Home-based internet businesses as drivers of variety

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Abstract
Purpose – The purpose of this paper is to show that the way home-based internet businesses (HBIBs) are operated and the reasons for which they are started enable HBIBs to bring about variety, and to argue that this variety has a broader impact on the industry and the economy.

Design/methodology/approach – The paper adopts a multiple case study approach, studying the best practices of eight HBIBs. 

Findings – The study finds that HBIBs generate variety because of the unique way in which they operate, and because of the reasons why they are started. How HBIBs operate can be captured in the acronym SMILES: Speed, Multiple income, Inexpensive, LEan, and Smart. They are founded (amongst other motives) for reasons of autonomy, freedom and independence. Both aspects – the how and why – of HBIBs are conducive to the creation of variety as they facilitate trial-and-error commercialisation of authentic ideas.

Research limitations/implications – Five theoretical perspectives posit that variety is important for the industry and the economy: evolutionary theory, strategic management, organic urban planning, opportunity recognition, and the knowledge economy. The findings are discussed in the context of each perspective, showing how HBIBs play a role in each perspective.

Practical implications – Policy makers should be aware of the importance of HBIBs, which can be promoted, providing generic facilities for business information, training, and mentoring, and by making compliance burdens more proportional to business size.

Originality/value – The paper shows how and why HBIBs are drivers of variety. This paper argues, by means of five theoretical perspectives, that because of the variety HBIBs generate, they contribute to the economy over and above their direct and indirect contributions in terms of revenue and employment.

Keywords Electronic commerce, Homeworking, Entrepreneurialism, Internet

Paper type Research paper

Introduction
Cumulative research has established that a positive relationship exists between the number of new and small businesses on the one hand and economic growth on the other hand (Carree and Thurik, 2003; Thurik and Wennekers, 2004). However, the mechanisms (and their respective importance) by which new and small businesses bring about economic growth are subject to considerable debate. Several intermediate linkages have been identified (Wennekers and Thurik, 1999), the most important ones being innovation, competition, and variety. In this paper, our focus is on the...
home-based internet business (HBIB), and its contribution to the economy through variety. Using a multiple case study approach, our purpose is to show that the specifics of how and why HBIBs are operated, allow them to be drivers of variety.

**The importance of variety to the economy**

Variety as an intermediate linkage between new or small firms and economic output is supported by a variety of theoretical positions. We discuss five. First, evolutionary approaches to organisations and economies state that variety drives economic outcomes (Aldrich and Martinez, 2001; Aldrich and Rueff, 2006). In the well-known triad of variety, selection, and retention, the more variety there is to select from, the better the eventual quality of what is retained (Aldrich and Rueff, 2006). Some evolutionary perspectives stress adaptation, for which variety is also a prerequisite (Aldrich and Martinez, 2001). Organisational population ecology states that variety is a hedge against future uncertain environmental changes, both on the industry and on the national level variety is created through new organisations, which are assumed to represent a unique formula (Hannan and Freeman, 1989). To be beneficial overall it is not necessary that the new organisation survives itself; it can also be the case that existing organisations incorporate desirable features of the new organisation (Aldrich and Martinez, 2001; Aldrich and Rueff, 2006).

The strategic management literature echoes some of these arguments. Miles and Snow (1986) argue that each industry needs a variety of strategic approaches to survive. Without variety, the industry converges around a dominant solution and incurs higher risks of collective failure in the face of environmental change (Murray et al., 2002, p.374). Greater variety in an industry increases the likelihood that appropriate firm responses are available to meet changing industry conditions (Nelson and Winter, 1982). Miles et al. (1993) empirically show industry variety to be related to long run industry performance, especially in industries that are early in their life cycle. They explain this by arguing that an industry’s performance will be higher in the long run if variety in strategic configurations and groups is present. Conversely, lack of variety is likely to lead to more head-to-head competition, less differentiation, more commoditisation, and less opportunity to learn, directly or indirectly, from the diverse experience of other firms (Miles et al., 1993, p. 174). By maintaining variety, the industry as a whole is more likely to be aware of changing conditions and to have appropriate responses available (Miles et al., 1993, p. 174). The last arguments have also been offered by proponents of diversity in top management teams (Herriot and Pemberton, 1995).

