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Developing sustainable business models: Local knowledge acquisition and tourism lifestyle entrepreneurship

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Abstract

Tourism lifestyle entrepreneurs’ (TLEs) businesses are associated with sustainable business models (SBMs) due to a link to the place. This link is a source of essential local knowledge that provides differentiation, competitiveness, and sustainability. Given the importance of local knowledge to SBMs, this article explores knowledge management by examining how TLEs acquire and integrate knowledge as well as its effects on innovativeness and self-efficacy. We use a sequential mixed-methods approach in which we first conducted a qualitative study with four in-depth semi-structured interviews with TLEs, followed by a quantitative study through a survey of 115 TLEs, and third we conducted another qualitative study based on four semi-structured interviews. The results indicate that entrepreneurial communication has a significantly positive and direct effect

on both the innovativeness and self-efficacy of TLEs. A community-centered strategy has a positive influence on innovativeness and self-efficacy but via the indirect effect of entrepreneurial communication. Local knowledge assimilation plays a mediating role between the acquisition of local knowledge and innovativeness and self-efficacy. These findings provide a general understanding and framework about how TLEs link the elements of an SBM to greater innovativeness and self-efficacy.

Keywords: Lifestyle entrepreneurship; Innovativeness; Self-efficacy; Creative Tourism; Sustainability; Knowledge management; Mixed-methods research.

1. Introduction

A traditional business model outlines the architecture of a company's value creation, delivery, and capture mechanisms (Teece, 2010). In turn, sustainable business models (SBMs) “incorporate a triple bottom line approach and consider a wide range of stakeholder interests, including environment and society” (Bocken, Short, Rana, & Evans, 2014, p. 42). A SBM transcends the narrow perspective of for-profit models (Schaltegger, Hansen, & Lüdeke-Freund, 2016a) by extending the focus on organizational value creation to incorporate social and ecological values (Schaltegger, Lüdeke-Freund & Hansen, 2016b). Boons and Lüdeke-Freund (2013) state that a SBM incorporates these values as generic elements: value proposition, organizational infrastructure, customer interface, and financial model.

Tourism lifestyle entrepreneurs (TLEs) constitute an important group within the tourism business (Thomas, Shaw, & Page, 2011). The literature considers them different from entrepreneurs in other economic activities (Carlsen, Morrison, & Weber, 2008) because they are

also governed by nonfinancial criteria (Ateljevic & Doorne, 2000; Wang, Li, & Xu, 2019), such as environmental and social goals, that are core features of a SBM (Stubbs, 2017). For them, business is a way of life in which the boundaries between personal life and work are blurred (Sun, Xu, Köseoglu, & Okumus, 2020). TLEs also tend to differentiate themselves with an “ideological concept of sustainability, derived from their intrinsic lifestyle motivation” (Wang et al., 2019, p. 1156). In opposition to large firms, they are more likely to adopt a sustainable behavior (Bosworth & Farrell, 2011; Morrison, 2006) that contributes to sustaining “the natural environment or adding value to local communities” (Morrison, 2006, p. 200).

TLEs’ place-based conception of sustainability (Shrivastava & Kennelly, 2013) reflects concerns with the preservation of the natural environment and the local culture and traditions (Sun et al., 2020) as well as purchasing from local suppliers, trading at the community level, and providing local employment (Jack & Anderson, 2002; Morrison, 2002). As argued in the SBM literature, “community spirit” is a distinctive characteristic in which social embeddedness plays a key role (Neumeyer & Santos, 2018; Schaltegger et al., 2016b) by providing access to valuable local knowledge and to a network of local stakeholders (Yachin, 2019), as compared to traditional business models (Stubbs & Cocklin, 2008).

In this study, we explore the link between the place as a source of local knowledge for TLEs and their SBMs to address three theoretical gaps. First, the research on SBMs has focused on their elements that misses a general understanding and a framework of the link between SBMs and how they contribute to innovation (Schaltegger et al., 2016b). Second, although there is a growing body of research on sustainable entrepreneurship, the role of the link to the place is still underexplored in the TLE context (Kibler, Fink, Lang, & Muñoz, 2015). Third, although both gaps can be addressed independently, the link between the elements of the SBM and the connection to the place is not separable in the context of knowledge management. Knowledge management represents an essential issue in the relations between the elements of a business model (Teece, 2010). Although business theory recognizes the existence of studies related to knowledge acquisition and assimilation (c.f. Liao, Fei, & Chen, 2007; Liao et al. 2010), the

tourism research has made few contributions regarding the way TLEs manage knowledge (Hoarau, 2014). This is especially true for the specificities of this group of entrepreneurs that are not conducive to the existing traditional models in the business literature (Bosworth & Farrell, 2011). There are few studies that focus on the mechanisms that TLEs use to acquire and assimilate local knowledge that is in a state constant flux (García-Rosell, Haanpää & Janhunen, 2019). Specifically, as indicated by Hoarau (2014) and Yachin (2019), these entrepreneurs have reduced management and organizational capabilities; therefore, how they translate this knowledge into innovation is unclear (Marchant & Mottiar, 2011). Thus, considering the four elements of a SBM, the objectives of this study are (i) to understand the key role of the place as a source of local knowledge, (ii) to identify the link between the SBMs through which TLEs convert local knowledge into innovation and self-efficacy, and (iii) to propose a model to develop a SBM.

The contribution of this study is threefold. First, it addresses the local knowledge management of TLEs by providing a framework for how they link knowledge to the elements of a SBM. This is an underexplored topic despite the representativeness of TLEs in tourism and their importance to sustainability. Specifically, by addressing SBMs, we examine the processes by which TLEs acquire and assimilate local knowledge and the way local knowledge translates into innovation. Second, to the best of our knowledge, this is the first study to explore the relation between the assimilation and acquisition of local knowledge and a community-centered strategy and entrepreneurial communication as well as the mediating role of assimilation as an enabling factor in transforming knowledge into the innovativeness and self-efficacy of TLEs. Third, the sequential mixed-methods approach this study applies is a methodological contribution. We conduct a qualitative study that leads to a better understanding of the relevance of the variables and relations proposed in our conceptual model. After this study, we conduct a quantitative study through a survey to test the conceptual model. Finally, we conduct qualitative follow-up interviews with TLEs.

The study proceeds as follows: Section 2 presents the theoretical background and the conceptual model. In Section 3, we describe the research design and detail it in the next sections (4, 5 and 6). In Section 7, we discuss the empirical findings. Section 8 concludes by presenting theoretical, practical, and managerial implications; limitations: and future research.

2. Literature Review

2.1. Local Knowledge Management and TLEs

2.1.1. TLEs and sustainable business models

In the context of TLEs, the four elements of the SBM are associated with the place. The *value proposition* is the result of the TLEs' place embeddedness that allows tourists to participate in creative and genuine experiences that are associated with the place (Kibler et al., 2015). The quality of the local natural environment and social and cultural practices provide uniqueness (Shrivastava & Kennelly, 2013; Thompson et al., 2018) and a source of competitiveness (Stamboulis & Skayannis, 2003).

