Investigating the effects of offline and online social capital on tourism SME performance: A mixed-methods study of New Zealand entrepreneurs

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A R T I C L E   I N F O

A B S T R A C T

Entrepreneurial social capital develops through the accrual of resources gained from an entrepreneur's social ties. These are integral to entrepreneurial success, enabling access to financial, marketing, and human resources, and innovation. Entrepreneurs increasingly manage their networks through online platforms such as Facebook, LinkedIn, and Twitter. However, there are major gaps in the extant empirical research concerning how online social capital is manifested, if this differs from an in-person context, and the effects 'online' and 'offline' social capital resources on tourism business success. This study adopts a mixed-method approach to examine tourism entrepreneur's behaviours in building offline and online social capital, and their nuanced effects on firm performance. The results found tourism entrepreneurs' networking activity manifests in three distinct configurations, Active Online Networkers, In-Person Networkers, and the Less Engaged. Each configuration demonstrated varying effects on expected business growth and performance with regards to number of employees, sales revenues, and net profit.

1. Introduction

The tourism industry is the highest contributor to foreign exchange earnings in New Zealand (Tourism Industry Aotearoa, 2019), predominantly comprising of SMEs (85% with less than 10 employees (Tourism Industry Aotearoa, 2017)). Thus, the performance of tourism firms is crucial to the success of the tourism industry and the visitor economy. Evidence suggests that an entrepreneur's professional and social networks facilitate access to resources integral to business success such as market information, innovation, and finances. These social and professional connections build entrepreneurial 'social capital', defined as 'the sum of actual and potential resources embedded within, available through, and derived from the network of relationships' (Nahapiet & Ghoshal, 1998, p. 243). In addition to physical/real world connections with family, friends, colleagues, and suppliers, entrepreneurs build social capital by using online social networking platforms such as Facebook, LinkedIn, and Twitter (Fischer & Reuber, 2011; Sigfusson & Chetty, 2013). However, social ties created and managed through online and offline environments present nuanced relationships and diverse opportunities which, in turn, can have varying types of impacts on a tourism business' activities.

In *offline* (i.e. face-to-face) environments, the evidence shows an entrepreneurs' social capital positively influencing enterprise performance (Stam, Arzlanian, & Elfring, 2014). Social capital is important to enterprise success as it enables opportunity recognition (Anderson & Miller, 2003), inter-firm alliances (BarNir & Smith, 2002), access to lines of credit (Honig, 1998), access to potential employees (Bosma, Van Praag, Thurik, & De Wit, 2004), development of business acumen (Zhou, Wu, & Luo, 2007), and the sourcing of ideas for innovation (Hughes, Ireland, & Morgan, 2007). However, our review of the literature also highlighted significant gaps on how social capital can develop from an entrepreneurs' online social networks. Although studies looking at online social networking in a tourism context have emerged (c.f. Lo, Mckercher, Lo, Cheung, & Law, 2011; Kim, Lee, & Bonn, 2016; Wang, Kirillova, & Lehto, 2017), most studies to date predominantly use a demand-side approach, focusing on the consumer's perspective and their engagement with social networking sites. In contrast, this study takes a supply-side approach to examine how tourism entrepreneurs utilise online social networking to build social capital and the consequent outcomes on firm performance.

A recent systematic review of research on social media and entrepreneurship demonstrates the adoption, usage, and outcomes of social

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media use by entrepreneurs (Olanrewaju, Hossain, Whiteside, & Mercieca, 2020). Several studies have examined how engagement with social media platforms can be used for business networking. Kasavana, Nusair, and Teodosic (2010) presented a conceptual paper on the historical development of online social networks and their implications for hotel businesses. However, the applicability of their concepts, which focus on large hotel properties, may not be suitable in the context of tourism SMEs that lack the time, resources, and skills necessary to develop, for example, proprietary online social network sites that can track customers (Kasavana et al., 2010). Smith, Smith, and Shaw (2017) presented a conceptual paper on how entrepreneurs may use online social networks to build their social capital resources, developing 12 propositions to explain how online social networks increases bridging and bonding social capital. However, these propositions are yet to be tested using empirical data. Studies have also looked at entrepreneur's use of Twitter and LinkedIn to build social capital. Fischer and Reuber (2011) examine the role of business-to-business (B2B) interactions on Twitter in enhancing an entrepreneur's goal-setting abilities (Fischer & Reuber, 2011). However, it is unanswered whether these interactions have implications on business success, nor does the study explore equally important connections that can be made between entrepreneurs and other stakeholders such as customers, suppliers, or their local community. Other studies focus on the retweets, posts, or interactions of Twitter and LinkedIn members in online groups for professionals (Sigfusson & Chetty, 2013; Quinton & Wilson, 2016; Wang, Mack, & Maciewjewski, 2016). However, the data extracted for these studies were from groups or discussion boards where membership was not exclusive to entrepreneurs. Therefore, it is unclear whether the interactions were between business owners (i.e. actual entrepreneurs) or individuals with merely an interest in entrepreneurship. In addition, the previous studies reviewed here bind their research settings to a single online networking platform (Twitter or LinkedIn), excluding larger and potentially more relevant online networking platforms to tourism such as Facebook and Instagram (Euromonitor International, 2019).