A third line of reasoning can be found in economic geography. Jacobs (1961, 1969, 1984) has advanced the idea that cities are the engines of economic development. In short she argues that cities are natural generators of variety (she uses the term diversity), and prolific incubators of new enterprises and ideas of many kinds (Jacobs, 1961, p. 156). However, she argues that cities do not generate diversity automatically. Her prescriptions for diversity include a high density of people; a mixture of work, leisure, and residence in the same area; a mixture of old and new buildings; and short street blocks (Jacobs, 1961). The combined effect of these conditions is to make it possible for people to interact and to communicate freely (thus creating “knowledge spillovers” in modern economic parlance), and to try out new ideas.
The latter point, variety deriving trying out new ideas, is also encountered in discussions of new and small firms in the knowledge economy. According to Audretsch and Thurik (2000, 2001), in recent decades large firms in developed countries were able to relocate much of their production to low-wage countries. Because of wage-disparity, developed countries need to look elsewhere in order to maintain low unemployment as well as high wages. The answer, for many developed countries, is to specialise in knowledge-based activities. New and small firms are a suitable vehicle in the knowledge economy because of the inherent uncertainty of ideas. Ideas need to be tried out, and it is difficult to predict in advance what will be successful. Firms cannot pursue all opportunities recognised, and instead focus on a few. If people have an idea that seems worth a try, and their firm will not pursue the option, they will have to start a business themselves, in order to prove the viability of their idea. Trial and error commercialisation thus generates variety, from which the most viable ideas may be selected and retained. Again, variety is posited as a linkage between new and small firms, and economic performance (Audretsch et al., 2004).

A fifth approach, emphasising the importance of variety, can be found in recent entrepreneurship literature on opportunity recognition. As a scholarly field, entrepreneurship has recently been redefined as being concerned with how opportunities are discovered, evaluated and exploited (Shane and Venkataraman, 2000). Shane (2000) shows that the actual opportunities inferred from a new technology depend on the entrepreneur’s prior knowledge. This prior knowledge of individuals is idiosyncratic and depends on the particular life experiences, educational trajectories, and information sources that a person has been exposed to. As a consequence, each person may discover different opportunities, and may have differing beliefs about the value of these discoveries (Eckhardt and Shane, 2003). Novel information in combination with prior knowledge gives rise to the recognition of opportunities, and because each person’s information and evaluation-set is different, variety will occur. Thus, start-ups carry the imprint of their founder’s idiosyncratic information and evaluation-set, resulting in variety.

HBIBs as drivers of variety: how and why
In this paper we focus on the HBIB, which we define as a business entity operated by a self-employed person working from home selling commodities or services in the market, using the internet as a key mechanism for servicing customers (Sayers and Monin, 2005, p. 7). HBIBs make a direct contribution to macro-economic outcomes (Stanger, 2000; Walker, 2003). Even if the business is run part-time and generates only part of household income, it still creates employment and economic revenue. However, our main argument is that HBIBs also impact on the economy is by means of the variety they generate, and that this variety is a consequence of the characteristics of how HBIBs operate, and the reasons why they are established. To this end we have investigated the best practices of HBIBs with respect to how and why they operate. Propositions are developed at the end of each section. The discussion will outline how our findings fit in to each of the theoretical perspectives discussed in the previous section.
Methodology
We conducted eight in-depth interviews with the owner/founders of HBIBs in Auckland, New Zealand. Sampled businesses were using e-technology to set up new initiatives selling both products and services, some nationally and others globally. The internet was then the key mechanism used for servicing their customers. The participating HBIBs were selected from a sample of internet-based businesses identified from a New Zealand directory of home-based businesses. The sample was chosen to give a selection of HBIBs providing a variety of products and services through the internet.

Using a thematic schedule, motivations and issues around working in the home environment and the use of the internet were examined and identified. In-depth interviews of two to three hours were held with each interview subject, and in some cases also with their partners. Workstations and work methods were observed, and photographic evidence was also collected. Return visits were held to follow up on areas that needed further development. Semi-structured interview schedules were used, based on themes that had been identified through an extensive literature review (Sayers and Monin, 2005). We focused on best practices, our research objective being to explore that HBIBs can contribute to variety because of how and why they operate.