The *supply chain infrastructure* is related to the development of the value networks in which community spirit (Stubbs & Cocklin, 2008) and social embeddedness constitute distinctive features of the SBM (Neumeyer & Santos, 2018). By being embedded in local communities, TLEs benefit from the network effect with local stakeholders (Bredvold & Skålén, 2016; Yachin, 2019). Furthermore, the community, heritage, and environmental preservation represent a central concern of the TLE activities that contribute to a more sustainable tourism (de la Barre, 2013) in which environmental training contributes to the employee in-role green performance (Pham et al., 2020).

As a part of the local community, TLEs are able to co-create unique and authentic experiences (Schilar & Keskitalo, 2018) and to target specific market niches (Ateljevic & Doorne, 2000). The TLEs also integrate local stakeholders and communities in the SBM going

beyond the classic customer concept as the primary beneficiary (Bocken et al., 2014). These *customer interfaces* represent an unrivaled path to transfer the value proposition. Further, by pursuing economic and non-economic goals (Sun et al., 2020), the *financial model* is strongly related to the TLEs' environmental and social performance (Stubbs, 2017). All the components of the TLEs' SBMs are linked to the place that represents a source of valuable knowledge (Yachin, 2019). Local knowledge gives meaning to the services and experiences they offer to tourists (Anderson, 2012) and simultaneously is unique and difficult to imitate (Shrivastava & Kennelly, 2013). Thus, knowledge plays an important role in the value proposition.

2.2. TLEs' knowledge management as a unique field of research

Knowledge management in tourism has particularities inherent to the sector. When compared to other sectors, the context of tourism is very complex, uncertain, and relational (Hall, 2019). The knowledge management models in tourism envisage structured approaches (Cooper, 2015). However, the characteristics of small-scale tourism firms do not facilitate knowledge management in these circumstances for several reasons: small businesses are predominant and often consist of just the founder who may have little training and management experience; lack of trust between partners; knowledge is instrumental and is only relevant if the results for the business are evident and immediate; the tourist product may be fragmented by various agents; the business and staff may be seasonal; and the entrepreneur may be risk averse (Cooper, 2015; Czernek, 2017).

The reality of TLEs is even more distinctive. Most of them are not exclusively governed by economic and financial criteria (Ateljevic & Doorne, 2000; Wang et al., 2019). Furthermore, the option to enter tourism is more related to the detection of opportunities than to thoughtful

business decisions (Hjalager, Kwiatkowski, & Larsen, 2018). Those opportunities can be low entry barriers like low investment or the inexistence of specific or formal training prerequisites (Ioannides & Petersen, 2003). As such, TLEs likely have little experience and few resources (Marchant & Mottiar, 2011).

2.3. TLEs' knowledge management

Knowledge can be divided into two groups: tacit and explicit. While tacit knowledge cannot be codified because it is associated with what people know, explicit knowledge is easily codified and transferable (Cooper, 2015). The superior strategic value of tacit knowledge is well recognized (Hoarau, 2014; Weidenfeld, Williams, & Butler, 2010) because it is difficult to replicate (Stamboulis & Skayannis, 2003). As TLEs are highly associated with the place, the strategic value of tacit local knowledge is even higher for the following reasons: this knowledge can only be accessed through interpersonal interaction in that place (Yachin, 2019); local knowledge is difficult to access and imitate by competitors (Cooper, 2015); local knowledge increases the likelihood of sustainable value creation (Shrivastava & Kennelly, 2013); and it improves co-creation processes (García-Rosell et al., 2019).

Knowledge management can be divided into two phases: *potential* that integrates the steps of acquisition and assimilation of knowledge, and *realized* that consists of the transformation or exploitation of knowledge (Jansen, Van Den Bosch, & Volberda, 2005; Zahra & George, 2002). The latter means that knowledge cannot be applied without first having acquired it (Hoarau, 2014). As such, the starting point in knowledge management is the way external knowledge (tacit and explicit) is acquired and assimilated in the tourism business processes (Hoarau, 2014). To exploit external knowledge, firms should translate it into useful forms that are market oriented in order to build competitive advantage through innovation and more responsive processes (Zahra & George, 2002). However, TLEs use their own mechanisms to manage local knowledge. Table 1 summarizes these mechanisms.

Insert Table 1 here

2.3.1. Knowledge acquisition

Although the acquisition of tacit knowledge can be accomplished through socialization (Zhang, Xiao, Gursoy, & Rao 2015), TLEs have unique mechanisms to acquire local knowledge (Bosworth & Farrel, 2011; Ioannides & Petersen, 2003; Kibler et al., 2015). Two complementary approaches for knowledge acquisition arise from the literature, namely, local embeddedness and a community-centered strategy. The acquisition of local knowledge stems from the fact that the TLEs are embedded locally (Bredvold & Skålén, 2016). This embeddedness provides access to local knowledge by merely living and spending time locally (Valtonen, 2009). Embeddedness is “the mechanism whereby an entrepreneur becomes part of the local structure” (Jack & Anderson, 2002, p. 467) that allows them to monitor the continuously evolving local knowledge through the sharing of experiences, stories, and tools (García-Rosell et al., 2019). Zhang et al. (2015) have found interactive relationships to be crucial to knowledge spillover. As such, place embeddedness allows the entrepreneur to align with the local cultural and social environment (Bredvold & Skålén, 2016).

Richards (2011) emphasizes the role of participating in conversations at cafes or in squares; and Valtonen (2009) also finds that observing, listening, and acting jointly with other stakeholders are mechanisms to acquire new knowledge. Furthermore, being close to customers is also a valuable source of tacit knowledge (Shaw & Williams, 2009). These mechanisms can be described as informal knowledge channels (Ioannides & Petersen, 2003; Marchant & Mottiar, 2011) with a distinctive practical nature (Valtonen, 2009). This approximation between learning and practice establishes a close relation between the processes of acquisition and the assimilation of knowledge (Cooper, 2015; Weidenfeld et al., 2010). As such, we hypothesize:

H1. Local knowledge acquisition positively relates to local knowledge assimilation.

