International Journal of Innovation Studies 4 (2020) 105–115



Contents lists available at ScienceDirect

International Journal of Innovation Studies

journal homepage: http://www.keaipublishing.com/en/journals/international-journal-of-innovation-studies



Innovation and strategy: Does it make a difference! A linear study of micro & SMEs

Kevin Blanchard

Department of Strategy and Enterprise, Lincoln International Business School, University of Lincoln, UK

ARTICLE INFO

Article history:

JEL classification:

A13

L21 M21

030

043

R12

Keywords: Business Entrepreneurship Strategy Rural

ABSTRACT

Innovation is known to be used by some businesses to help them differentiate their trading position within a specific locale. Research has also proven that by adopting a strategy, aims can be achieved and turnover increased. This study will endeavour to use these two key areas to evaluate how, they are used and to what extent they can improve business performance. The study was carried using 145 Micro and SME business, located within the rural county of Lincolnshire. The businesses were taken from specific locations on a random basis which included rural, remote rural and urban settings. Initial findings found that businesses situated within remote areas performed better than those within the other test areas, leading to the conclusion that they use innovation as a strategy to outperform their business rivals.

© 2020 China Science Publishing & Media Ltd. Publishing Services by Elsevier B.V. on behalf of KeAi. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

1. Introduction

It has been noted by several authors that adopting and implementing specific innovative practices, aligned with a level of entrepreneurial ability, can aid to the survival and longevity of many Micro and SMEs, brought about through a constant examination and review of the disciplines of decision making and strategic awareness (Acs & Audretsch, 1993; Drucker, 2014; Galvan-Martínez et al., 2019). It has further been established that innovative activity may be more proactive within individuals, who have a sub-set of well defined entrepreneurial characteristics; which could result in higher levels of creativity and vision, and thereby being able to both spot and take advantage of opportunities, which in turn could aid to the longevity and sustainability of both projects, businesses and ecosystems within local communities (Esparcia, 2013; Spigal & Harrison, 2018; Ferreras et al., 2019). Chell (1985) also subscribes to the idea that entrepreneurial businesses are driven by people who are alert to opportunities and act upon them for the pursuit of capital gain, thereby enabling a level of sustainability and continuity, both within the locale and region.

When debating the concept of entrepreneurial and strategic thinking, and its many implications on business performance, it can imply that the additions of certain aspects of business practice need to be part of an inclusive holistic process, to achieve its visionary objectives (Wickham, 2004). It is through processes such as these that the examination of structures and operational systems within a business are reviewed and synchronised to that of the owner/manager. The owner/managers which accept such a review are often the more able and established ones who understand the benefits of such undertakings

E-mail address: kblanchard@lincoln.ac.uk.

(Jackson, 2016). It is businesses such as these, which often have higher levels of entrepreneurial awareness, and channel this into the mechanisms of change, innovation in order to achieve a vision. Some may not wish to adopt such actions, in which case this may have an outcome of limiting both their present and future business potential and also limit profitability and longevity (Stam, 2017). In such cases, this may have the affect of influencing and changing the framework they operate in; which is due purely to the dynamics displayed by other entrants to the market/location. Interestingly, these dynamics have the ability to identify individuals which have a limited amount of entrepreneurial awareness, and an inadequate perspective of their micro and macro operating environment (Stam, 2017). This clinical view of innovation brings into perspective the stark reality an effective innovative operational strategy may have on any business. It is widely accepted that both innovation and entrepreneurial activity are synonymously interlinked and offer a symbiotic relationship working for the benefit of the business (Shane, 2003) (Radas & Božić, 2009; Randelli & Martellozzo, 2019). In some cases it can influence both the ability to spot and act upon opportunities through the lack of recognition of present and future possibilities, which are known to be intrinsically linked to the availability of a strategic vision (Audretsch et al., 2017).

It is understood that such actions are often influenced and linked to the level of risk propensity, one is willing to undertake, along with the level and type of creativity demonstrated and the vision attached to such actions (Shane, 2003). This is so often present in owners/managers who can and often do, influence the strategic direction of the locale they operate in; this is none more so than businesses which have a similar focus and have a symbiotic relationship/vision, but still have a level of autonomy/rivalry (Drucker, 1997). This can often be the case with the remotely located business, where they have an autonomous influence over their geographical location, which in turn could also be derived out of the analysis of the strategic objectives adopted and desired by the business owner/manager (Birchall et al., 1996; Didonet et al., 2019). It is possible that many of which are influenced through a variance of innovative abilities and are able to stimulate both the growth, depth and range of decision making processes, which in turn can bring about a change of direction and a re-thinking of the strategic necessities of the business (Jackson, 2016). This scenario can become more complicated with the introduction of the concept of entrepreneurial strategic thinking, which has a specific mode of analysis and is firmly embedded within many central management practices. It can also offer a proactive, risk-seeking orientation, enabling an individual to differentiate themselves from their neighbour, by offering and employing a level of service which can change the dynamics of a given geographical location. Through this process it can enable a level of sustainability to be injected into the micro climate of the area, thereby helping fellow owners to provide to both grow and inject new capital into the community and helping it to grow and attract new entrants (Keszey, 2019). In some cases this may lead to a realignment of their strategic vision through a realisation of the changing dynamics of their region or locality, and in some cases thereby limit their subsequent growth and success of the business, which is a realisation of the entrepreneurial profile whereby some owners can spot and act upon opportunities and others, not (Wang and Han, 2011).

In cases such as these, it is not a traditional bureaucratic approach to problem solving, planning or implementing a new strategic objective; as that would not allow for any creative, pro-active and risk-seeking orientation. It is more an implementation of a process driven mechanism which further offers a method of an optimistic entrepreneurial spirited approach to a 'root and branch' examination of a business that includes an assessment of both internal and external customer orientation, for the purpose of applying future strategies (Steiss, 2003).