Before we move to discuss the characteristics of this group of HBIBs in more detail, we first briefly describe the opportunities that these HBIBs pursue. Four male and four female operators were interviewed. Of these, four operated either with a business partner (two of these were with spouses). The interview subjects were all mature operators (over 25) with previous business experiences to draw on. Because of the generosity of our interview subjects we are able to publish their web site details in this article, enabling the reader to link through to the internet business to view what each business has to offer:

- www.vinote.co.nz is based on product innovations – wine cellaring software and barcode tags for wine bottles – and sells to a global wine enthusiast market;
- www.petsonthenet.co.nz initially started as a service to find lost pets on the net, and now also sells pet related products;
- www.howtolaw.co.nz is a self-help legal site providing on-line legal information;
- www.divorce.co.nz is an infomediary site that provides information, product and community to people coping with divorce;
- www.homebizbuzz.co.nz operates as a portal to New Zealand home-based businesses;
- www.tenantcheck.co.nz provides a site where landlords can check the previous tenancy record of incoming tenants before committing to the tenancy;
- www.childcareonline.co.nz provides is an infomediary web site helping parents make appropriate choices for day care for their pre-school children; and
- www.edfmodel.com provides a site specialising in the design of quality electric ducted fan model jet airliners and their components.
How HBIBs operate

Speed
A first characteristic is speed: these businesses work fast. All it takes to start an internet business is a computer and an idea: systems are built with most transactions being provided on-line. Businesses often use third party payment systems such as PayPal. E-mail invoicing and correspondence eliminate much traditional paperwork. In addition, sales require immediate fund transfer, so these businesses did not have to offer credit or manage a debtor’s list. Accounting is simple and fast:

We are a fairly paperless business . . . but so much of what we do is transacted over the internet that your e-mail really replaces your correspondence and a lot of your administration reports can be kept as soft records.

Multiple income
The HBIB owners were likely to engage in multiple forms of income generation, often working externally to the HBIB in the absence of other household income to support them working on their venture. Most of the operators were engaged in multiple job-holding arrangements. Or, if they were older, the HBIB operator was more likely to rely more on returns from accumulated investments. Some had a partner’s income, which allowed them to pursue their internet business without the pressures of immediate financial reward. Others had part or full-time jobs, a combination of work and other self-employment and or existing businesses:

I already had another company providing income and used my own financial resources in starting the business.

Yes I do work part-time in a communications role.

Another HBIB operator had four income streams: employee, contractor, and two businesses:

Oh yes indeed. I still have many jobs. I have two businesses and two jobs.

Several site operators had to rely on income resources external to their HBIB to establish their web sites.

My husband has had to take work outside the home. He was doing the web site sales full-time but we couldn’t survive. I wouldn’t hold it up as being a highly profitable business model. We thought when we first did our business plan that it would bring in reasonable returns on advertising.

So, HBIB operators had eggs in several baskets and these multiple income streams enabled experimentation because risks could be taken. Generally speaking, each of the HBIBs was able to be launched because income was partially provided from other avenues and so a sense of financial security was available. Despite this the hope of operators appeared to be to build internet businesses that would enable future financial independence.

Inexpensive to operate
One of the reasons that HBIBs seem attractive to set up is the low-cost of entry, and the relatively low operational costs. Since the costs of accessing the internet and of web
hosting have become very competitive and are not necessarily confined to national ISPs, the business can set up and run for under US$500 per year. As communication costs can be high, HBIB owners relied almost completely on their e-mail, and perhaps a cell phone. A trend amongst these businesses is to conduct as much communication as possible via the internet. Telephone calls were kept to a minimum and in many cases considered unnecessary:

\[\ldots\text{while the internet is critical, I use the phone very little. Compared to a traditional business it would hardly bother me if the phone was turned off.}\]

There were a few one-off costs that are the same for any business, such as the costs of forming a company and attending to legal requirements. But, there are no rents to pay, and in New Zealand there are positive tax implications to running a business from home (a percentage of the costs of maintaining the home, and the mortgage interest payments, can be claimed back against income as business expenses). However, generally speaking an HBIB can be funded by an individual without having to take on any significant debt. Only small amounts of seed capital were required to form the business.

