (or not) by the business model adopted (Hedman and Kalling, 2003; Teece, 2010). The support implications for this type of HBB are not similar to those in other quadrants though. Further, conventional wisdom would locate those with low skills levels in this quadrant, but as illustrated by the sample used for this paper, this is an unsafe assumption, with evidence of low skills businesses operated by people with high human capital. Skills development support needs to engage with actual rather than assumed knowledge and skills levels of those operating HBBs in any of the quadrants identified if it is to be most effective.

The framework also provides a basis on which to test integral dimensions, assess similarities and differences in what is often a homogenised understanding, or representation, of HBB (refer to Massa and Tucci, 2013, for a discussion on business model archetypes). In this paper we used *higher education* and *mother* as constants and found evidence of HBBs facilitating dual roles. The evidence was not consistent to one model of HBB though, and representation in each quadrant was found. This suggests that even where the value capture purpose of the HBB is consistent (from the perspective of the individual owner) – in these cases to facilitate dual roles and keep costs down – neither the experiences of the owners nor the types of HBB business models they adopted for this are homogenous and as such have different support and resource requirements. This clearer view of the differences between HBB models for working mothers might afford tailored and most effective support for their disparate HBBs. Other examples of the affordance of greater inspection may be the much-asserted utility of technology for HBBs; this is especially pertinent given that the importance and use of technology may well vary between the quadrants. Another might relate to business scale, providing a better idea of which types of HBB are represented by those who are self-employed and those who are employing others (and in either case, those that have the potential to grow). The framework also provides a way of classifying a HBB that, by recognising the issue of heterogeneity, makes the ability to compare like with like more feasible. This affords a more precise understanding of different types of HBB, with which to inform research activity, policy and those who seek to support HBB.

To summarise, our framework illustrates that HBBs exhibit different business models based on their approach to the creation and capture of value. Therefore, based on the differing categories that they occupy, HBBs are observable heterogeneous; they represent, in fact, meta-models (as per Massa and Tucci, 2013). Recognising broad distinctions will enable future research to examine variation between the business models employed, and key issues that affect the different business models (for example technology and lifestyle factors). This may allow for the nuance required to understand additional issues in the HBB landscape such as work-life balance, for example. From these more refined categories, better-focused research to understand issues and explore experiences may be achieved. From there, better understanding can develop and be used to inform support and policy agents. Furthermore, this research provides a conceptual framework from which we can theorise abstract factors which are likely to be embedded in the structure of HBB business models such as social class, social status, gender, intellectual, social and financial capitals and opportunity recognition/discovery.

Conclusion

This paper has paid specific attention to the complex issue of activities classified as HBB. The study builds on existing HBB classifications such as those developed by Newbery and Bosworth (2010) and Walker and Brown (2004). This study develops insights into the value creation and capture approaches taken by HBBs. We demonstrate that for HBBs, the distinct category of location, that is *in* and *from* home may be viewed together with other business model components, to inform future research, including for the purposes of theory building as per Eisenhardt (1989). In this case, while the theoretical assertion of the role of flexibility of HBB ownership can be useful for mothers is supported, the expression and type of HBB ownership is seen to vary considerably and as such, suggests heterogeneity of experiences within this group rather than homogeneity.

The implications of this study for policy and practice are considerable. First, the number of HBB activities across the developed world appears to be continuing to increase. Thus, awareness of this trend within support agencies is advised. Second, the framework indicates that HBB is heterogeneous, including different business models. Therefore clarity around the support offering for the different activities that are currently labelled as HBB would be beneficial. In particular, even amongst specific groups or for specific purposes, as illustrated in this paper by the example of working mothers, it is not safe to assume business model homogeneity. The potential of supported business development activities specifically for HBBs across different business models will be valuable. Finally, with regards to practitioners, an awareness of the aspects of different HBB business models as per this framework would be beneficial as it may help those businesses and owners to alleviate some of the challenges identified.

As with all studies, this study has limitations. First, the complexity of the existing research base is hard to reconcile given the heterogeneity of organisations studied. Second, this paper provides only limited examples of the components of HBB that may be studied. This provides an opportunity for future research in the field to identify and map additional ones (e.g. technology, key partners, *owner* value propositions (i.e. lifestyle factors)). Third, this study comprises a snapshot in time in terms of the HBBs studied and decisions regarding each firm and its business model may be realistically expected to change over time as per business model theory (Morris *et al.*, 2005; Teece, 2010). This is an aspect worthy of future research. Finally, this study has not addressed all of the business and owner characteristics of HBBs. Given that HBBs are often solely owner-led, there is room for future research to examine how business models intersect with specific owner/business-related components and whether these constructs are discrete or overlap in the study of HBB.

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