The aim of this paper is to examine and debate the effectiveness of adopting innovative practices within Micro and SMEs situated within rural, remote and urban settings, with the aim and intension of achieving a level of achievement for both for the community and area. The mode of assessment and analysis will use the family of entrepreneurial characteristics, to examine if it can have an effect on business performance, their level of appliance and use of innovation in relation to applied strategies. This will be done by the testing of the following hypotheses.

- **H1.** Can the choice of location make a difference to business performance?
- H2. Does employing an innovation strategy influence the growth and sustainability of a business?

1.1. Theoretical background

The term entrepreneurship is often used within a variety of different contexts and varying connotations to describe and define an individual which may be viewed as being exceptional in some way. Evidence suggests that the term "entrepreneurship" is often misused when applied to describe both business practice and performance, invariably in circumstances where no exceptional abilities or characteristics are evident within the firm (Lillington, 2015). Whereby, the area of sustainability takes the viewpoint of offering a continuation and longevity, not short term or profit maximisation (Ahmad et al. 2019). It is these two and sometimes opposing outcomes which tend to often form an attraction towards a successful effect for an economic area. It can be that this suggests there are a number of academic possibilities and permutations available when trying to formulate a concerned and effective approach to both the understanding and application of entrepreneurship, and entrepreneurial behaviour within a true precise form. Early references in relation to the term can be found in the writings of the economists Cantillon (2010), and Jean Babtiste Say (1964). Neoclassical economists found correlated activity between entrepreneurship and the market economy, where demand-supply and rational thinking were the deciding factors of entrepreneurship. In the early 20th the century economists including, Hawley (1907), Knight (1921), shared this neo-classical view and tried to build on this early foundation work. Later discussions centered on entrepreneurial risk, learning, decision

making in the face of uncertainty, and the cognition of entrepreneurs. Schumpeter (1934a), Heyek (1948), Mises (1949), Leibenstain (1968), Shackle (1970), Kirzner (1982), Casson (1982), Choi (1993), and Drucker (1997) etc, have all contributed in many different ways in providing alternative angles and multiple viewpoints focusing on the trait areas of risk, uncertainty, and learning/decision making patterns of economic agents. When relating these academic debates to contemporary opinion on the relationship of the entrepreneur, little synergies exist. Arguments could be made that both the limitations of its meaning and the many 'sub-sets' used within our society are placed within an 'all embracing term'; such a viewpoint tends to bring into disrepute its true meaning.

The development of a theoretical framework which included key elements of the entrepreneurial ethic was developed in parallel with economists, sociologists and psychologists, who were also attracted and responsive to the idea of entrepreneurship. Sociologists including Weber (1922), Cole (1949), Johnson (1951), all attempted to conduct research into the history of entrepreneurial behaviour, its meaning and development over time. Hoselitz (1971), Young (1971), further examined the area of social marginality, Hannon and Freeman (1977), Thornton (1999), Aldrich and Martinez (2001), have further developed and contributed to theories of an evolutionary approach to the area of entrepreneurial behaviour. Glade (1967), Greenfield and Strickon (1981) Gardner, 1985), centered their efforts on situational approaches, while Chell (2000) developed the idea of social constructionism. Psychologists including McClelland (1961) and Hagen (1962) developed the idea that traits were essential criteria for explaining entrepreneurial theories; whist Rotter (1966), Gilad (1982) and Kets-de-Vries (1977) built upon the associated area of locus of control. With this in mind and the research implications this study raises, such definitions and connotations surrounding entrepreneurial theory, can change the contextual relationships of a particular group, in the case of this paper, the group are urban, rural and remote rural Micro/SMEs.

1.2. Micro/SMEs

Previous research based on the relationship of entrepreneurial activity within Micro and small businesses, within the premise of identifying fast-growing businesses so as to be able to target limited government resources more effectively, can be traced back to Storey (1989). It was envisaged through a specific process, that certain businesses would be identified so as to target specific capital and resources to ensure a more structured, and deliberate growth pattern, one similar to that of Greiner (1972) or Churchill and (Lewis, 1983). In so doing it was hoped to avoid the more common reasons for failure, which include a lack of management abilities (Greiner and Cummings, 2009). A number of authors' including Marshall (1920), Goffee and Scase (1987), and McKenzie and Hillel (2007), all advocate that the advancement of individuals emerges out of the development of other people and organizations. By adopting this approach, one must distinguish between both theory and training, and these areas should not be confused with the idea that individuals have both innate and latent talents. What is being proposed is that a process of development, based on or around either latent or embedded abilities; which finally culminates to a sustainable level of attainment, is attained when individuals achieve a given level of entrepreneurability and awareness of their environment. What needs to be understood at this stage is that the level of entrepreneurial ability is in relation to the location, entrepreneurial awareness and strategic vision. What can and often does happen is an individual's decision making processes synchronise with given strategic goals for which they may have well developed or just latent ideas, driven by a given, but movable need. The interesting point based on this realisation, is that solely within a theoretical perspective, it suggests that by evaluating such avenues, it may denote a specific level of strategic thinking ability brought out of the innovative need of either the owner/manager or customer base of that business, and thereby by default, a devised entrepreneurial strategy may emerge from the implementation of such a process. It can also be argued that having a set of highly developed specific skill sets may enable certain business owners to outperform other businesses within given and similar geographical locations, and in so doing, enable them a distinct advantage over others (Blanchard, 2015). To address these areas, comparisons need to be made between both rural and remote businesses including the urban perspective, which in turn would lead to an examination of the innate skills sets used by businesses within each location.