We both put a small amount of seed capital in. But a very small amount and for the rest the business has had to be cash flow positive from day one. And I think that you cannot do that with a non-web based business \ldots\

The level of investment was low and typically provided entirely by personal funds:

\begin{quote}
No loans, just out of my own pocket. It wasn’t overly expensive to set the business up. I would think probably not more than $NZ6-8000 to develop the web site, get legal advice, and make it all happen and work.
\end{quote}

\begin{quote}
I already had another company providing income and used my own financial resources in starting the business.
\end{quote}

The immediate purchase of stock or administration materials normally associated with traditional businesses was not required to get the web-based business up and running:

\begin{quote}
I think with a non-internet-based business that your capital costs are higher generally because you may have stock that you have to buy in. We were not doing anything with stock until our second year of business. We didn’t have the shop when we first launched. We didn’t have a lot of publication costs, we weren’t printing on paper, we weren’t printing with ink, we didn’t have a distribution network that we needed to pay or anything like that and I think that is the beauty of the internet. It does give you a lot of leverage without the costs up front. But once you know that, you have to use it. You cannot sit at that point forever. You have got to move it forward.
\end{quote}

\textit{Lean}

The HBIB characteristic of being lean is related to HBIBs being small and virtual. HBIBs are small both in the physical sense of how much room they take up (perhaps as small as a laptop and/or a cell phone), how many people they are responsible for, and also how much turnover they have. The success of mainstream businesses is often measured by determining the number of employees and the gross turnover. HBIBs are not focused on building a big business or a company measured by its number of employees, turnover, stock or its assets, although this may occur. Their own measure
of success was in their ability to create revenue with minimum overheads, employees, and debt. Work was subcontracted wherever possible:

I did start out with some technological skills to start a web-based business, but employ others to do the technical thing. I continue to learn how to do the technical things myself . . . never employ anyone . . . sub-contract everything and pay on results . . . I sit outside the circle and work hard.

Keeping the business lean (easy to manage and not “bloated” and time-consuming), was important to all the HBIB operators we interviewed. Without a need for physical retail space, there was little point in obtaining premises to house additional staff. Rather, it was preferred that additional staff or contractors did not work in the HBIB owner’s home, but worked in their own space. Since the public face of the business is in cyberspace and there was little requirement for stock holdings or physical contact with customers, there is equally little need to rent or purchase premises. Many people use a spare bedroom in the home, or the garage:

We are in Devonport because we are lifestyle focused right! And so we don’t need to deal with the public. Well, generally maybe one or two if we had a physical presence, but it’s a home, not a place where we do business.

But we very much want to keep people working from their own homes, as much as possible. Spatial dislocation (not being reliant on a particular place for work) is a characteristic of HBIBs. As well as using any available niche at the home, HBIB operators work from cars, public transport, in cafes, or even parks and beaches:

The term Home-Based Business implies you are stationed in one place – at home . . . It doesn’t matter where I am, people wouldn’t know I was sitting on the beach in Australia . . . You only appreciate it when you start living it.

As well as keeping the space used to a minimum, the size of the business is also kept deliberately small. Instead of hiring staff to accomplish business growth as traditional companies might, there was a high priority placed on establishing partnerships both virtual and non-virtual. When asked about their views on taking on staff as their business grew, HBIBs typically viewed their networks as part of the organisation, and saw little need to take on the expense of staff when other organisations contributed more services, product and capability without having to hire it in. One respondent articulated the flexibility and inter-dependence characteristic of this model:

It is very hard to say. It’s one full-time and that’s me. But we have so many people working with us and leveraging what they are doing. It’s a different model. I would like to keep that open. Although I am the only full-time person working in the business, I don’t think that is an accurate representation of the business because we have at least 20 other people or organisations that we work with who we are affiliated and who provide services or products on our behalf or we do the collection of the orders but they do the outsourcing of the work.