The second approach to acquiring knowledge is to more actively promote or participate in community-centered activities. The access to tacit local knowledge is mostly practice-based (Hoarau, 2014) and exists in a multiplicity of knowledge sources that require the ability to read symbolic and non-verbal evidence (Hall, 2019). In this context, knowledge acquisition benefits from the involvement of stakeholders through partnerships (Czernek, 2017) and the realization of collaborative practices (García-Rosell et al., 2019). The implementation of cooperative strategies also overcomes any barriers to knowledge sharing such as distrust and high competition (Czernek, 2014). As such, “forming and utilizing links to external actors is a practice which owner-managers of micro-tourism firms can develop and should apply. After all, such links embed entrepreneurial opportunities” (Yachin, 2019, p. 61-62). In this sense, TLEs benefit from acquiring local knowledge through actively cooperating with other local stakeholders, that is, community-centered strategies. These strategies transform new local knowledge into new stories and meaningful experiences and to “selling the place” that means TLEs not only acquire the knowledge but also share it with tourists (Schilar & Keskitalo, 2018). Formally, we propose the following hypothesis:

H2. Pursuing a community-centered strategy positively relates to entrepreneurial communication.

2.3.2. Knowledge assimilation and TLEs’ self-efficacy and innovativeness

The assimilation capacity refers to the firms’ ability to integrate external knowledge into the organizational knowledge stock (Hoarau, 2014). The assimilation of knowledge also requires specific skills and experience from the entrepreneur (and his/her staff). The assimilation is the result of the existing routines, life and market experiences, and “certain person-specific competencies” (Ioannides & Petersen, 2003). More precisely, it combines the “knowledge corridor (ability to imagine resources as products), personal traits (creative thinking) and social

network (access to information and inspiration)” (Yachin, 2019, p. 59). Thus, two dimensions exist. First, the organizational dimension represents the processes and capabilities to assimilate knowledge. It is related to the routines that transform newly acquired knowledge and incorporate it in the organization knowledge stock (Weidenfeld et al., 2010). This stock is destination-specific and user-oriented and thus provides an intangible and difficult to replicate source of competitive advantage (Stamboulis & Skayannis, 2003). Second, the communicational dimension comprises the entrepreneurs’ user-oriented activities. Complementarily to the organizational capabilities, TLEs must be able to convert communication into client-oriented narratives (Yachin, 2019) by capitalizing on their connection with customers (Marchant & Mottiar, 2011) through a producer-oriented context (Richards, 2011). This connection demands that the TLE has important traits such as communication and interaction (Yachin, 2019). These abilities develop knowledge assimilation by stimulating its diffusion within the organization through the free sharing of ideas (Hoarau, 2014).

Knowledge management can provide TLEs with significant benefits in terms of innovation and competitiveness (Cooper, 2015; Weidenfeld et al., 2010). However, in the TLE context, performance should be contextualized. TLEs assess performance based on criteria that are not necessarily economic (Wang et al., 2019). In addition to the maintenance of the quality of life (Thomas et al., 2011), they also use social (Morrison, 2006), ideological, environmental (Ateljevic & Doorne, 2000), and cultural (Bredvold & Skålén, 2016) indicators. This myriad of options indicates that the most appropriate ways to assess TLEs’ performance are subjective measures of performance (Wang et al., 2019), such as TLE’s perceived self-efficacy that is defined as the TLEs’ beliefs in their capabilities to achieve the business goals (Hallak, Brown, & Lindsay, 2012) and their innovativeness (Hoarau, 2014).

Considering this definition of self-efficacy, the TLEs' performance is subjectively perceived through a combination of financial and nonfinancial indicators. The perceived self-efficacy depends on the ability to transform assimilated knowledge into enhanced performance (Marchant & Mottiar, 2011; Shaw & Williams, 2009). This transformation occurs through

poorly structured activities (Cooper, 2015). Considering the contextual nature of local knowledge, the assimilation capacity depends on the interaction between the organization and the community and its stakeholders that is associated with life experience (Yachin, 2019). This valorization of knowledge as practice-based and context-specific contributes to overcoming TLEs' low qualification levels (Czernek, 2014; Hoarau, 2014). Additionally, these entrepreneurs usually follow an unstructured approach to knowledge management through a process of trial and error (Cooper, 2015). As such, previous experience plays an important role in the way knowledge is assimilated and transformed into increased performance (Martínez-Martínez, Navarro, García-Pérez, & Moreno-Ponce, 2019). As such, assimilated knowledge generates growing returns in which the more it is used, the greater the benefits it delivers (Cooper, 2015) that then increases TLEs' perceived self-efficacy. As such, we hypothesize:

H3a. Local knowledge assimilation positively relates to TLEs' perceived self-efficacy.

In addition to self-efficacy, knowledge assimilation also supports innovation which is the basis of organizations' competitiveness (Shaw & Williams, 2009). Innovation is a recognized outcome of the TLE activities with important effects on both the organization and the destination (Sun et al., 2020). To do so, they should bridge the gap between their activity and the market (Eikhof & Haunschild, 2006). However, in tourism, converting knowledge into innovation requires certain abilities, especially when it concerns tacit knowledge (Hoarau, 2014). Weidenfeld et al. (2010) argue that exchange practices between organizations are essential for small-scale businesses to assimilate knowledge. Conducting collective learning practices, peer-to-peer relationships (Cooper, 2015), and active participation in networks (Weidenfeld et al., 2010) foster knowledge transfers and increase trust and shared values. As such, by influencing local knowledge assimilation, social participation plays a key role in the innovation success of small-scale businesses (Hoarau, 2014). The involvement of the local stakeholders facilitates knowledge assimilation (Czernek, 2014), stimulates innovation spillovers and collaborative efforts to generate local innovation (Zhang, et al., 2015), and feeds

TLEs with new local knowledge that is translated into innovative client-oriented narratives (Yachin, 2019). In this vein, knowledge assimilation supports innovation (Marchant & Mottiar, 2011; Shaw & Williams, 2009), even if it is the result of spontaneous and unstructured processes (Cooper, 2015). Thus:

H3b. Local knowledge assimilation positively relates to TLEs' innovativeness.

Communication and interaction skills with stakeholders, clients, and the community also contribute to the innovation process (Yachin, 2019) by facilitating the translation of acquired knowledge and its application to new experiences (Hoarau, 2014). TLEs are generally effective communicators who exploit their "resources far more inclusively and thoroughly" than other workers (Eikhof & Haunschild, 2006: p. 240). They provide tourists with experiences associated with host and place values by offering a glimpse of local life (Sun et al., 2020), where new relevant interpretations of the place are implemented and validated through feedback from the tourists (Cooper, 2015). This process encourages innovation by adding value to the experiences delivered to the consumers (Eikhof & Haunschild, 2006). Community interaction also increases the sense of contribution and accomplishment of more sustainable practices (Morrison, 2006) that enables the TLEs to achieve their goals (Schilar & Keskitalo, 2018). By exchanging knowledge with other local stakeholders and customers, TLEs increase their ability to operate in highly segmented tourist markets with very demanding tourists that increases the likelihood of generating tailor-made innovations for niche markets (Ateljevic & Doorne, 2000). Thus, we formulated the following hypotheses:

H4a. Entrepreneurial communication positively relates to TLEs' perceived self-efficacy.