In light of these research gaps, this study will contribute to the literature on entrepreneurial social capital and empirically examine how entrepreneurs in the tourism sector develop social capital resources through offline (face-to-face) connections, and through online engagement via multiple social networking platforms (in our case Facebook, LinkedIn, Twitter, and Instagram). In addition, drawing on theories of entrepreneurship and social capital theory, the study examines the extent to which different forms of social capital (online and offline) have varying effects on tourism firm's performance outlooks. We conduct a mixed methods study through a survey of 285 tourism SMEs in New Zealand, as well as follow up in-depth interviews with tourism entrepreneurs. We use quantitative and qualitative methods of analysis that includes cluster analyses to segment different groups of tourism entrepreneurs according to their social capital resources. Parametric and nonparametric tests are then applied to profile 'social capital clusters' of firms and examine key differences across business and owner characterises, as well business performance and future growth outlooks. Postsurvey in-depth interviews with seven entrepreneurs from the survey sample were conducted to help validate and explain the findings of the quantitative analysis. Through this approach, the study contributes to the body of knowledge on tourism entrepreneurship, social networks, and social capital by understanding the configurations of tourism entrepreneur's offline and online social capital in a single study, and the subsequent implications these configurations have with regards to tourism enterprise performance.

2. Literature review

2.1. Entrepreneurial social capital

Social capital is defined as the actual and potential resources available through an actor's network of relationships with others (Stam et al., 2014). These 'others' refer to people an actor knows or, who are known by the people that an actor knows (Greve & Salaff, 2003). Such connections can serve as resources/assets to help achieve certain objectives (Burt, 1992; 2000). Social capital is an important resource in entrepreneurship as it provides access to other resources including financial resources, labour, skills, and information (Greve & Salaff, 2003). Empirical evidence suggests social capital supports entrepreneurial efforts in opportunity recognition (Anderson & Miller, 2003), building of inter-firm alliances (BarNir & Smith, 2002), access to lines of credit (Honig, 1998), access to potential employees (Bosma et al., 2004), obtaining business advice (Zhou et al., 2007), and creating ideas for innovation (Hughes et al., 2007).

Social capital has been classified into two different types; 'bonding' and 'bridging' social capital (Adler & Kwon, 2002; Davidsson & Honig, 2003). Bonding social capital refers to relationships between actors that know each other well (e.g. family and friends), allowing exchanges of resources based on trust and reciprocity (Davidsson & Honig, 2003). It is closely related to Granovetter's (1973) 'strong ties', referring to ties derived from strong relationships such as family bonds, which provide consistent access to resources. Bridging social capital is relationships between actors from diverse groups or backgrounds (e.g. between a firm and trade organisations), which facilitates the attainment of information otherwise unavailable within an actor's familiar group (i.e. bonding social capital) (Davidsson & Honig, 2003). This is similar to 'weak ties' (Granovetter, 1973), meaning, loose relationships between individuals to obtain resources that are otherwise unavailable, and 'structural holes' (Burt, 1992), where weak connections between groups create 'holes' in the social structure. These 'holes' allow an individual to derive a competitive advantage by becoming a 'broker' that spans the hole, brokering the flow of information between people across holes, thus, controlling the processes between.

In an entrepreneurship context, social relationships are grouped into four categories: personal, professional, associative, or institutional (Hernández-Carrión, Camarero-Izquierdo, & Gutiérrez-Cillán, 2017). Personal networks are relationships with people in an individual's private circle, such as with family, relatives, and friends that share common characteristics and interests. These are related to bonding social capital or strong ties. Professional networks are relationships with partners, workers, suppliers, customers, and colleagues. These are related to bridging social capital as they occur in a formal context. Associative networks are relationships with associations an individual belongs to (e.g. business, trade, professional, political, sports, or volunteer associations). These relationships can be formal in nature, especially when these groups are governed by rules that regulate membership entry and behaviour, but can also involve informal interactions (such as religious and sporting associations). Thus, these relationships can involve both bonding and bridging social capital or strong and weak ties. Institutional networks are relationships with people within public or private institutions (such as local, regional or national governments, large firms, and banks). These relationships are usually not voluntary in nature and highly regulated.

2.2. Online social networks

Developing social capital is context specific; the rules that govern interactions, access to resources, and entrepreneurial business practices are influenced by historical, cultural, and business contexts (Foley & O'Connor, 2013; Kristiansen, 2004). The utilisation of online networking platforms to build and maintain relationships is substantially different than in-person interactions (Baym, 2010). In these settings, time and space is compressed, speed of communication is high, and accessibility to individuals increases (Baym, 2010). Kasavana et al. (2010) argues that the communication between a hotel firm and its guests through online social networks can positively affect guest satisfaction and loyalty behaviours, for example, by providing a virtual concierge that answers questions guests post on social networking sites

in a timely and informative manner. Hotels can also create co-worker sites where staff can interact with each other through a social networking platform, encouraging a community of inclusiveness and information sharing. However, while online social networks can be beneficial, they also come with risks such as data breaches and excessive unwanted and unverified chatter such as gossip about the property or persons.