Smart
Keeping costs as low as possible was an important issue for the HBIBs we interviewed, and one way to facilitate this was to work smart. Working smarter meant working less hard in the long term for maximum financial gain. For example, this can be seen most clearly in the ways HBIBs handled their marketing. Effective cyber-networking

Smart
replaced traditional promotion methods such as advertising, which was also much cheaper for the businesses concerned:

Our costs are less than $1000 per year ... But that is because of leverage. We have 100,000s of people telling others about us. I won't say we incentivise it, but we do make it smart for them to do this. And so word of mouth grows ... 

While many had tried various forms of traditional advertising, they returned to the internet and focused heavily on trying to create virtual partnerships, reciprocal links, building a database of users and doing joint marketing with other enterprises. If the mass media was used it would be by deals done in partnership rather than purchasing advertising space. This took an exchange of value between businesses. The small business provided a regular service in return for regular media exposure:

We also do things like provide a tip a week to the New Zealand Herald who publish it along with our URL. If you are doing things like that then you don't need to spend money on marketing. And in fact it works better, we do huge amounts of marketing but don't spend a lot of money doing it.

Interestingly, forms of e-marketing such as linking to affiliate sites and trade directories were found to be of little use to HBIBs, since the benefits are largely one-sided:

A lot of people use affiliates but this isn't trying to help each other. Affiliates have a kind of mother-daughter relationship. The affiliates benefit mother sites but rarely build the affiliate's business.

It is tempting to proliferate but I have decided to stick to one [internet venture] and hang a few things off it because search engine presence is too important. We don't list on trade directories as I am sure that our buyers mostly find us through search engines, either on their own or because of word of mouth ... I feel trade directories are more or less a waste of time for us.

Most operators instead focused on building good search engine presence:

We spend a lot of time trying to get search engine optimisation and good linkages to other sites. I have just discovered a program ARELIS, it goes on the web and looks at linkages, like my competitors or similar products, ... we look at them and then write a letter to web sites to say “What about a reciprocal link?” About 60 percent of people come through the search engines.

I would like to do TV ads but TV advertising costs are prohibitive. So I am just using search engine capacity.

Constantly learning was important to HBIB operators. Their reliance on the internet demanded this approach. Trial and error was part of the way they thought and operated, and they took this approach to their learning. Learning was self-directed and ad hoc: that is, it occurred when and where it was needed to solve problems and challenges as they presented themselves.

In summary, these cross-case comparisons generated five characteristics of HBIBs – Speed, Multiple Income, Inexpensive to Operate, LEan and Smart, generating the acronym SMILES. The literature confirms these characteristics. Operators can work with great speed, once an opportunity is recognised, because the whole operation is designed as a web-based business from scratch (Jackson and Harris, 2003).

Traditional HBIBs as drivers of variety
businesses have to address how to redefine their business strategy to incorporate e-commerce and need to re-evaluate company structure and culture to become more customer-focused and driven (Jackson and Harris, 2003). Large businesses are at a disadvantage with respect to HBIB and lack the speed and focus of these new enterprises. When the business is initially expected to generate only part of the household income, there is financial room to test an idea for its commercial viability (Carter et al., 2004). Idea testing is also enhanced by the fact that HBIBs are inexpensive to begin and operate (Fairlie, 2006; Turban et al., 2004). By working lean, for example by employing subcontractors, and working from one’s own house or car, in cafés, parks and on beaches (Felstead and Jewson, 1999; Felstead et al., 2005a, b), and smart (e.g., targeting search engines instead of buying expensive advertising space) the businesses can be sustained, a strategy that has been referred to as molecularisation (Tse and Soufani, 2003). This leads to the following proposition:

P1. The operational characteristics of HBIBs are SMILES: speed, multiple income, inexpensive, lean, and smart.

Why HBIBs operate
So far we have painted a picture of HBIB by discussing their SMILES characteristics: that they are speedy, on multiple incomes, inexpensive, lean, and smart. But, doing business itself (i.e. making money) is not the only, or even the most important motivation for setting up a business from home. The HBIBs in our sample did not only measure their success by categories such as turnover and the number of employees. Freedom and independence from traditional workplaces was an obvious motivating factor for our interviewees. Analyses of our cases showed that HBIB operators had several reasons for working on the business, all related to autonomy and freedom. Operators wished to have and maintain total control over their venture; they expressed the desire to minimise their obligations as employers of others; they also did not want to be employees – they wanted autonomy to make their own decisions and to be free from employment obligations; operators valued spatial freedom – that is, the freedom to work from anywhere that internet businesses allow. Finally, the HBIB operators saw the internet as providing possibilities for leveraging their labour so that they could work less. They hoped that eventually there would be less person-hours involved (as in the start-up phase), so they could enjoy an income stream from their business and pursue other ideas and ventures. Whether or not this last desire eventuates is the role of a further research project, but this desire was expressed unanimously by the HBIB operators that we interviewed.