These viewpoints build upon some theoretical Schumpeterian elements (1934a), whereby it is stated that the innovator acts as a dynamic agent for both the economy and change. This academic debate is interesting when applied to Micro/SMEs, and related to the rural economy, whereby in some cases it has been established that small rural firms need a catalyst in order to grow (Goetz et al., 2010). The innovative behaviour of the business owner can be viewed as the catalystic change agent, who not only spotted an opportunity over others, but more importantly and differentially, also act upon it (McKenzie and Hillel, 2007). By adopting such a viewpoint, it can become a more interesting scenario when such ideas are aligned and equated within the nuances of a rural framework. These specific and differentiated conurbations may go some way in explaining how local environmental dynamics can create specific opportunities and offer a form of innovation in relation to a strategic objective (Gartner, 1988) Gudmundson, D et al., 2003). It needs to be understood that it is not a matter of debate how you define rural or their specific and individual nuances which are associated directly with the geographical location; it is a commonly accepted definition that such areas do face significant challenges and more so the remote rural areas (Hoggart, 1990). It may also be argued that this is not purely the domain of the rural or remote entrepreneur, as it may and often does take place within the confines of an urban environment also. In these situations individuals with some entrepreneurial flair may act upon identified potential possibilities, and in so doing establish a successful business through a positive action with their environmental needs. The vibrancies of one location are not easily translated or interchangeable with the other. It can also be argued that it is the remote rural entrepreneur needs to be more alert to their environment than the urban business owner, due to the transient nature of their local populous and customer base.

2. Defining areas of a strategic vision

It has been debated by many authors' that having a strategic vision may be viewed as an anomaly, in so far, that by adopting such a practice can denote that the business has evaluated every aspect of their future direction, including the traits, aspiration, enthusiasm, risk propensity and core values (Ireland et al. 2009). The notion of such can become problematic when placed within a constantly changing dynamic of a remote or rural environment, which is why a comparison needs to be made with the more stable environment of the urban business. It can only be evaluated through a better understanding of the applicable process of strategy, only then can it be viewed as an integral element of entrepreneurial behaviour and become a contextual setting in understanding both the person and business (Wickham, 2004). Adopting such an observation can open up a plethora of ideas, viewpoints and perspectives, whereby it allows a vision to be adapted, changed and placed within the desired outcomes of a business, and be directly related to the entrepreneurial perspectives and characteristical behaviour of the owner, including being able to offer a level of innovation consummate with the needs of the area and customer base (Chell, 1985).

Although Hoffman et al. (2008) indicates that the process by which businesses innovate is unclear, there is an agreement that it has strong links with their geographical location (Radas & Božić, 2009). Through the identification of links such as these that it enables the debate surrounding key entrepreneurial characteristics and traits and their relationship with the formulation and influence over innovative practice, to be examined in a new light and framework (Shane, 2003) (Keizer et al., 2002). This latter point can highlight the level of awareness the founder/owner of the business may have in relation to their location and customer/business requirements. Interestingly, this in turn can be linked to the growth potential of the business, offering a strategy for continuous or limited growth (Leitch et al., 2010).

Strategy formulation and its sister element strategic awareness, are concepts concerning the ability to read the connections between the needs of the business, the desires of the owner/founder and the opportunities available within a location in which the business operates in. Actions such as these lead to a level of innovation being transformed within the business, benefitting the customer base as a result. It is the knowledge associated with the individual and the needs both internally and externally which can be linked to the entrepreneurial levels exhibited by the owner/founder/manager. The use of this knowledge can define the level of entrepreneurial ability displayed by the owner/manager in relation to their level of risk taking ability. All of these elements form a composite from which a strategic vision can be fashioned and brought about from a theoretical perspective, playing a major part in the debate over both the role of traits and characteristics may play within an overarching entrepreneurial theory (McClelland, 1961).

A contrasting view which endeavours to embrace a catholic ethic of entrepreneurship and build upon the proposal of entrepreneurial strategic awareness by adopting an innovative stance to the development of a business model, is that of Llewellyn and Wilson (2003) whose debate brings together a plethora of elements, singled out by authors' over many years, in order to give a consensus embracing the term, they state: "....some people relate to a set of personal characteristics (especially risk taking, creativity and ambition), a set of behaviours by others (starting a business and being innovative). It is through this ethic that entrepreneurship can be viewed as a pure theoretical construct in one sense, although it is also implicitly tied to real world research findings". They are effectively stating that there is no one specific definition of an entrepreneur and it is up to researchers to prove their viewpoint through robust and rigorous research within the parameter of their overarching and defining argument.

It has been stated by some that Micro/SMEs are often portrayed as both lifesavers and a central focus for the community and the economy (Hannon, 2005). Businesses such businesses, can often be the sole employer or one of only a handful within a given location or area, which is often seen as more prevalent within a remote or rural locality (Hannon, 2005; Rothwell & Zegveld, 1982). Within such locations it is often the vision of the business owner to become more dominant within their location, this can form part of their overall strategic vision, thereby minimising interloper intervention. Physical parts of the strategy may take the form of innovative personal sponsorships or grants for local good causes (Blanchard, 2015). The entrepreneurial business often capitalises upon such situations, and exploits it fully to their overall advantage; thereby, when examining these practices, they can be seen as a key and important element of applying an effective strategic vision for rural or remote businesses. Through the implementation of such methods, it enables them to manufacture, identify and act upon opportunities, enabling them to differentiate their business from others within the locality.