Fischer and Reuber (2011) examine how the use of Twitter may enhance the effectuation process in entrepreneurs. Through interviewing twelve entrepreneurs, their findings suggest that moderate online social interaction through Twitter allows entrepreneurs to gain new insights into the resources available to them and how they can be used to achieve a set of goals. However, if one invests too heavily in social media interaction, they may continuously loop between gaining new information about resources and reassessing their set of means and potential goals, without actually using their means to pursue a goal. Wang et al. (2016) studied retweets of Twitter users within entrepreneurial networks in the United States. Twitter enabled interactions between actors in geographically distant locations, however, the highest density of interactions still occurred within regions than between regions. In addition, the socioeconomic and demographic profile of the individuals interacting in these entrepreneurial networks were similar regardless of geographical distance, suggesting social similarity is important to these interactions.

Quinton and Wilson (2016) focus on the business networking platform LinkedIn to examine the nature of business relationships developed through this platform in wine networks. Their study identified multiple tensions between actual networking behaviours and business relationship theory. LinkedIn facilitates sharing industry insights, but, this goes against competitive strategy. Also, the immediacy of obtaining information about other actors allows emergent relationships to form by chance, as opposed to rational and strategic relationship development. In addition, membership in social media networks acts as heuristics to determine an actors trustworthiness, reducing the time required to assess this trait over a prolonged period of interactions.

Smith et al. (2017) develop a conceptual framework to understand how social networking sites influence an entrepreneur's bridging and bonding social capital. Social networking sites may enable entrepreneurs to find others with similar interests, assess the content of networks they may wish to join, and make social judgements about potential connections, aiding network broadening behaviours that may be hard, time-consuming, or socially awkward for face-to-face interaction. In addition, with the vast availability of information through social networking sites, entrepreneurs could use this opportunity to make calculative connections that may not be possible in offline settings. Entrepreneurs can convert weak ties to stronger ties by leveraging common ground and shared attributes through social networking site profiles, which are difficult to determine offline.

2.3. Research questions

The review of the extant literature identifies the need to investigate the types of social capital that is accrued through online engagement across a wide range of social media platforms, the process in which social capital resources are accrued, and the entrepreneur's ability to leverage these social connections to support firm performance. In addition, we recognise that entrepreneurs build social capital through both offline and online social networks, and that these two types of social capital can have nuanced effects on firm performance. For example, face-to-face interactions enable strong interpersonal bonds to develop, facilitating 'strong ties' and easier access to resources. However, these strong ties require significant investment and time, requiring multiple interactions in order to build trust in the relationship (Quinton & Wilson, 2016). There is a risk that investment in cultivating these ties may result in fruitless outcomes for the entrepreneur. Online social platforms enable speed of communication and accessibility to

information and resources (Baym, 2010). These support the formation of weak ties and a significantly larger network of friends/followers/contacts. The balance of social networks (including strong and weak ties) developed through offline and online environments, and the effects of these networks on building social capital and enterprise performance remains a significant gap in the literature. This study will address these gaps through the following research questions (RQ):

RQ1: What are the configurations of tourism entrepreneurs' offline (personal, professional, associative, institutional networks) and online (Facebook, LinkedIn, Twitter, and Instagram connections) social capital?

RQ2: What are the implications of social capital configurations with regards to tourism enterprise performance (i.e. performance outlooks for staffing levels, sales revenue, and net profit)?

3. Methodology

The research questions are examined through a mixed methods approach using both quantitative and qualitative methods. This enables 'complementarity', exploring different facets of the same complex phenomenon to provide a deeper understanding of the issue under study (Greene, 2007), as well as 'triangulation' through corroboration of inferences (Teddlie & Tahsakkori, 2009). The mixed methods approach followed an explanatory sequential design (c.f. Kallmuenzer, Kraus, Peters, Steiner, & Cheng, 2019). Phase 1 involved a quantitative study exploring the configurations of offline and online social capital present among tourism entrepreneurs in New Zealand, and whether these configurations affect firm performance outlook. Phase 2 involved qualitative interviews with a sample of the Phase 1 participants in order to gain an in-depth understanding of their social networking practices and the how they leverage their social networks to extract resources for their business.