HBIB operators appeared to enjoy having control over the entire business, and they valued their independence. Furthermore, this desire for control and independence was related to the size to which they wished their enterprises to grow. In short, they did not want to grow beyond the point where control and independence would be compromised. To them the traditional concept of “growth”, that business success meant expansion, appeared to be rejected.

In addition to control over their businesses, HBIB owners wanted more control over their time. For these HBIBs, spending hours in traffic and being restricted to specific hours of attendance was rejected in favour of the freedom to build work around their families, interests and to achieve their desired lifestyle:
I decided to work from home as a lifestyle choice and I was sick of sitting in traffic.

I think because of the age that my son is at now, maybe a couple of years down the track when he is at school it may be quite different. But right now it suits my lifestyle.

In addition interviewees wished to be free of the constrictions often associated with traditional employment. Examples cited from respondents included: working for someone else within designated hours, lack of decision-making power and wasted down-time associated with being an employee in an organisation:

... we want that freedom to do it the way that we want to do it. Although your time may in some instances be more condensed, you've generally got a lot more time available. It is a very productive way to work, so long as you manage your travel commitments. Again, different businesses are different because some of them are on the road all the time. But you have comparatively less down-time and I think significantly less (it's certainly my situation) than you have if you are in a working environment.

This is not to say that external pressures of work did not impact on HBIBs. Rather, those individuals with an HBIB felt they had more control over their time, but this had to be well managed. They hoped that outcome of developing businesses was a declining in working hours. In all the HBIBs featured, there was no requirement to work 40 hours a week: some spent a few hours and others around 50 hours:

And the more I became interested in business the more I really wanted to establish a business that could exist without me and so moving into a home based internet business was a conscious decision.

The total business takes about two hours a week. Most of my business is done by e-mail. Almost none is done by phone. The e-mail inquiries and the banking, that's all that is involved. They do credit cards through the system. It's a beautiful business to run. It just runs itself.

It gives you a huge amount of leverage because you can automate 90 per cent of what you do. So instead of employing 90 people you've got just yourself and a computer.

The motives for people to start and run a HBIB are typically a mixture of balance and autonomy (Soldressen et al., 1998). Balance motives, also called lifestyle motives, concern the wish to integrate the business with other interests such as the family, community, other work arrangements, and leisure pursuits (Reihana, 2005). In order to be able to balance these interests, autonomy is a prerequisite. The autonomy motive implies that people like to decide themselves on what they do, how they do it, and when they do it (Van Gelderen and Jansen, 2006). This leads to the second proposition:

P2. HBIBs are mostly started for autonomy reason.

HBIBs as generators of variety

Variety can be brought about in many ways. Aldrich and RueFf (2006, p. 18) define variety as any departure from routine or tradition. Of course a new service or product adds to variety, but also a new distribution mode, business model, business process, organisational form, or previously untapped market niche can emerge. The HBIBs we studied contributed to variety in all those categories.

All of the HBIBs came up with something that did not previously exist. Several of our HBIB operators started their business because they had a social issue or personal
need, which was not being catered for existing businesses, not-for-profit, or government organisations. For instance, there was no organisation, company or charity that openly acknowledged and serviced divorcees. Divorce.co.nz provides a community web site with information to assist people through the process. Lost your pet? Pets on the Net provides a central forum by which you can register lost and found pets, and discuss pet issues with other pet owners. How-to-Law provides access to legal information for New Zealanders and the ability to purchase contracts and legal information without incurring costs. ChildCareOnLine offers a free directory and community web site for soon-to-be-parents enabling them to make informed decisions about child care options. Likewise there was little a landlord could do to avoid bad tenants until Tenant Check was formed allowing landlords to create a national database of bad tenants so they can avoid future financial losses on their property investments. He found it difficult to fit into existing informational systems in business directories:

They wouldn’t let me list under Real Estate, which is where I wanted to be, and in the end I was forced to go into the Property Management section that is not associated with me at all. It may have brought me some business but it was minimal and wouldn’t have paid for the advertising.