H4b. Entrepreneurial communication positively relates to TLEs' innovativeness.

Moreover, the business literature finds that the process of knowledge assimilation has a mediating role between its acquisition and performance (c.f. Zahra & George, 2002). Czernek (2017) argues that the conversion of acquired knowledge into better innovation requires its adequate assimilation. By being part of the community, TLEs interact face-to-face to leverage

the acquired knowledge from innovation (Hoarau, 2014). It indicates that the transformation of the acquired knowledge into enhanced performance requires an adequate assimilation of this new knowledge (Czernek, 2014). Hoarau (2014) argues that this ability to assimilate knowledge enables TLEs to innovate and improve their performance. The ability to assimilate local tacit knowledge and use it to differentiate themselves from their competitors enables TLEs to achieve a competitive advantage (Cooper, 2015). Thus, we propose the following mediating hypotheses:

H5a. Entrepreneurial communication mediates the relation between a community-centered strategy and TLEs' perceived self-efficacy.

H5b. Entrepreneurial communication mediates the relation between a community-centered strategy and TLEs' innovativeness.

H6a. Local knowledge assimilation mediates the relation between local knowledge acquisition and TLEs' perceived self-efficacy.

H6b. Local knowledge assimilation mediates the relation between local knowledge acquisition and TLEs' innovativeness.

Figure 1 shows the conceptual model and hypotheses.

Insert Figure 1 here

3. Method

We use a sequential mixed-methods approach that combines two qualitative studies with a quantitative study.

The target population of this study is Portuguese and Spanish TLEs. We selected the TLEs based on the following inclusion criteria: (i) had a tourism related business; (ii) independently ran business (not part of larger chains or franchising networks); (iii) committed to expressing the local character of the destination; and (iv) sustained the local environment, heritage, and traditions. These criteria come from Bosworth and Farrell (2011) and Morrison (2006). The participants were from the center region of Portugal and the Andalucía autonomous community (Spain).

To increase the confidence of the participants, confidentiality and anonymity were assured in all studies.

4. Qualitative Research I

4.1. Qualitative method

The first study is qualitative and seeks to gain insight into the variables and relations proposed in our conceptual model on TLEs and the SBM elements. The research team performed face-to-face in-depth interviews with four TLEs (1 hostel, 2 tour guides, and 1 cooking experience restaurant) that were selected using a purposive sampling technique. Although there was an interview script, a flexible approach was followed so that respondents could feel free to address the most important topics. Thus, in line with Bosworth and Farrell's (2011) approach, the interviewer fulfilled the role of facilitator, although probing questions were used to explore some topics more deeply. Each interview took, on average, two hours and was held at the entrepreneurs' facilities. Two of the researchers conducted the interviews while taking notes and recording.

4.2. Qualitative results

From the interviews we learned about the various elements of SBM and how they facilitated knowledge management. Sustainability practices were integrated in the elements of the SBM,

namely at the level of value proposal (tradition, nature preservation), infrastructure (community relationship), and customer relationships (narratives, products) which benefited from the inclusion of local knowledge in the SBM. Knowledge acquisition strategies such as the involvement of people from the community were also verified. Some of the respondents' comments were:

"Twice a year we hold a local festival with tradition recreations [...] which allows us to publicize our activity".

"Our hostel is decorated with themes alluding to the past of this place [...]. It allows us to have a storytelling with our guests".

"Our customers value very much the traditional dishes made by old ladies of the neighborhood [...] and also our care with the recycling and reuse of materials".

The results of the interviews allowed us to verify the adequacy of the knowledge management variables used in the study. The acquisition of knowledge was essentially achieved informally through conversations with locals and customers. Community-centered strategies arose from cooperation with local stakeholders or from holding events and other festivities. The assimilation of knowledge was quite variable among respondents, but it was linked to transforming knowledge into new experiences and creating new stories and narratives (communication). Some examples taken from the interviews were as follows:

"We are constantly learning new things. We use several sources for that, but the conversations with people from the village are the most important."

"The old ladies who come to cook with us revealed to be a source of new knowledge and a way to improve our experiences, increasing authenticity at the same time."

"The festival we organize always brings new people, functioning as a magnet [...] in which we catch stories, photos, legends and other local traditions".

“As a result of talking with local people, we have a lot of new ideas, which allows us to quickly offer new tours”.

“We feel that we are pioneers because we innovate within the tradition of this neighborhood.”

These ideas show that a correspondence existed between what was observed in the field and the variables identified in the literature. They were: community-centered strategy (e.g., festivals, workshops, and cooking instruction), knowledge acquisition (talk with local people), communication (new stories and narratives, use of local people for marketing activities), and knowledge assimilation (offering new tours, pioneerism).

5. Quantitative Research

5.1. Quantitative method

5.1.1. Data collection and sample

The target population for the quantitative study was Portuguese and Spanish TLEs who met the inclusion criteria previously presented. As obtaining a sampling frame in this case was difficult, we used a non-probability sampling, or more specifically a convenience sampling. One of the researchers recruited TLEs during three tourism entrepreneurship meetings (i.e., Tourism-Up, Taste-Up, and Green-Up) and invited them to participate in the quantitative study. An internet based-questionnaire was used for data collection. The questionnaire was initially developed through a review of the literature and revised following a two-step approach. First, we consulted three tourism academics to assess the content validity of the scales. After that, the questionnaire was pilot tested by using face-to-face semi-structured interviews with five TLEs (1 hostel, 1 tour guide, 1 cooking experiences restaurant, 2 nature tourism) to validate the wording and the survey design. The final internet-based questionnaire was sent by email to the 115 TLEs. A total

of 115 complete questionnaires were received. Data collection occurred between February 2019 and October 2019.

Of the respondents, 66% were male, and 62% were born in the place where they currently had their tourism business. Most of the respondents were from the center region of Portugal (85), and the remaining were from the Andalucía autonomous community of Spain. In terms of age, 7.5% were less than 30 years old, 12.5% were between 30 and 40 years old, 25.6% were between 40 and 50 years old, 44.4% were between 50 and 60 years old, and the remaining were older than 60. Regarding firm size, 68% of the TLEs stated that their firms had 10 or less employees, 16.6% stated they had between 11 and 20 employees, and the remaining stated that their firms had more than 20 employees. The average years in operation of a business was 7.26 with a standard deviation of 5.47 years (minimum: 1 year; maximum: 43 years).