3.1. Phase 1 - quantitative study

3.1.1. Quantitative sample

An e-survey of tourism SME owners in New Zealand in 2018 was conducted, using a sampling frame of 4510 businesses developed from two online business-listing companies. After pilot testing and final modifications, the survey resulted in 285 completed responses from tourism business owners across New Zealand. This represents a 6.3% response rate, consistent with prior studies of tourism entrepreneurs utilising e-surveys (Lee & Hallak, 2018). The adequacy of the sample size was determined through *a priori* and post-hoc power analyses using G*Power (Faul, Erdfelder, Buchner, & Lang, 2009). Using suggested minimum values by Cohen (1988) (medium effect size of 0.25, statistical power of 95%, 3 groups), the *a priori* G*Power calculation indicated a sample size of 252 was required. In addition, the post-hoc G*Power calculation for a medium effect size of 0.25, a sample size of 285, and 3 groups resulted in a statistical power of 0.97 (97%), well above Cohen's (1988) recommendations, justifying the adequacy of our sample. Missing value analysis indicated less than 5% values missing per indicator in the dataset. Therefore, missing values were imputed using the expectation maximization algorithm (Peters & Enders, 2002).

Appendix 1 presents the descriptive summary of the respondent's characteristics. Over half of respondent businesses were accommodations (hotels/motels/backpackers), followed by restaurants/cafes/bars (22.1%), and tour operators (15.8%). In terms of entrepreneur characteristics, 45.3% were female and over 80% of tourism business owners were above the age of 45, consistent with data from the New Zealand Small Business Council (2019) which reported 85% of business owners to be 40 years and above. Just over half of business owners had completed post-secondary education including certificate/diplomas or Bachelor's degrees. However, the majority did not have any formal qualifications in entrepreneurship (80%) or tourism/hospitality

(69.1%). With regards to entrepreneurs' use of social media platforms, most business owners had a Facebook page, but few had LinkedIn, Twitter, or Instagram accounts. Business owners with social media accounts generally had between 1 and 100 friends/connections/followers.

3.1.2. Construct measures

Online Social Capital was measured following Zheng et al.'s (2014) study. Respondents were asked to indicate how many friends/connections/followers they had on four social media platforms of Facebook, LinkedIn, Twitter, and Instagram, which is a similar measure of network size used in studies of online social networks (Luo & Zhong, 2015). We repeated the questions for their 'personal' accounts and 'business' accounts to examine if there were differences in the nature of the connections they made online. *Offline Social Capital* was measured using a scale developed by Hernández-Carrión et al. (2017). This measured the degree to which entrepreneurs acquired financial resources, technology and innovation capabilities, marketing resources, quality management capabilities, human resources, and organisational capabilities from their personal, professional, associative, and institutional networks. *Future Growth Outlook* measured the tourism SME owner's expected future growth outlook for the next 12 months with regards to employment growth, sales revenue, and net profit (see Prasad, Naidu, Murthy, Winkel, & Ehrhardt, 2013). This also follows Murphy, Trailer and Hill's (1996) call for measures of entrepreneurial performance to measure multiple and specific outcomes. As discussed previously, social capital provides access to potential employees (Bosma et al., 2004), key customers to increase sales (Kasavana et al., 2010), and new sources of finance or business advice (Honig, 1998; Zhou et al., 2007). In this study we focus on expected future growth to account for the time lag between the accrual of offline and online social capital and its subsequent influence on the business' performance moving forward. Subjective measures of growth were captured since obtaining actual financial/accounting data from SMEs is known to be problematic as it cannot be checked for accuracy, and results in missing data due to the reluctance of business owners to disclose sensitive information (Haber & Reichel, 2005; Runyan, Droge, & Swinney, 2008). As such, we excluded objective performance measures from our analysis. Finally, multiple research studies have demonstrated that subjective performance measures are strongly correlated to objective performance measures for small businesses (Dess & Robinson, 1984; Vij & Bedi, 2016; Wall et al., 2004). Demographic variables which were also captured were type of business, number of full- and part-time staff, business location, business age, the entrepreneur's education and business experience levels, their gender, and their age.

Common method bias (CMB) was mitigated through procedural design (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Senior academics specialising in entrepreneurship and tourism were consulted to develop the survey, which was then pilot tested on tourism SMEs, ensuring the contents were clear, concise, context specific, and free of ambiguity. Also, the constructs of interest were methodologically separated through different response formats (Likert scales, yes/no, semantic differential scales, ordinal scales) and the question order was counter-balanced by separating survey sections (Podsakoff et al., 2003). For example, questions on business demographics were first presented, followed by questions on offline social capital, followed by further personal demographic questions, and then questions on online social capital.

3.1.3. Quantitative data analysis

Quantitative data analysis followed a four step process: 1) Hierarchical cluster analysis; 2) K-means cluster analysis; 3) Discriminant analysis; and 4) One-way ANOVA, Kruskall-Wallis and Mann-Whitney U tests, and cross-tabulations. First, hierarchical cluster analysis was performed to segment the sample on their offline and online networking practices. Based on the results, K-means cluster analysis was subsequently used to determine the final number of clusters (Lee, Hallak, &

Sardeshmukh, 2016). Next, the final cluster solution from the K-means cluster analysis was validated using discriminant analysis. One-way ANOVA, Kruskall-Wallis and Mann-Whitney U tests, and cross-tabulations were then used to examine the significant differences between the clusters on a set of variables not used in the cluster analyses.