The internet was in all cases the place where customers were reached. Homebizbuzz went furthest in creating an online community. Here, HBIBs could find information, but also, if it serviced other HBIBs, provide information that would potentially attract customers. Internet business operators were both creative and inventive. They tended to class themselves as “Inventors”, and for several operators, their previous start-ups involved entrepreneurial ideas:

It’s very hard to mix and match … My curse is that I used to be a farmer, and I used to win prizes at the fields days for farmers’ inventions. Then I got to thinking I was an inventor. Invention is part of the entrepreneurial creativity. It drives you to do things.

I guess I have always been an entrepreneur anyway. I am an inventor. An invention is a wonderful thing. I had a wonderful product so I went to the patent attorney. He loved it, so we went ahead and sure enough there was no one in the world who had done it. All I need is $50,000 for tooling and I could do it. If you can find me an angel who will invest in my product I would be very happy.

We definitely talked a lot about doing our own thing and we have crazy ideas about stuff. So I guess in that way I feel that we are entrepreneurial.

Variety in the form of new businesses processes and routines have been discussed in the previous section where the SMILES characteristics of HBIBs were noted. Together with the creation of online communities, the introduction of business models, the internet distribution mode, and the offering of previously non-existing products and services, all provide ground for the following proposition:

\[ P3. \] HBIBs give rise to variety.

Our final argument is that HBIBs bring about variety in the economy as a consequence of how and why they operate. The autonomy orientation of HBIB founders supports independent opportunity recognition. An autonomy motivation implies that people like to make up their own minds about what they do, and how and when they do it.
Therefore autonomous people are less conformist and more likely to come up with something unconventional. When owners/founders of HBIBs are motivated by notions of freedom and independence, variety is likely to result. The SMILES characteristics are conducive to the creation of variety because they cause efficient implementation. Being speedy, inexpensive, lean, smart, and using multiple income sources allows ideas to be tested for their viability. This brings us to our last proposition:

\[ P4. \] HBIBs generate variety because of why and how they are operated.

**Discussion**

While we can show variety emerging on the firm level, we can only extrapolate this to the industry or national level. We will explore our final proposition argument by revisiting the five theoretical positions that argue for the broader importance of variety to the economy, and discussing them again in the light of our findings.

From an evolutionary perspective, variety is important because it is a prerequisite for selection and retention. HBIBs contribute to variety by introducing new concepts for services and products, by reaching out to previously untapped market segments, and by using new business models and processes. Organisational population ecology shows that new niches are initially filled by what are called r-specialists – firms that can rapidly enter the market and that serve a small and specific consumer segment (Zammuto, 1988). Because of their SMILES characteristics, HBIBs can play this role. That the HBIBs wished to remain small does not mean that the variety they initiate will not be selected. According to Nelson and Winter (1982), firms operate in a selection environment in which they search for innovations to replace their current routines. Particularly important is experimentation and feedback, and this is exactly what HBIBs provide to the industry. This helps existing firms to select those new routines that hold the most promise for competitive advantage. If practices of HBIBs are adopted elsewhere, they enhance the existing routines of other organisations (Aldrich and Martinez, 2001, p. 44; Murray et al., 2002).

When applying insights from evolutionary theories to strategic management, learning from variety should be emphasised. Take, for example, the hotel chain versus the bed and breakfast (B&B) in the hospitality business. Each family-run B&B offers a somewhat different experience, because of the idiosyncratic characteristics of the owners, the property and the location. If a hotel chain wants to expand its offerings, sleeping at these micro-businesses would be one way to get new ideas. Similarly, internet businesses are well advised to keep an eye of HBIB small scale initiatives. HBIBs are an expression of new ideas which can be incorporated by incumbents into existing practices, or at least be made part of the excess capacity in the firm’s stock of adaptive behaviours (Miles et al., 1993).