Such views and practices are also advocated by Schumpeter (1934a) who broadly outlines that innovation within a tripartite methodology, is encouraged through the technological, political and social aspects of society. It is through the recognition of such and the action of acting upon the opportunity that the small business encourages and develops a realistic strategic vision which is tailored to the needs and direction of the business. Because the number of firms which truly innovate within a technological framework are fairly small; the emphasis of innovation within the Schumpeterian perspective is a good one to adopt (Keizer et al., 2002). It is through such views of what elements need to be included within the strategic vision become apparent and only then can be acted upon and honed to fit both the ideal and vision of the business owner. Gray (2006) states; "If small firms are to fulfil their expected innovative function, it is important to better understand the causes and effects of these knowledge, capabilities and skills gaps in relation to SME growth".

It is clear to see that business owners need to be innovative and learn continuously from social interactions that include many participants (Rosenberg, 1976) these can comprise of customers, consultants and competitors-external factors, each of which will have an influence on the overarching strategic vision of that business. Change, can and often is a catalyst for innovation; it often provides the opportunity for systems within a business to be constructed in a different way, that may

prove more efficient and profitable (Van de Vrande et al., 2009). If systemic innovation were inherent within an organisation, that organisation would be purposefully looking for change opportunities within all its mode of operations; these would be on both a macro and micro environmental basis. Furthermore, structural organisational change can often lead to an increase in facsimile innovation, brought about by a new focus being adopted through its relationship with organisational change (Radas & Božić, 2009) (Martinez-Roman et al., 2011). As all innovation it involves change of some sort in order to make cost/production savings and improvements, these changes could take place within the areas of product, practice technology or market, because what innovation is not, is stable, it adopts the fluidity of market forces, needs and demands which invariably involves new technology (Mole & Worrall, 2001). Gray (2006) states; "If small firms are to fulfil their expected innovative function, it is important to better understand the causes and effects of these knowledge, capabilities and skills gaps in relation to Micro/SME growth".

3. Method

The applied methodology adopted for this research project is based on a survey of Micro/SMEs owner/managers located within urban, rural and remote geographical locations. The purpose and rationale of which, was to examine how a combination of entrepreneurial awareness, innovation and strategic vision may affect levels of sustainability within each of the geographical locations. The trading nature of the 145 businesses Micro/SMEs (73 Micro and 72 SMEs) ranged from micro/ small agricultural merchants, cheese manufactures, small builders to estate agents and holiday letting sites. The survey consisted of 55 questions based on and around key known entrepreneurial characteristics and processes, with specific Likert scale feedback selections. The design of the questions were detailed, in so far that each could be attributed to specific task or action a business may perform, thereby enabling a synergy to take place between the concepts of strategy and entrepreneurial values. Through such a methodology, it was geared that the response would determine both the level and style of entrepreneurial behaviour captured, in relation to areas of entrepreneurial characteristical determination, in relation to the research parameters. Specifically, the questions had two separate themes; one centered on entrepreneurial characteristics, the other on business growth, in order to demine if entrepreneurial characteristics influenced business performance through an integrated strategy. As a measure of test in relation to each of these data areas, a selection of associated characteristics/ traits were used to ascertain how each of the owner/managers performed within daily tasks, involving the use of decision making. Each of these responsibilities could be related to specific known traits/characteristics as defined by key authors', which was then related to a matrix based on an alpha numeric Microsoft office table. This enabled a cross comparison to be made, which resulted in composite figure being generated, which in turn would be able to define a level of sustainability to be made in relation to each location. The measure for sustainability used within the survey was growth. This was selected as growth determines and encompasses many entrepreneurial aspects and delivers on sustainability through a number of areas, namely employment, wellbeing and economic activity within their locale. Therefore it needs to be noted that both location and strategy may make a difference to business performance, and through this make it more attractive to new entrants enabling a period of growth and increased sustainability through diversity to take place.

The survey was taken over a period of 10 years, so to ascertain the viability and reliability of the measures. The survey comprised of two periods of data collection; one at the beginning in 2009, the second during mid 2019. Within the generality of the premise, a level of entrepreneurial awareness was identified through an analysis of the traditional characteristical trait approach, which was able to add further elements of scrutiny, through the compilation of composite data (Blazkova & Dvoulety, 2019).

4. Data collection

To ensure that the survey was a representative sample of Micro/SMEs and an even spread of rural, remote and urban business locations, within the survey area, a probability sampling technique was employed, the outcome of which ensures that bias and sampling error are kept to a minimum, (Bryman & Bell, 2003). Through such a methodology, it was geared that the response would determine both the level and style of entrepreneurial behaviour captured, in relation to areas of entrepreneurial characteristical determination, in relation to the research parameters.

Table 1 displays a steady increase in the number of private sector new starts coming to market, which surprisingly shows a sharp increase 4 years after the start of the recession in 2008. This is intriguing in a number of ways, in that it identifies that after a specific period of time, people have decided that self-employment and starting a business was an option for them. The rationale for this may be a number of things, but previous research suggests that being made redundant or the desire to be your own boss, the 'push/pull' factor is often the main factor (Blanchard, 2013; Gray, 1993). Such undertakings do not naturally happen and it is only after great deliberation that a person decides to start a business, it has to be part of a greater symbiotic process, whereby the political, geographical location and psyche of the individual are synchronised to the opportunities presented at the time.

In contrast, Table 2 presents the number of private sector businesses operational within greater Lincolnshire, specifically from the Micro and SME demographic. What the data is suggesting is that the number of businesses compared to the national average by sector/size has not grown by relocating to the area, but more from organic growth of the new start businesses setting up in the area. These statistics indicate that the geographical environment of Lincolnshire is attractive in some way, and conducive for new starts. Also, it implies that the number of job opportunities is not great in comparison to number of

Table 1Share of business in the UK by size. 2018.