3.2. Phase 2 - qualitative study

3.2.1. Qualitative sample

In phase 2, respondents who completed the e-survey in phase 1 (i.e. the 285 respondents) were asked to participate in follow-up interviews about their networking practices. Through this, 61 previous respondents indicated a willingness to be interviewed. Of those, only seven were available to be interviewed during the data collection period when contacted. For those that were unavailable, these were due to the entrepreneur not responding when contacted, changing their mind, being unavailable to be interviewed due to a busy work schedule, or only being able to be interviewed at a date significantly outside the data collection period. In-depth telephone interviews were conducted with the seven tourism SME entrepreneurs that agreed to be interviewed, and the data was used to add qualitative insights into entrepreneur's social capital. The qualitative sample represented a good range of business types, location, business age, and owner gender balance (Table 1). We interviewed three accommodation businesses, two food and beverage establishments, and two tour operators located across New Zealand's North and South Islands, with three businesses in operation under 10 years and four businesses in operation ranging from 12 to 26 years old. The sample included three female and four male entrepreneurs, with all owners aged 36 or above.

3.2.2. Qualitative data analysis

The interviews used a protocol with several core questions related to the research aims with opportunities for follow up probes (Miles & Huberman, 1994). Participants were asked about their offline and online social networks and how they used these networks to extract resources using the following questions: 'Who do you consider as important to your business networks?', 'What are the benefits that you obtain for your business from these networks?', and 'What do you use your online social networks for?'. The interviews ranged between 20 and 40 min. Data from the interviews were digitally recorded, transcribed, and analysed using thematic analysis following Braun and Clarke's (2006) procedures. The thematic analysis predominantly used a deductive approach, using knowledge obtained from phase 1 to search for themes within the data corresponding to the types of business networks the entrepreneurs engaged with, the benefits they derive from such networks, and their objectives when engaging in online social networks, consistent with a deductive bottom-up approach to theorising (Shepherd & Sutcliffe, 2011). A summary of the questions asked and the themes derived from

Table 1
Demographic information of the interview sample.

Code	Business type	Location	Years of ownership	Age	Gender
Café A	Café	Bay of Plenty	13	56 and above	Male
Motel B	Motel	Otago	19	56 and above	Female
Restaurant C	Restaurant	Northland	6	36–45	Male
Tour Operator D	Tour Operator	Otago	26	56 and above	Male
Holiday Park E	Holiday Park	Taranaki	12	46–55	Female
Motel F	Motel	Southland	2	46–55	Female
Tour Operator G	Tour Operator	Hawke's Bay	9	56 and above	Male

the interviewees' responses are provided in Table 2.

4. Results

4.1. Phase 1 - quantitative results

4.1.1. Cluster analysis

To segment the tourism SMEs based on their online and offline social networking practices, hierarchical cluster analysis using the z-scores of the thirty two offline and online social capital measures, the Ward clustering algorithm, and the squared Euclidean distance was conducted. The agglomeration coefficient usually indicates too few clusters as a solution because maximum heterogeneity is reached when moving from a two to one cluster solution (Milligan & Cooper, 1985). Thus, the three cluster solution was investigated as it represented the second highest increase in heterogeneity (Table 3).

K-means clustering was used to finalise the clusters. The ANOVA data indicated statistically significant differences in offline and online social capital among the three cluster solutions (Table 4). Next, discriminant analysis was conducted to validate the three-cluster solution. The classification matrices showed that for the initial 285 observations, 97.2% of respondents were correctly classified (Table 5). In addition, 91.6% of cases were correctly classified for the cross-validated sample, supporting the reliability and validity of three-clusters in distinguishing the sample based on offline and online social capital.

4.1.2. Profiling the clusters on their social capital

Cluster I (N = 45) had significantly higher levels of online social capital compared to Clusters II and III. This Cluster had more friends/connections/followers on all social media platforms compared to the other two clusters, with the exception of the number of LinkedIn Company connections, where there were no significant differences between the three clusters. Cluster I had similar levels of offline social capital with regards to personal and professional networks with Cluster III, but significantly lower levels of associative and institutional networks. Thus, we label Cluster I as the 'Active Online Networkers' (AONs), owing to their significantly higher levels of online social capital. Cluster II (N = 166) had significantly lower levels of offline and online social capital in almost all categories compared to the AONs and Cluster III. However, this Cluster had similar levels of online social capital with Cluster III as there were no significant differences on most of the online social capital variables between these two clusters. Thus, we label Cluster II as the 'Less Engaged' (LEs), owing to their significantly lower levels of both social capital types. Cluster III (N = 74) had significantly higher levels of

social capital with regards to associative and institutional networks compared to the AONs and LEs. This Cluster also had significantly less online social capital compared to the AONs, but no significant differences with the LEs on most online social capital measures. Cluster III also had no significant differences with the AONs on most of the variables relating to personal and professional networks. Thus, we label Cluster III as the 'In-person Networkers' (IPNs) as they pursue increasing their social capital in the offline sphere through associative and institutional networks and building strong ties, with the trade-off being foregoing the opportunity to expand their networks through online social platforms.