5.1.2. Variables

This study adopted existing scales to measure all variables. The acquisition and assimilation of local knowledge were measured using four and two items, respectively, that were adapted from Jansen et al. (2005). The entrepreneurial orientation to communication and the TLEs' innovativeness were measured using a five- and a four-item scale adapted from Kropp, Lindsay, and Shoham (2006). The four items used to measure the TLEs' perceived self-efficacy were adapted from Zhao, Seibert, and Hills (2005). Community-centered strategy was measured through a six-item scale adapted from Besser and Miller (2001) and Hallak et al. (2012). The acquisition and assimilation of local knowledge, the entrepreneurial orientation to communication, and the innovativeness of TLEs were measured using seven-point Likert-type scales anchored by one (strongly disagree) and seven (strongly agree). The perceived self-efficacy of TLEs was measured by asking respondents to indicate the degree of confidence with a specific statement (e.g., creating new products, commercializing an idea, or new development) on a five-point Likert-type scale (one equals no confidence disagree to five equals complete

confidence). A community-centered strategy was assessed by asking TLEs to evaluate on a five-point Likert-type scale (one equals not important to five equals extremely important) the importance of specific strategies.

5.1.3 Statistical analysis

To test our conceptual model we used structural equation modelling (SEM). More specifically, we used partial least squares (PLS), which is a variance-based structural equation modelling technique, by means of SmartPLS 3 software (Ringle, Wende, & Becker, 2015). The analyses and interpretation of the results followed a two-stage approach. We first evaluated the reliability and validity of the measurement model and then assessed the structural model.

To assess the quality of the measurement model, we examined the individual indicators of reliability, convergent validity, internal consistency reliability, and discriminant validity (Hair, Hult, Ringle, & Sarstedt, 2017). The results showed that the standardized factor loadings of all items were above 0.6 (with a minimum value of 0.62) and were all significant at $p < 0.001$, which provided evidence for the individual indicator reliability (Hair et al., 2017). Internal consistency reliability was confirmed because all the constructs' Cronbach alphas and composite reliability (CR) values surpassed the cut-off of 0.7 (See Table 2) (Hair et al., 2017).

Insert Table 2 here

Convergent validity was also confirmed for three key reasons. First, as noted before all items loaded positively and significantly on their respective constructs. Second, all constructs had CR values higher than 0.70. Third, as Table 2 shows, the average variance extracted (AVE) for all constructs exceeded the threshold of 0.50 (Bagozzi & Yi, 1988). The discriminant validity was assessed using two approaches. First, we used the Fornell and Larcker criterion. This criterion

requires that a construct's square root of AVE (shown on the diagonal with bold values in Table 2) is larger than its biggest correlation with any construct (Fornell & Larcker, 1981). Table 2 shows that this criterion is satisfied for all constructs. Second, we used the heterotrait-monotrait ratio (HTMT) criterion (Hair et al., 2017; Henseler, Ringle, & Sarstedt, 2015). As Table 2 shows, all HTMT ratios are below the more conservative threshold value of 0.85 (Hair et al., 2017; Henseler et al., 2015). They provide additional evidence of discriminant validity.

The structural model was assessed using the sign, magnitude, and significance of the structural path coefficients; the magnitude of R^2 value for each endogenous variable as a measure of the model's predictive accuracy; and the Stone Stone-Geisser's Q^2 values as a measure of the model's predictive relevance (Hair et al., 2017). However, we checked for collinearity before evaluating the structural model (Hair et al., 2017). The VIF values ranged from 1.00 to 1.15, which was below the indicative critical value of 5 (Hair et al., 2017). These values indicated no collinearity. The coefficient of the determination R^2 for the four endogenous variables of entrepreneurial communication, local knowledge assimilation, and the TLEs' perceived self-efficacy and innovativeness were 15.2%, 36.9%, 36.4%, and 48.3%, respectively. These values surpassed the threshold value of 10% (Falk & Miller, 1992). The Q^2 values for all endogenous variables (0.08, 0.29, 0.20, and 0.35 respectively) were above zero that indicated the predictive relevance of the model. We used bootstrapping with 5,000 subsamples to evaluate the significance of the parameter estimates (Hair et al., 2017).

5.2. Quantitative results

The results in Table 3 show that acquiring local knowledge has a significantly positive effect on assimilating local knowledge ($\beta=0.607, p < 0.001$) and that a community-centered strategy has a significant effect on entrepreneurial communication ($\beta = 0.390, p < 0.001$). These results provide support for H1 and H2, respectively. Local knowledge assimilation has a significantly

positive relation with the perceived self-efficacy ($\beta = 0.391, p < 0.001$) and innovativeness of TLEs ($\beta = 0.269, p < 0.001$), which supports H3a and H3b, respectively.

Insert Table 3 here

Entrepreneurial communication has a significantly positive relation with the perceived self-efficacy ($\beta = 0.340, p < 0.001$) and innovativeness ($\beta = 0.551, p < 0.001$) of TLEs. These results provide support for H4a and H4b, respectively.

To test the mediation hypotheses (H5a-H6b), we followed the recommendations of Hair et al. (2017; p. 232). Thus, we used a bootstrapping procedure to test the significance of the indirect effects via the mediator (Preacher & Hayes, 2008). Table 4 presents the results of the mediation effects.

Insert Table 4 here

The indirect effects of a community-centered strategy on TLEs' perceived self-efficacy and innovativeness via the mediator of entrepreneurial communication are significant with ($\beta = 0.133; p < 0.01$) and ($\beta = 0.215; p < 0.001$), respectively. These results provide support for the mediation hypotheses H5a and H5b, respectively. In the same vein, the indirect effects of local knowledge acquisition on TLEs' perceived self-efficacy and innovativeness via the mediator of local knowledge assimilation are significant with ($\beta = 0.237; p < 0.001$) and ($\beta = 0.164; p < 0.001$), respectively. Thus, H6a and H6b have support.

6. Qualitative Research II

6.1. Qualitative method

The second qualitative study was conducted to explore the results from the quantitative study in more detail. Thus, the researchers returned to the field to conduct additional face-to-face in-depth interviews. In order to not bias the interviews, four other TLEs (1 photographic tour guide, 1 hostel, and 2 handcraft workshop) were contacted who did not belong to the survey sample and did not participate in the first study. The aim of this study was to test whether the relationships found made sense. The same procedures for study 1 were used (open questions, anonymity, recording, note taking, transcript). Each interview took, on average, 1 hour and 13 minutes and was held at the entrepreneurs' facilities.

6.2. Qualitative results

The results of qualitative study II support the empirical results obtained in the quantitative study. Knowledge acquisition through informal means with locals and visitors was part of daily life, although it also turned out to be a deliberate approach to gather information and feedback on the activity. Cooperation with other local entrepreneurs represented a common practice with an emphasis on implementing community-centered strategies. The assimilation of local knowledge that results in learning was addressed in two ways: either it was quickly operationalized through the development of new experiences or narratives in which their communication abilities were essential, or it was accumulated in potential ideas for future innovation. Respondents acknowledged a strong competition between them. In this sense, the agility with which they made this conversion was essential for competitiveness and tourist satisfaction. Some of the answers were transcribed below.

"The experience and the narrative associated with it (newly acquired knowledge) are adapted throughout the realization and delivery of unique experiences with a high degree of creativity".