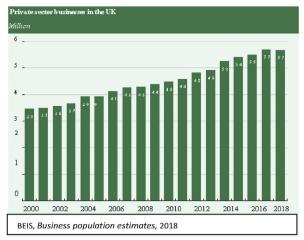


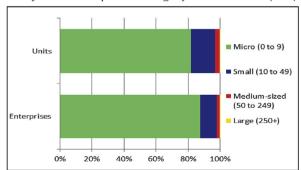
Table 2Share of business in the UK by size. 2018 *Source: Office for National Statistics* (2013).

	standard	
Area Type	local authorities: county / unitary (as of April 2019)	
Area Name	Lincolnshire	
Date	2018	
Industry	Total	
Employment size	Total	Private sector total
Total	32,705	31,485
Micro (0 to 9)	27,315	26,740
Small (10 to 49)	4,475	4,030
Medium-sized (50 to 2	249) 805	630

people of employment age. The data from the survey suggests businesses are surviving longer, but not adding to their employment, which does substantiate the statistics. This disconnect with the rest of the country can be verified with the data analysis, which shows a steady increase in turnover over and above the rate of inflation, during the survey period. An explanation may include the type and range of entrepreneurial profile each of the owners/managers displayed, which again can be seen within the analysis of the composites.

 Table 3

 Percentage of greater lincolnshire businesses by units and enterprises Source: Office for National Statistics (2013).



Within Table 3 it can be seen that the number of Lincolnshire business by employees and the differential between them and a base-line national comparison have been growing over a significant period of time. It clearly shows that the vast majority of businesses are made up of micro and small units, with the size and profile broadly in line with national statistics; although, understandably, it does have a greater proportion of Micro businesses employing 5 to 49 people. These statistics also agree with the data from the survey in that the employment uptake within rural and remote rural areas is constant and within these parameters.

The current official nationally available data on business numbers indicate that there are approximately 65,300 businesses based within the Lincolnshire area. It is understood that there are businesses trading which do not generate enough income to trigger the VAT threshold, -£84,000- and are therefore not captured within the HMRC data base. In order to generate a more accurate figure of micro and small businesses within the Lincolnshire area, we need to consult other sources of data. One such source is MintUK, which captures data direct from businesses and offers a realistic snapshot of both micro and small businesses.

The data displayed within Tables 4 and 5 show a breakdown of businesses by employee numbers, which unsurprisingly suggests that the vast majority of the undercount in business numbers are based within those that are micro, in particular those with 0–4 employees. As already suggested, this is due to the turnover being under the threshold level, and are therefore not captured in the data trawl. When this data is compared to the current 2018 results of 65,300 it shows an increase of 15,940 enterprises. This increase builds on the previous data given in Table 2 which indicates that new businesses are being established by indigenous incumbents of the area. In examining this further it builds on and substantiates previous research which found that business owners know their locale and customer base and is the main reason for setting up their business (Blanchard, 2015).

As can be seen within Table 6, the results from the 2019 research project present the averages of the entrepreneurial traits exhibited by the survey sample; per characteristical area, per location in order to examine if some of the locations display any difference within entrepreneurial ability. The first table offers the areas as a mean rank in relation to the entrepreneurial qualities displayed by geographical location. The second table gives a significance value of the combined averages of each location, per area, in respect of the entrepreneurial abilities displayed by the sample. This figure needs to be below the acceptable score of 0.05 degrees of freedom. By conducting such tests it establishes if each of the areas exhibit different entrepreneurial abilities or are the same in regard to their trading habits. The test further identifies that there are no significant differences identified within the sample, either within the areas of test (characteristics) or between the specific geographical locations in relation to the tests. These results are surprising; in so far that the number of indices used to compile the composite build, would normally identify a number of areas of significance within a statistical analysis test. As this was not the case in this instance, it was decided to apply the results within a contextual linear setting, and compare the current statistical results with those of a previous study sample undertaken in 2009 and would provide a linear study over a 10 year period.

It can be seen within Table 7 that the 2009 survey demonstrates a slightly different picture, in so far that the statistics show that 3 areas of test, offer an acceptable level of significance, which indicates that they were displaying a high level of entrepreneurial awareness and implementation within their daily decision making. The other 6 areas of test, also offer close acceptability scores, but not at the required level of acceptance, indicating that some of the key areas of test do have various values, but within a composite setting these are not at an acceptable level. The data also highlights that these areas are used within decision making but do not form an overarching framework of strategy making or deliverability. The correlated areas at an acceptable level are; adaptability, visionary and creative, and are based within the geographical locations of rural and remote rural. Interestingly, the data for the urban location does not fall within acceptable parameters; therefore it demonstrates that businesses sited here tend to have a less developed set of entrepreneurial skills.



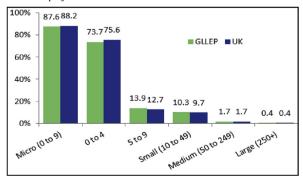


Table 5Percentage of businesses by employees source: MIntUK business database, bureau van Dijk.

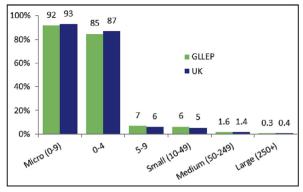


Table 6 Kruskal-Wallis test: 2019.