The three identified clusters from the analysis 1) Active Online Networkers (AONs), 2) Less Engaged' (LEs), 3) In-person Networkers' (IPNs) are graphically presented on a radar chart (Fig. 1). The radar chart is plotted based on the mean z-scores of each cluster on the thirty two social capital variables. It visualises the explicit differences between the three clusters in terms of the extent to which the cluster members acquired financial resources, technology and innovation capabilities, marketing resources, quality management capabilities, human resources, and organisational capabilities from their personal, professional, associative, and institutional networks (i.e. offline social capital), and the amount of friends/connections/followers the cluster members had on their business and personal accounts on the four social media platforms of Facebook, LinkedIn, Twitter, and Instagram (i.e. online social capital).

4.1.3. Key differences among the three clusters

The three identified clusters of tourism businesses were profiled using additional variables (i.e. those not included in the cluster analysis). These variables include: tourism firm's future growth outlook; the type, age, location, and number of full- and part-time staff in the business; and the business owner's levels of education, business experience, age, and gender. Parametric (ANOVA) and non-parametric (Kruskall-Wallis, Mann-Whitney U and cross-tabulation) tests were used to determine any significant differences among the clusters across these discriminating variables. The results indicated that the three clusters were significantly different on a number of key variables, (significant findings are presented in Tables 6–8).

Profiling the clusters identified differences among business groups. The AONs consisted mostly of restaurant/cafes/bars, whereas the LEs were mostly hotel/motel/backpacker businesses. LEs also employed fewer full- and part-time staff compared to the AONs and IPNs (Table 7). Business owners from the LE cluster were significantly older in age compared to owners from the AON and IPN clusters (Table 6). Entrepreneurs from the IPN group were more likely to have qualifications in entrepreneurship and/or tourism/hospitality as compared to the other groups (Table 8).

When comparing the clusters across business performance (and outlook for growth), the analysis found that both the AONs and IPNs expected their business to achieve higher levels of growth in staff numbers compared to the LE group of entrepreneurs. In addition, AONs reported significantly higher growth outlooks for sales revenue growth than both the IPNs and LEs, and significantly higher net profit growth compared to the LEs. These findings support the importance of entrepreneurial social capital for the success of tourism enterprises (Table 6).

4.2. Phase 2 - qualitative results

The qualitative results triangulated, complemented, and helped to explain the quantitative results. Similar to the findings in Fig. 1, social networks and relationships developed through industry associations (i.e. Institutional Relationships) were the most important for tourism entrepreneurs:

Tourism Industry Aotearoa are Wellington's advocacy group when it comes to making noise with knocking doors open and introducing us to important people that we need to talk to in Wellington. (Tour Operator D).

Table 2
Themes generated from interviews.

Interview question	Themes derived from responses[a]
Who do you consider as important to your business networks?	Industry associations
	Suppliers
	Customers
	Staff
	Other business owners
	Business partner
	Leisure associations
What are the benefits that you obtain for your business from these networks?	Sourcing staff
	Market information
	Ideas for innovation
	Mentoring
	Customer referrals
	Quality assurance
What do you use your online social networks for?	Spread business information (opening hours, closures)
	Business intelligence (scanning competitor and customer pages)
	Marketing new products/services/events

[a] Themes arranged in order of magnitude within the sample's responses.

Table 3
Agglomeration coefficients from the hierarchical cluster analysis.

Stage	Cluster 1	Cluster 2	Coefficient	Number of clusters after combining	Coefficient increase to the next stage	Proportionate increase in heterogeneity to the next stage
277	5	58	5696.999	8	167.197	2.95%
278	5	10	5864.196	7	226.662	3.87%
279	1	25	6090.858	6	255.078	4.19%
280	3	23	6345.936	5	261.640	4.12%
281	1	9	6607.576	4	350.885	5.31%
282	1	19	6958.461	3	458.932	6.60%
283	1	5	7417.393	2	1670.607	22.52%
284	1	3	9088.000	1	–	–

Note: If we discard the two cluster solution in stage 283, the second highest increase in heterogeneity corresponds to a three cluster solution in stage 282.

We also have Adventure Taranaki, which is very important in New Plymouth that's supported by the district council. So, we have events with them, but we can also ring them for any help or advice. They also do data collecting and sharing. (Holiday Park E).

Other significant networks, in order of importance, were the entrepreneur's professional networks, who were their suppliers, customers, staff, other business owners, and the entrepreneur's business partners, followed by associative networks through leisure associations. No business owners mentioned personal networks such as family and friends as being an important network for their business.

We also explored what resources the entrepreneurs were able to gain from these networks. The main resource was access to qualified and reliable staff:

My staff themselves, they sometimes ask their friends to come. Or, previous staff who already resigned recommend someone to come apply to a job, and most of them end up doing a good job. (Restaurant C).