"...the knowledge obtained through local events does not always translate into innovation, but that they are 'stored' to be materialized in the future, when time is available".

"The municipality's is focused on promoting surf, contributing to disfigure the local commerce and traditions of the locality [...]. In response to this, I and other local entrepreneurs have held several events and a documentary with the aim of identifying and collecting ancestral practices and showing visitors the local way of life".

We also examine how a community-centered strategy relates to innovativeness and self-efficacy. The realization of events or other forms of collaboration within the community are important to acquire new knowledge and to increase the proximity to the potential market. However, the ability to capitalize on these opportunities is dependent on communication with the market. If TLEs do not approach customers with interesting proposals and new narratives, they cannot make a profit. This ability means that learning contributes only indirectly to innovation and self-efficacy but clearly benefits from the entrepreneur's communication skills.

One interviewee (photographic tour) stated:

"Our great difficulty is communication with the market. The tourists are dispersed, being very difficult to reach them so that we can fill the necessary vacancies to carry out the experiments".

7. DISCUSSION

7.1. Entrepreneurial communication: creating new narratives and experiences

Our model considers TLEs' innovativeness and self-efficacy as outcomes. By considering the social goals for their businesses, TLEs incorporate a triple bottom line in their business model. The ability to communicate influences both outcomes and is an important TLE trait, as recognized by Yachin (2019). This ability is intrinsically linked to the producer-oriented form of experience (Richards, 2011). Indeed, these small-scale businesses provide close contact with

tourists (Marchant & Mottiar, 2011), which is an important source of knowledge (Yachin, 2019). Furthermore, the indirect link between community-centered strategy and TLEs' innovativeness and self-efficacy reinforces the importance of the entrepreneurial communication. While there is a clear recognition that this area is essential, these businesses need to fill this gap at the same time.

The quantitative results show that there is a sequence in the SBM that goes from local knowledge acquisition to innovativeness and self-efficacy. The starting point is the local knowledge acquisition and the active participation in the community, that is, the community-centered strategy. However, the second qualitative study shows that it is not always easy to get community members involved. All those interviewed said that a lot of communication effort was necessary to generate trust in the local communities that traditionally were averse to change and the presence of strangers. This finding extends the knowledge on SBM by providing a better understanding of the knowledge links across it. Boons and Lüdeke-Freund (2013) and Porter, Orams and Lück (2018) recognized the need to understand how these links were established and how they contributed to innovation.

7.2. Community-centered strategy: an active knowledge magnet

In line with the research (Binkhorst & Den Dekker, 2009), the results from the quantitative study show that knowledge acquisition and community-centered strategy are also typical mechanisms in the small-scale tourism business. This finding proves they are privileged channels for the TLEs to participate in the so-called “playgrounds of creativity” (Richards, 2011). The interviews conducted in the second qualitative study showed that organizing local events worked like a “magnet” to attract knowledge and visitors. In their words, the holding of events promoted the participation of members of the community to which they generally had no access to or contact with. They always brought new practices, theories, or traditions. Since TLEs are poorly structured and with few resources, these strategies for local knowledge acquisition represent the most common path (Cooper, 2014). Furthermore, the TLEs saw community-centered strategies as a way of preserving local traditions and identities, even when

contradicting the official institutions that manage tourism locally. The studies from both the TLE and the SBM fields recommend more active strategies that involve stakeholders, communities, and visitors to promote trust and networking as ingredients for innovation in small-scale businesses (García-Rosell et al., 2019; Yachin, 2019). Furthermore, the community participation is a distinctive feature of SBM (Porter et al., 2018; Schaltegger et al., 2016). Our findings expand these relations by identifying a community-centered strategy as an important tool for knowledge acquisition that is appropriate for the limitations of these small-scale businesses.

7.3. Leveraging local knowledge outcomes

Our findings from the quantitative study show that local knowledge assimilation mediates the relation between local knowledge acquisition and TLEs' self-efficacy and innovativeness. As such, local knowledge needs to be integrated and applied in tourist experiences and narratives. As Hjalager et al. (2018) point out, innovation depends on the ability of TLEs to capitalize on opportunities.

The learning that results from the community-centered strategy influences the ability of the TLEs to communicate new narratives to the market. Although the proximity of clients and the community allows them access to knowledge, the research has identified TLEs as having limited capabilities to use this knowledge (Yachin, 2019) that is evidence of an unstructured approach to innovation (Cooper, 2015). As such, they have difficulties in turning new knowledge into innovation (Hoarau, 2014; Morrison, 2006). Thus, the ability to acquire local knowledge is not all that matters, but also the ability to translate it into something meaningful for the business that is dependent on their ability to communicate with the market, as suggested by Yachin (2019). Thus, a community-centered strategy influences TLEs' innovativeness and self-efficacy indirectly through entrepreneurial communication. The interviews from the second qualitative study showed another possible complementary explanation. The accumulated knowledge not yet converted into innovation reflects the concept of "knowledge stock", as suggested by Weidenfeld et al. (2010).

This study contributes to the SBM literature by providing evidence of the importance of acquiring and assimilating local knowledge, community-centered strategy, and entrepreneurial communication for the innovativeness and self-efficacy of TLEs. Furthermore, by exploring the underlying relations between these elements, this study expands the knowledge on more competitive and integrative solutions for SBM development, as prompted in the recent research (c.f. Neumeyer & Santos, 2017; Schaltegger et al., 2016). Another important contribution for the TLE and SBM literature is the mediating roles of assimilating local knowledge and entrepreneurial communication. Although previous research has identified knowledge management as a mediator by creating the values, philosophy, and the necessary foundations for more sustainable businesses (Zaragoza-Sáez et al., 2020), this study expands existing knowledge by assessing the role of local knowledge assimilation and entrepreneurial communication in leveraging the effects of a community centered-strategy and local knowledge acquisition on TLEs' innovativeness and self-efficacy. Considering that local knowledge is the basis for the TLE's differentiation, mechanisms for knowledge assimilation in the SBM can benefit competitiveness.

7.4. Developing more sustainable business models

Based on our findings, the following links in the SBM can be considered. The TLEs acquire knowledge through formal mechanisms and a community-centered strategy. They transform this knowledge through very specific mechanisms: the capability to assimilate knowledge and the capability to communicate entrepreneurial activities. The innovativeness and self-efficacy are important outcomes of the TLEs' SBM. Furthermore, there are two streams for knowledge management in the SBM. One stream is related to organizational informal processes (knowledge acquisition and assimilation). A second stream is linked to the TLEs' ability to cooperate and communicate with local stakeholders, the community, and tourists.

Thus, the strategies for acquiring this knowledge (local and market) can result from being close to clients and to the community and other stakeholders. But it can also arise from active participation in the community that favors the involvement of stakeholders both in obtaining

new knowledge and in participating in the experiences they offer to tourists. In this sense, Figure 2 displays four scenarios.