				Location		N			Mean Rank
Innovative	e			Urban		35			72.69
				Rural		63			72.98
				Remote Rural		47			79.60
Creative				Urban		35			68.04
				Rural		63			74.21
				Remote Rural		47			81.17
Opportun	ity spotting	3		Urban		35			86.13
				Rural				69.19	
				Remote Rural		47			75.35
Risk prope	ensity			Urban		35			74.12
				Rural				76.58	
				Remote Rural		47			73.35
Need for a	achievemei	nt		Urban		35			81.72
				Rural				68.33	
				Remote Rural		47			79.79
Visionary				Urban		35 81.		81.25	
				Rural		63			70.16
				Remote Rural		47			77.48
Adaptabili	ity			Urban		35			73.57
				Rural		63			77.90
				Remote Rural		47			71.84
Intuitive				Urban		35			78.13
				Rural		63			67.28
				Remote Rural		47			83.90
Confident				Urban		35			79.12
				Rural		63			67.98
				Remote Rural		47			82.18
	Innovati	ve Creativ	e Opportunity spotting	Risk propensity	Need for achievement	visiona	ry Adaptabi	lity Intuitiv	e Confident
Chi- Square	0.785	1.886	3.733	0.210	3.035	1.782	0.748	4.504	3.465
Df	2	2	2	2	2	2	2	2	2
Asymp. Sig.	0.675	0.389	0.155	0.900	0.219	0.410	0.688	0.105	0.177

It can be seen within Table 8 that the levels of growth as a percentage attained by the sample over the period 2009–2019, show that businesses situated within all three locations demonstrated an increase in turnover, it needs to be noted that these increases are achieved over and above the level of inflation, therefore demonstrating a real increase in monitory value. The data is suggesting that businesses within all locations are making distinct progression over other parts of the UK; which signifies an agreement with national data (Table 2) which states that new business growth is through organic means. The results also confirmed that businesses located within a remote setting did see the largest increase in turnover growth within the period, which highlights that business in these locations do offer a higher level of entrepreneurial awareness, which is consummate with their customer's needs, and the strategic vision of the business owner/manager. More so, these business

Table 7Kruskal-Wallis test: 2009.

				Location		N			Mean Rank
Innovative	,			Urban		35			71.69
				Rural		63			61.98
				Remote Rural		47			59.60
Creative				Urban		35			66.04
				Rural		63			64.21
				Remote Rural		47			51.17
Opportuni	ty spottin	g		Urban		35			81.13
	J 1			Rural		63			69.19
				Remote Rural		47			55.35
Risk prope	ensity			Urban		35			64.12
	3			Rural		63			66.58
				Remote Rural		47			60.35
Need for a	chieveme	nt		Urban		35			71.72
				Rural		63			60.33
				Remote Rural		47			59.79
Visionary				Urban		35			71.25
,				Rural		63			62.16
				Remote Rural		47			58.48
Adaptabili	tv			Urban		35			73.57
	3			Rural		63			67.90
				Remote Rural		47			55.84
Intuitive				Urban		35			68.13
				Rural		63			67.28
				Remote Rural		47			63.90
Confident				Urban		35			79.12
				Rural		63			67.98
				Remote Rural		47			52.18
	Innovati	ve Creativ	re Opportunity spotting	Risk propensity	Need for achievement	visiona	ry Adaptabi	lity Intuitiv	ve Confident
Chi- Square	6.785	6.886	6.733	6.210	6.035	6.782	6.748	6.504	6.465
Df	2	2	2	2	2	2	2	2	2
Asymp. Sig.	0.049	0.051	0.044	0.040	0.042	0.051	0.050	0.049	0.046

owners/managers synchronise key aspects of their business to the needs of the location, this indicates that these new businesses are set up by people with a level of entrepreneurial prowess, therefore having a strategic vision which they aim to achieve.

5. Conclusion

In conclusion, the research project has debated many aspects of innovation and strategy and placed these within the framework of a sustainable pitch structures, based on local and regional models. It is through the understanding of how these work that it enables a new emphasis to be placed within the sustainable debate on how the entrepreneurial psyche of innovative practice can translate into a pattern of growth and revitalise the local hinterland and offer a sustainable future through continuous augmentation. The key to the replication of this taking place within other areas is for encouragement of support to entrepreneurial businesses through a range of initiatives. This can foster growth through the micro environment which enables a symbiotic process to take place within the region.

The data generated from the research project found that H1 was proven in so far that location made a difference over the 10 year survey period to those businesses located within remote rural settings, as they had achieved the greater turnover as a measure. The measures used to evaluate H2, were those of entrepreneurial awareness so as to understand the needs of a customer base, based on a known level of characteristics/traits. It was these identified areas which were built within a composite and subsequently analysed, which were able to be used to identify a level of entrepreneurial activity which could be linked to the level of strategic vision displayed by the owner/manager of the business. This analysis proved that those businesses which applied a higher level of entrepreneurial awareness to their daily decision making, adopted a strategic vision for the business, whereby it was proved that each did achieved higher levels of growth, which was analytical value for innovation/strategy.

It was further proven that the remotely located business attained a higher level of growth, therefore proving and accepting H2. The analysis also found that it was also proven, in that all owners/managers did use a form of entrepreneurial activity within their daily business transactions, but not everyone at levels to make significant changes to their business. Therefore, they do regard themselves as being entrepreneurial, up to limit in regard of their holistic environment. The limitations of the

Table 8 % of growth over 2009-2019 period.

Business/Location	Urban	Remote Rural	Rural
Turnover increase % from 2009 to 2019	27	35	30

research must be recognised that the areas of research were limited, although offering a representative and recognised number of areas of test, could be increased within any surveys.

Declaration of competing interest

The authors delare no conflicts of interest.

References

Acs, Z. J., & Audretsch, D. B. (1993). Conclusion. In Z. J. Acs, & D. B. Audretsch (Eds.), Small firms and entrepreneurship; an east-west perspective. Cambridge: Cambridge University Press.

Ahmad, S., Rosmini Omar, R., & Quoquab, F. (2019). Corporate Sustainable longevity: Scale development and validation (Vol. 1), 19.