This was followed by the ability to extract market information from their institutional relationships.

We work within that high net worth premium market because our clients have got a lot of money when they come here. So, they're (Tourism New Zealand) always there to offer advice and direction on how to deal with some of those bigger, VIP-type clients that want to operate in a very discreet and discerning way, but want their product delivered to them on a silver plate as well. (Tour Operator D).

Other significant benefits, in order of importance, were ideas for innovation, business mentoring, customer referrals, and quality assurance assessments.

Finally, we also examined how entrepreneurs used their online social networks in their business operations. By far, the most common response was as a tool to spread information about the business, such as opening hours or any significant closures.

We definitely post when we have to tell the customer that we're going to close, like when we have end of year leave and I'm going to check all of my staff for holiday, or, when we're going to close during long weekends. When it's close to some festival or some events and we're going to decorate our restaurant, then I post pictures. (Restaurant C).

The next important function of their online social networks was to market new products, services, and events such as competitions the business is running (Holiday Park E) and tour packages (Tour Operator G). A few business owners also obtained business intelligence by scanning their online social network pages, the pages of their customers, and their competitor's pages on similar platforms.

It makes us realise which customers I see at the restaurant really like our product. Some customer that come, I might not know what they really think. Then, I see them active on our Facebook page. So, I know that this customer is an important customer. (Restaurant C).

5. Discussion

This study addresses two fundamental research questions with regards to tourism entrepreneurship and social capital. RQ1 concerns the configurations of tourism entrepreneurs' offline (personal, professional, associative, institutional networks) and online (Facebook, LinkedIn, Twitter, and Instagram connections) social capital connections. Results of the cluster analyses on data collected from 285 tourism entrepreneurs in New Zealand identified and supported three distinct clusters of tourism firms with different configurations of social capital: AONs (N = 45) had significantly higher levels of social capital through social networks developed through online networking platforms. This is in contrast to IPNs (N = 74) who reported significantly higher levels of associative and institutional networks developed through face-to-face connection, but relied less on online social networks to build social capital resources. The final cluster, the LEs (N = 166), had significantly lower levels of social capital from both offline and online networks.

Empirical evidence suggests social capital supports entrepreneurial efforts in opportunity recognition (Anderson & Miller, 2003), building of inter-firm alliances (BarNir & Smith, 2002), access to lines of credit (Honig, 1998), access to potential employees (Bosma et al., 2004), obtaining business advice (Zhou et al., 2007), and creating ideas for innovation (Hughes et al., 2007). In this study we expand this body of knowledge by examining RQ2 concerning the implications of social capital configurations with regards to tourism enterprise performance (i.e. performance outlooks for staffing levels, sales revenue, and net profit). Parametric (ANOVA) and non-parametric (Kruskall-Wallis, Mann-Whitney U and cross-tabulation) tests were used to determine any significant differences among the three clusters of tourism entrepreneurs across business performance outlooks. Our analysis demonstrated that entrepreneurs from the LE cluster reported significantly lower performance outlooks compared to the other clusters. In addition, entrepreneurs from the AONs reported higher performance outlooks in terms of growth in staff, sales revenues, and forecasted net profit. Building social capital (both strong ties and weak ties) through engagement with social networking platforms has positive impacts on tourism firm performance. Those less engaged are inadvertently reducing potential sources of competitive advantage and in turn, reducing their performance against competitors.

Results of the follow-up qualitative interviews with tourism entrepreneurs helped delineate these findings and provide further insights into how social capital supports tourism firm performance. The interview data was analysed through thematic analysis, using knowledge obtained from the survey to search for themes within the data corresponding to the types of business networks the entrepreneurs engaged with, the benefits they derive from such networks, and their objectives when engaging in online social networks, consistent with a deductive bottom-up approach to theorising (Shepherd & Sutcliffe, 2011). Specifically, social capital developed through both online and offline networks supports tourism firms in accessing qualified and reliable human resources. Attracting, hiring and training staff remains significant challenge for tourism SME, and this study has found that through social capital entrepreneurs can develop a competitive advantages in their HR practices:

Otago is a market where you have students, and students like [casual] jobs. This is a casual job, there is flexibility, so usually it's word of

Table 4
K-means cluster solutions.