Insert Figure 2 here

In a situation where the TLE poorly engages the community, the local knowledge acquisition requires greater local participation (*embed*). In this case, the development of charitable actions or the preservation of local traditions together with other stakeholders may be a route to explore. In this way, the access to the continuously evolving local knowledge and stakeholder participation increases because of sharing experiences and stories (García-Rosell et al., 2019). However, collaboration is not an easy path, especially for those from abroad due to socio-cultural distance (Czernek, 2017).

When community involvement is low, TLEs need to seek market knowledge. In this situation, the TLE needs to *integrate* the business into the value chain, as suggested by Yachin (2019), or to maximize the power of networks with agents, companies, and organizations (Binkhorst & Den Dekker, 2009).

When a community-centered strategy already exists, the acquisition of knowledge is more assured. In this case, TLEs need to capitalize on it and *innovate*. The experiences offered can be leveraged with the existing link to the community and local stakeholders, which can be an integral part of the strategy. This strategy can be a playground for co-creation and creative experiences (Richards, 2011).

The last quadrant refers to the acquisition of market-related knowledge in situations where TLEs promote active strategies in the community. Here the important step is to *develop* the experiences in line with what the market seeks. Indeed, tourists that seek involvement in the experiences are fragmented into niches that demand tailor-made experiences (Ateljevic &

Doorne, 2000). Thus, local experiences need to be adapted and developed in line with these specific expectations.

8. CONCLUSION

In this research, we used a mixed-methods approach to achieve our objectives. The first objective concerns the comprehension of the key role of the place as a source of local knowledge. Our results show that local knowledge is the source of the TLEs' competitiveness (innovativeness and self-efficacy) by providing a distinctive value proposition that materializes the specificities of the place and the network developed by the entrepreneur. Local knowledge is also a key factor in the business model. TLEs are particularly interested in the preservation of the environment and local social traditions and way of life. Those were the reasons they were attracted to the place. As stated by Stubbs (2017), TLEs integrate sustainability goals into their business because economic success is linked to their environmental and social performance. Furthermore, the networks of local stakeholders that add value to the experiences empower them. This valuable distinctiveness is operationalized through innovative narratives and new products and services that embody this new knowledge. This is the customer relation element of the SBM.

The question is how do they do it? The answer comes with the response to the second objective. This research identifies the links between the elements of the SBM that convert local knowledge into entrepreneurial innovativeness and self-efficacy. Specifically, the first element is local knowledge acquisition that consists of the collection of local knowledge through informal channels and a community-centered strategy. This element concerns the infrastructure of the SBM. Knowledge acquisition is not an end in of itself. It must be transformed both into the knowledge stocks of narratives and experiences. As such, local knowledge must be integrated into organizational routines and embedded in the tourist experiences and the communication strategies. Furthermore, these issues must align with the growing tourist

exigencies, that is, market-focused experiences and communication. Knowledge acquisition is leveraged by knowledge assimilation, while a community-centered strategy is leveraged by entrepreneurial communication in relation to TLEs' innovativeness and self-efficacy.

Based on the results of the quantitative and the two qualitative studies, we proposed a model to develop an SBM, the third objective. The model proposes four situations according to the degree of the TLE's integration into the community and the source of local knowledge: place related or market related.

This study provides important practical and managerial implications. Local knowledge increases the probability of sustainable value creation from the destination (Shrivastava & Kennelly, 2013). Since TLEs are in the best position to promote sustainable practices (Bosworth & Farrell, 2011), destinations should create favorable conditions for the development of this type of business. By understanding the connections in the SBM managed by these entrepreneurs, some recommendations are possible. In order to improve the sustainability of small-scale businesses in the destination, it will be important to promote better knowledge management. First, TLEs must improve the acquisition of knowledge and the spillover effect. Based on the results, this research shows the importance of informal meetings with stakeholders that prevents maximum diversity and origins. Encouraging festivals and other events that involve the community is another important strategy. But improving knowledge assimilation skills is also important, which can be achieved through training (e.g., new product development, interpersonal communication, and marketing). Also, by stimulating the formation of clusters, destinations can not only boost this development of skills but can also act as a trigger for innovation in tourism in the destination (Czernek, 2017).

This study contains limitations that indicate different avenues for future research. First, the cross-sectional nature of this study limits our ability to fully establish causality. Thus, future research should follow a longitudinal data approach. Second, this study uses a non-probabilistic convenience sampling procedure for the survey which may create representativeness problems

for the population under study. Third, it limited the sample to Portuguese and Spanish TLEs and hence may not be generalizable to the TLEs in other countries. Thus, some caution should be taken in the generalization of the results. Consequently, in order to achieve better generalization, future research should test our conceptual model by using data from TLEs from other countries and by using a probability sampling procedure.

An important topic is the knowledge stocks. TLEs learn from the local context, but they do not transform all of this knowledge into innovation. This topic was also identified by other studies (c.f. Weidenfeld et al., 2010). However, it was not sufficiently developed, and key questions emerged for both small-scale businesses and destination competitiveness; such as, which factors increase the conversion rate of new knowledge into innovation?

Considering the links between the elements of the SBM, another important issue is the exploration of other dimensions or variables. Human resources influence TLEs' ability to compete that poses a challenge due to seasonality and low qualifications, as pointed out by Czernek (2014). The implications for the SBM elements are an important avenue for researchers. This research also shows that the local knowledge flows along those elements until it is converted into TLEs' innovativeness and self-efficacy. However, other links need to be explored. Since TLEs follow a triple bottom line approach to their SBM, they seek to balance environmental and social goals with economic ones. However, as argued by Zhang et al. (2015) and Bredvold and Skálén (2016), these elements are not equally reflected in their ambitions. Is there a difference between a business orientation and a purely lifestyle orientation in relation to assimilation strategies and innovation? To answer this question researchers can explore the effectiveness of the Google keywords as suggested by Huynh (2019).

Disclosure statement

The authors report no potential conflict of interest.

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Table 1. TLE-specific mechanisms for knowledge management.

Acquisition	Assimilation	Outcomes
<p>Informal and practical channels (Local embeddedness)</p> <ul style="list-style-type: none"> • Living and spending time locally; sharing experiences, and stories • Participating in conversations • Observation and listening • Acting with other stakeholders • Being close to customers <p>Community-centered strategy (active channels)</p> <ul style="list-style-type: none"> • Partnership with stakeholders • Collaborative practices with the community to “attract” new knowledge • Cooperative strategies 	<p>Organizational dimension (processes and capabilities)</p> <ul style="list-style-type: none"> • Routines to transform newly acquired knowledge • Incorporation in the organization knowledge stocks <p>Communication entrepreneurial orientation dimension (transformation in client-oriented narratives)</p> <ul style="list-style-type: none"> • Knowledge diffusion within the organization • Free idea sharing • Transform new local knowledge into new stories and meaning-making experiences • “Selling the place” • Identity building 	<p>Innovativeness</p> <ul style="list-style-type: none"> • New experiences • Relevant interpretations of new local knowledge • Tailor-made innovations to niche markets • Resource exploitation <p>Entrepreneurial self-efficacy</p> <ul style="list-style-type: none"> • Subjective measures of performance

Table 2. Composite reliability, average variance extracted, correlations, and discriminant validity checks.