Third, we have noted Jacobs’ perspective that cities have the potential to generate variety. The HBIB case is interesting in this regard, because they can operate from any location, not necessarily an urban setting. In our sample, half of the HBIBs operated from the city, half from the countryside. Some were very active in networks; others were not. Perhaps in the case of the HBIB it is the internet itself that should be seen as a big city, in the sense that there is a demand base broad enough to sustain variety.

The HBIB model greatly facilitates trial-and-error commercialisation, which is such an important feature of value creation in the knowledge economy. The HBIB operators in our sample each possessed specialised knowledge – for example knowledge of...
airplane models, divorces, law, home business, wine – that was sold directly and/or used to attract traffic to their web site, opening up opportunities for advertising. While the autonomy orientation was important for getting authentic ideas, the SMILES characteristics assured that ideas could be tried out in practice in an efficient and effective way. They simply gave it a go. For the knowledge economy, the importance of the HBIB model should therefore not be underestimated.

Finally, the opportunity recognition literature stresses the importance of the idiosyncratic knowledge and beliefs. Several of our HBIB operators leveraged off negative experiences to solve problems; in particular, they used their experiences of being let down by large corporations, or their experience as dissatisfied consumers. These experiences were a fertile ground for gaining their business ideas. In combination with the knowledge they already possessed or accrued, they were able to think of alternatives. The SMILES characteristics allowed them to express their idiosyncrasies. Alvarez and Busenitz (2001) suggest that differences in information and beliefs form a competitive advantage. By means of HBIBs this competitive advantage can be exploited.

For policy makers who accept the propositions and perspectives above, we suggest two policies that have immediate positive effects for HBIBs. First, governments can install generic policies that facilitate starting and running a business. Autonomy-oriented business starters do not like to be told what to do. However, they do appreciate access on their own terms to training, education, and mentoring facilities. Second, HBIBs surely appreciate simple and few business laws and regulations. It is imperative for governments to reduce the red tape constraining small businesses. Our cases all reported on the burden of compliance and wished for simple and few business laws and regulations. Compliance burdens fall disproportionately on HBIBs, which are often run part-time. Big firms can hire staff to fulfil compliance obligations, but HBIBs as a rule do not. Facilitating easy of entry and ease of doing business contributes to increasing variety in the industry, thereby increasing the opportunities for industry learning and adaptation.

Conclusion
The main idea presented in this article is that HBIBs may ultimately be of greater impact to the economy than just through their direct economic contribution. Using a multiple case study approach involving eight HBIBs, we have shown that HBIBs are characterised by their SMILES features and their autonomy orientation. Our argument has been that the how and why of HBIBs makes them drivers of variety. We have built our argument employing five theoretical positions that assume variety to be a linkage between entrepreneurship and economic growth. In the discussion we revisited these five theoretical positions outlining for each perspective how HBIBs are the generators of variety because of how and why they operate.

The HBIB owners we interviewed were not inclined to grow. However, we contend that growth may very well happen anyway. HBIBs can grow beyond the initial expectations of their owners. HBIBs can directly help others to grow when they contract out expansion. And HBIBs can indirectly help growth when their ideas are incorporated or further developed by others. Because of the variety HBIBs generate, they contribute to the economy over and above their direct and indirect contributions.
in terms of revenue and employment. This contribution is especially important if the industry serves international markets, thus bringing in export currencies.

To conclude with a metaphor, the environment of HBIBs seems rather like a fertile tropical rainforest: the atmosphere is fecund with possibilities; there is a clamouring of ideas; and there is fierce competition that weeds out the weak and less well-adapted. In this prolific atmosphere, which is enabled by the potential of the home computer for communication and for extending and using knowledge, operators are in an ideal environment for trial and error commercialisation, with minimal risk. Micro home-based businesses are often ignored in the business literature, and even in the small to medium sized enterprise literature (Sayers and Monin, 2005). They are not considered significant enough for many researchers and governments around the world who often appear to be confused as to their significance to the economy and employment. Using the rainforest metaphor again, it is perhaps timely to remember that it was not the dinosaurs that survived, but the smaller organisms. They were able to take advantage of their new surroundings when the atmosphere and climate changed dramatically, probably due to one or more cataclysmic events.

References
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Further reading

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