Aldrich, H. E., & Martinez, M. A. (2001). Many are called, but few are chosen: An evolutionary perspective for the study of entrepreneurship. J. Entrepren. Theor Pract., 25(4).

Audretsch, D. B., Lehmann, E. E., & Warning, S. (2017). Universities and the entrepreneurial ecosystem. In Chapter 6 university spillovers and new firm location. Elgar-on- line publishing.

Birchall, D. W., Chanaron, J. J., & Soderquist, K. (1996). Managing innovation in SME's: A comparison of companies in the U.K, France and Portugal. Int. R & D Nat. J. Technol. Manag., 12(3), 291-305.

Blanchard, K. (2013). Entrepreneurial characteristics in SMEs: A rural, remote rural and urban perspective of Lincolnshire businesses. J. Strat. Change, 22. Blanchard, K. (2015). Entrepreneurial characteristics in SMEs: A rural and remote rural perspective of Lincolnshire businesses Part 2. J. Strat. Change, 6.

Blazkova, I., & Dvoulety, O. (2019). Investigating the differences in entrepreneurial Success through the firm-specific factors: Microeconomic evidence from the Czech food industry. *I.Entrepren. Emer. Econ.*, 11(2), 154–176.

Bryman, & Bell. (2003). Business research methods. Oxford University Press.

Cantillon, R. (2010). An Essay on Economic theory. The Mises Institute. Translated by Chantal Saucier Edited by Mark Thornton. Mises Institute. In this issue. Casson, M. (1982). The entrepreneur. Totowa, NJ, US: Barnes and Noble Books.

Chell, E. (1985). The entrepreneurial personality: A few ghosts laid to rest? Int. Small Bus, I. Spring, 3(3), 43-54, 1985.

Chell, E. (2000). Towards researching the "opportunistic entrepreneur": A social constructionist approach & research agenda'. Eur. J. Work. Organ. Psychol., 9(1), 63-80.

Choi, J. P. (1993). Dynamic R7D competition. J. Econ. Manag. Strat., 2(2).

Churchill, N., & Lewis, V. L. (1983). The five stages of small firm growth. Harv. Bus. Rev., 6(3), 43-54.

Cole, G. (1949). The dream & society. Wiley on-line.

Didonet, S. R., Ferne, A., & Simmons, G. (2019). Determining the presence of a long-term/short-term dilemma for SMEs when adopting strategic orientation to improve performance. Int. Small Bus. J.: Res. Entrepren. Article first published online: . (Accessed 3 October 2019).

Drucker, P. (1997). Innovation and entrepreneurship. Oxford: Butterworth-Heinemann.

Drucker, P. (2014). Innovation and entrepreneurship. London: Routledge.

Esparcia, J. (2013). Innovation and networks in rural areas. An analysis of innovation from European projects. J. Rural Stud., (April), 34.

Ferreras, R., Hernandez-Lara, A. B., & Seradell-Lpoz, E. (2019). Entrepreneurial competences in a higher education business plan course. Educ. Train., 61(7). Galvan-Martínez, D., Espejel, I., Arredondo-García, M. C., Delgado-Ramírez, C., Vázquez-León, C., Hernández, A., & Gutiérrez, C. (2019). Sustainability assessment in indigenous communities: A tool for future participatory decision making, In S. Lucatello, E. Huber-Sannwald, I. Espejel, & N. Martínez-Tagüeña (Eds.), Stewardship of future drylands and climate change in the Global South. Springer climate. Springer.

Gardner, R. (1985). Social psychology and second language learning. London: The role of attitudes and motivation. Gartner, W. (1988). 'Who is an entrepreneur?" Is the wrong question'. Entrepren. Theor. Pract., 13(4), 47–68.

Gilad, B. (1982). Allocation of entrepreneurial attention. J. Econ. Behav. Org., 19.

Glade, W. P. (1967). Critical perspectives on business and management. Explorations in entrepreneurial history (Vol. 3). Routledge.

Goetz, J. L., Keltner, D., & Simon-Thomas, E. (2010). Compassion: An evolutionary analysis and empirical review. Psychological Bulletin, 136, 351-374. Goffee, R., & Scase, R. (1987). Entrepreneurship in europe. London: Croom Helm.

Gray, C. (1993). Growth-orientation and the small firm. In K. Caley, E. Chell, F. Chittenden, & C. Mason (Eds.), Small enterprise development: Policy and practice in action. London: Paul Chapman.

Gray, C. (2006). Absorptive capacity, knowledge management and innovation in entrepreneurial small firms. Int. J. Entrepren. Behav. Res., 12(6).

Greenfield, S. M., & Strickon, A. (1981). New paradigm for the study of entrepreneurship and social change. Econ. Dev. Cult. Chang., 29(3), 467-499. April. Greiner, L. (1972). Evolution and revolution as organisations grow. Harvard Bus. Rev., 50(July-August).

Greiner, L. E., & Cummings, T. G. (2009). Dynamic strategy-making: A real-time approach for the 21st century leader. San Francisco: Jossey-Bass.

Gudmundson, D., Burk-Tower, C., & Hartman, E. (2003). Innovation in small business: Culture and ownership structure do matter. J. Dev. Entrepren., 8(1). Hagen, E. E. (1962). On the theory of social change: How economic growth begins. Homewood, IL: Dorsey Press.

Hannon, P. (2005). Incubation policy and practice: Building practitioner And professional capability. J. Small Bus. Enterprise Dev., 12(1).

Hannon, M., & Freeman, J. (1977). The Population ecology of organizations. Am. J. Sociol., 82(5).

Hawley, F. (1907). Enterprise and production process. New York: G.P Putnam.

Hayek, F. (1948). Individualism and economic order. Mises Institute.