Latent Variables	α	CR	AVE	1	2	3	4	5	6
(1) Entrepreneurial communication	0.850	0.893	0.627	0.792	0.274	0.427	0.429	0.570	0.726
(2) Local knowledge aquisition	0.760	0.845	0.578	0.228	0.760	0.735	0.623	0.190	0.183
(3) Local knowledge assimilation	0.831	0.922	0.856	0.362	0.607	0.925	0.425	0.604	0.542
(4) Community-centered strategy	0.746	0.829	0.553	0.388	0.433	0.334	0.744	0.399	0.368
(5) TLEs' perceived self-efficacy	0.810	0.874	0.635	0.481	0.126	0.514	0.308	0.797	0.794
(6) TLEs' innovativeness	0.915	0.941	0.800	0.648	0.123	0.468	0.353	0.682	0.895

Note: α -Cronbach Alpha; CR -Composite reliability; AVE -Average variance extracted. Bolded numbers are the square roots of AVE. Below the diagonal elements are the correlations between the constructs. Above the diagonal elements are the HTMT ratios.

Table 3. Structural model assessment.

Path	Path coefficient	Standard errors	<i>t</i> statistics	<i>p</i> values
Local knowledge acquisition→ Local knowledge assimilation	0.607	0.067	9.071	0.000
Community-centered strategy→ Entrepreneurial communication	0.390	0.059	6.596	0.000
Local knowledge assimilation→ TLEs' perceived self-efficacy	0.391	0.097	4.043	0.000
Local knowledge assimilation→ TLEs' innovativeness	0.269	0.073	3.704	0.000
Entrepreneurial communication→ TLEs' perceived self-efficacy	0.340	0.090	3.765	0.000
Entrepreneurial communication→ TLEs' innovativeness	0.551	0.085	6.456	0.000

Table 4. Bootstrap results for indirect effects.

Indirect effect	Estimate	Standard errors	<i>t statistics</i>	<i>p value</i>
Community-centered strategy→ Entrepreneurial communication→ TLEs' perceived self-efficacy	0.133	0.043	3.064	0.002
Community-centered strategy→ Entrepreneurial communication→ TLE's innovativeness	0.215	0.050	4.334	0.000
Local knowledge acquisition→Local knowledge assimilation→ TLEs' perceived self-efficacy	0.237	0.059	4.020	0.000
Local knowledge acquisition→Local knowledge assimilation→ TLEs' innovativeness	0.164	0.046	3.544	0.000

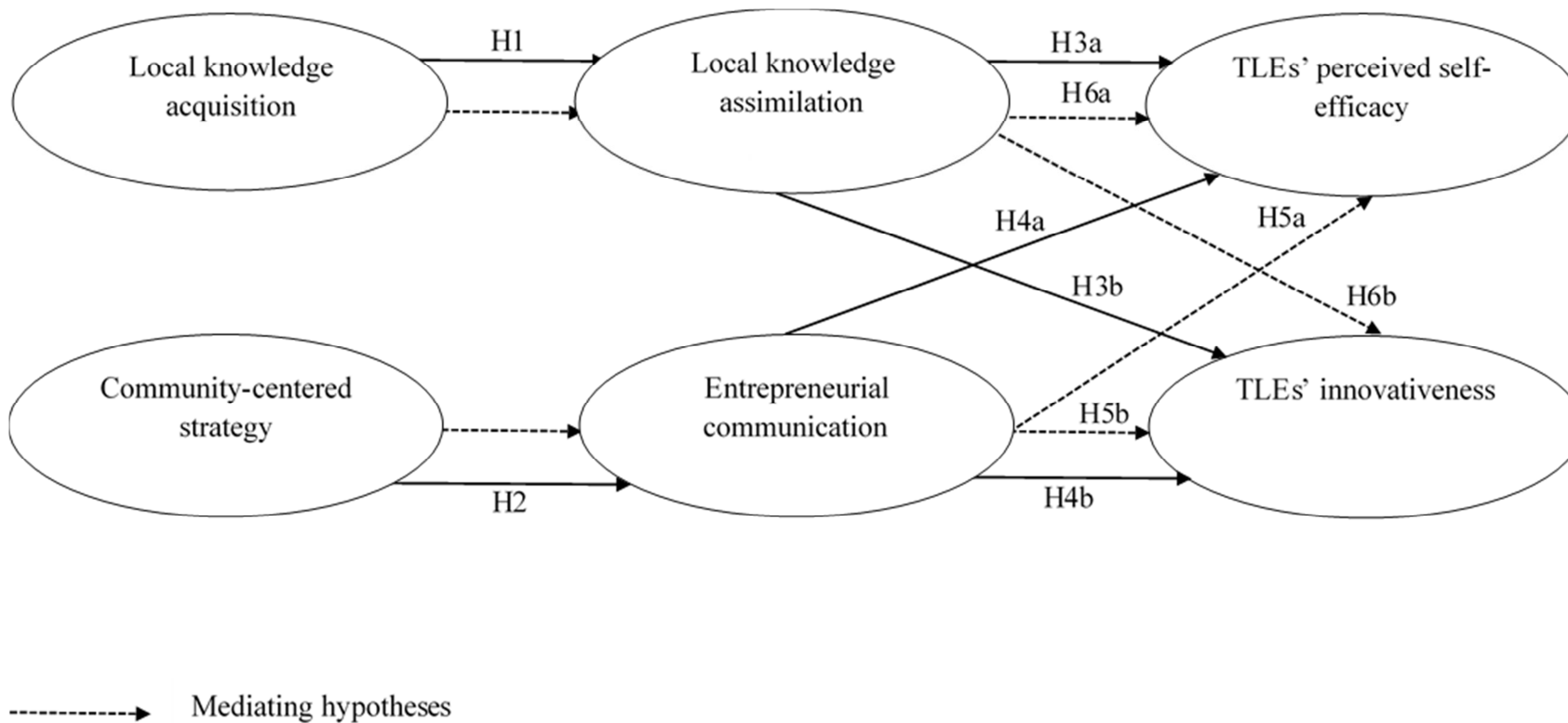


Figure 1. Conceptual model.

Involvement in the community	High	Innovate	Develop
	Low	Embed	Integrate
		Place related	Market related
		knowledge	

Figure 2. Actions for more Sustainable Business Model