Hoffman, K., Parejo, M., Bessant, J., & Perren, L. (2008). Small firms, R7D technology and innovation in the UK: A literature review. Technovation, 18(1). Hoggart, K. (1990). Lets do away with Rural. J. Rural Stud., 6(3).

Hoselitz, B. (1971). Social conditioning & entrepreneurship. Special collections research centre university of chicago library. Research Centre University of Chicago Library.

Ireland, D., Covin, J. G., & Kuratko, D. F. (2009). Conceptualizing corporate entrepreneurship strategy. *Entrepren. Theor. Pract.*, 33(1).

Jackson, M. (2016). Centre for local economic strategies, ISBN 1870053869.

Johnson, H. (1951). Sociological aspects of change and the entrepreneur. J. Econ. Hist., 11(1).

Keizer, J., Dijstra, L., & Halman, J. I. M. (2002). Explaining Innovative Efforts of SMEs: An exploratory survey among SMEs in the mectanical and electrical engineering sector in The Netherlands, Technovation, 22.

Keszey, T. (2019). Environmental orientation, sustainable behaviour at the firm-market interface and performance. J. Clean. Prod., 243.

Kets-de-Vries, M. F. R. (1977). The entrepreneurial personality. A person at the crossroads. J. Manag. Stud., 14(1).

Kirzner, I. M. (1982). Uncertainty, discovery and human action: A study of the entrepreneurial profile in the misesian system. In I. M. Kirzner (Ed.), *Method process and Austrian economics* (pp. 139–159). *Lexington*, MA: D.C. Heath.

Knight, F. (1921). Risk, uncertainty and profit. New York: Houghton, Mifflin.

Leibenstein, H. (1968). Entrepreneurship and development" the American economic review. In Papers and proceedings of the eightieth annual meeting of the American economic association (may) (Vol. 58, pp. 72–83), 2.

Leitch, C., Hill, F., & Neargard, H. (2010). Entrepreneurial Business Growth & the quest for a 'comprehensive theory': Tilting at windmills? *J. Entrepren. Theor. Pract.*, 34(2).

Lillington, K. (2015). Education v entrepreneurship: How universities can strike a balance. Irish Times.

Llewellyn, D. J., & Wilson, K. M. (2003). The controversial role of personality traits in the entrepreneurial psychology. Educ. Train., 45(6).

Marshall, A. (1920). *Principles of economics* (8th ed.). London: Macmillan.

Martinez-Roman, J. A., Gamero, J., & Tamayo, J. A. (2011). Analysis of innovation in SMEs using an innovative capability-based non-linear model: A study in the province of seville (Spain) (Vol. 30). Technovation. Elsevier.

McClelland, D. C. (1961). The achieving society. Princeton, NJ: Van Nostrand.

McKenzie, D., & Hillel, R. (2007). *Network effects and the dynamics of migration and inequality: Theory and evidence from Mexico*". *J. Dev. Econ.*, 84, 11–24. Mises, L. (1949). *Human action: A Treatise on economics*, Yale University Press: The Mises Institute.

Mole, K., & Worrall, L. (2001). Innovation, business performance and regional competitiveness in the west midlands: Evidence from the west midlands business surveys. Eur. Bus. Forum, 13(6).

Radas, S., & Božić, L. J. (2009). The Antecedents of SME Innovativeness in an emerging transition economy. Technovation, 29, 438-450.

Randelli, F., & Martellozzo, F. (2019). Is rural tourism-induced built-up growth a threat for the sustainability of rural areas? The case study of tuscany. Sci. Direct, 86, 387–398.

Rosenberg, N. (1976). Perspectives on technology. Cambridge University Press.

Rothwell, R., & Zegveld, W. (1982). Innovation and the small and medium sized firm. London: Frances Pinter.

Rotter, J. B. (1966). Generalised expectations for internal versus external control of reinforcement. Psychological Monographs: Gen. Appl., (1).

Say, J. B. (1964). A treatises on political economy. In C. R. Prinsep (Ed.), *Clement C. Biddle* (5th ed.). Philadelphia: Lippincott, Grambo & Co, 1855, trans. Schumpeter, J. A. (1934a). The theory of economic development: An inquiry into profits, capital, credit, interest and the business cycle. Cambridge MA: Harvard University Press.

Shackle, G. L. S. (1970). Expectation, enterprise and profit. London: George Allen and Unwin.

Shane, S. (2003). A general theory of entrepreneurship: The individual-opportunity nexus. Cheltenham, UK: Edward Elgar.

Spigal, B., & Harrison, R. (2018). Toward a process theory of entrepreneurial ecosystems. Strat. Entrepren. J., 12, 151-168.

Stam, E. (2017). Measuring entrepreneurial ecosystems. In A. E. O'Connor, F. Sussan, & D. Audretsch (Eds.), Entrepreneurial ecosystems. Springer

Steiss, A. W. (2003). Strategic management for public and non-profit organisations. New York: Routledge.

Storey, D. J. (1989). Firms performance and size: Explanations of the small firm sector. Small Bus. Econ., 1.

Thornton, P. (1999). The sociology of entrepreneurship. Ann. Rev. Soc., 25, 19-46.

Van de Vrande, De Jong, J. P. J., & Vanhaverbeke, W. (2009). Open innovation in SMEs: Trends, motives and management challenges (Vol. 29). Technovation.

Wang, C., & Han, C. (2011). Linking properties of knowledge with innovation performance: The moderate role of absorptive capacity. *J. Knowl. Manag.*, 15(5). Weber, M. (1922). *Economy and society university of California press*.

Wickham, P. A. (2004). Strategic entrepreneurship. London: Prentice Hall.

Young, F. W. (1971). A macro sociological interpretation of entrepreneurship. Entrepreneurship & economic development. New York: Free Press.