Variable	Active Online Networkers (I) (N = 45) Mean (z-score)	Less Engaged (II) (N = 166) Mean (z-score)	In-person Networkers (N = 74) Mean (z-score)	F-statistic	Sig.	Post-Hoc Tests[a] 95% CI I-II	I-III	II-III
Personal networks for Financial Resources	0.36340	−0.25826	0.35835	12.87^W	***	0.32–1.37	n.s.	[-1.30]-[-0.47]
Personal networks for Technology & Innovation	0.49608	−0.35745	0.50018	27.86^W	***	0.62–1.53	n.s.	[-1.38]-[-0.74]
Personal networks for Market Information	0.55782	−0.41609	0.59419	42.00^W	***	0.81–1.60	n.s.	[-1.52]-[-0.93]
Personal networks for Quality Management Capabilities	0.17858	−0.36022	0.69946	30.85^W	***	0.22–0.99	[-1.04]-[-0.13]	[-1.54]-[-0.90]
Personal networks for Human Resources	0.25140	−0.35375	0.64066	30.51^W	***	0.36–1.23	[-1.00]-[-0.04]	[-1.64]-[-0.95]
Personal networks for Management Capabilities	0.41851	−0.34344	0.51592	25.66^W	***	0.46–1.37	n.s.	[-1.34]-[-0.72]
Professional networks for Financial Resources	0.43520	−0.29308	0.39280	17.56^W	***	0.39–1.26	n.s.	[-1.10]-[-0.48]
Professional networks for Technology & Innovation	0.57178	−0.46528	0.69602	65.57^W	***	0.92–1.77	n.s.	[-1.80]-[-1.24]
Professional networks for Market Information	0.44432	−0.46609	0.77537	73.10^W	***	0.81–1.42	[-0.74]-[-0.08]	[-1.79]-[-1.27]
Professional networks for Quality Management Capabilities	0.65940	−0.54095	0.81251	98.78	***	1.19–1.89	n.s.	[-2.01]-[-1.47]
Professional networks for Human Resources	0.65573	−0.49166	0.70415	72.19	***	1.12–1.89	n.s.	[-1.89]-[-1.32]
Professional networks for Management Capabilities	0.54164	−0.52722	0.85331	106.70^W	***	0.96–1.78	n.s.	[-2.01]-[-1.54]
Associative networks for Financial Resources	−0.04351	−0.24883	0.58465	12.11^W	***	n.s.	[-0.82]-[-0.19]	[-0.94]-[-0.38]
Associative networks for Technology & Innovation	−0.03732	−0.39521	0.90925	41.65^W	***	0.07–0.72	[-1.48]-[-0.64]	[-1.74]-[-1.13]
Associative networks for Market Information	0.27258	−0.42783	0.79397	53.35^W	***	0.46–1.26	[-1.12]-[-0.20]	[-1.84]-[-1.23]
Associative networks for Quality Management Capabilities	0.06489	−0.45364	0.97817	70.60^W	***	0.28–0.97	[-1.50]-[-0.66]	[-1.96]-[-1.42]
Associative networks for Human Resources	0.21966	−0.44294	0.86006	55.22^W	***	0.38–1.20	[-1.18]-[-0.28]	[-1.80]-[-1.24]
Associative networks for Management Capabilities	0.02728	−0.44149	0.97379	61.95^W	***	0.23–0.85	[-1.51]-[-0.67]	[-1.93]-[-1.33]
Institutional networks for Financial Resources	−0.23927	−0.19012	0.57199	15.08^W	***	n.s.	[-1.63]-[-0.63]	[-1.47]-[-0.65]
Institutional networks for Technology & Innovation	−0.21044	−0.37161	0.96159	42.44^W	***	n.s.	[-1.54]-[-0.83]	[-1.64]-[-1.07]
Institutional networks for Market Information	0.13481	−0.44834	0.92375	67.72^W	***	0.33–1.12	[-1.39]-[0.47]	[-1.91]-[-1.36]
Institutional networks for Quality Management Capabilities	0.03044	−0.47361	1.04391	73.62^W	***	0.27–0.87	[-1.50]-[-0.76]	[-1.98]-[-1.41]
Institutional networks for Human Resources	−0.12737	−0.37039	0.90832	37.49^W	***	n.s.	[-1.29]-[-0.65]	[-1.51]-[-0.93]
Institutional networks for Management Capabilities	−0.07843	−0.40878	0.96468	53.13^W	***	0.05–0.67	[-1.51]-[-0.76]	[-1.76]-[-1.21]
Number of personal Facebook friends	1.00551	−0.32858	0.12562	40.16^W	***	2.10–3.24	1.08–2.38	[-1.41]-[-0.40]
Number of personal LinkedIn connections	0.52755	−0.13306	−0.02233	5.34^W	**	0.50–1.87	0.16–1.70	n.s.
Number of personal Twitter followers	0.83971	−0.16492	−0.14068	5.08^W	**	0.38–1.53	0.36–1.51	n.s.
Number of personal Instagram followers	1.32001	−0.29090	−0.15015	24.69^W	***	1.63–2.86	1.38–2.70	n.s.
Number of Facebook Business followers	0.86737	−0.28704	0.11645	45.29^W	***	2.31–3.51	1.12–2.60	[-1.67]-[-0.34]
Number of LinkedIn Company connections	0.17031	−0.05744	0.02528	0.66^W	n.s.	n.s.	n.s.	n.s.
Number of business Twitter followers	0.91292	−0.20931	−0.08562	8.60^W	***	0.75–2.11	0.54–2.00	n.s.
Number of business Instagram followers	1.36595	−0.37292	0.00591	56.70^W	***	2.94–4.35	1.96–3.70	[-1.31]-[-0.30]

*** = p ≤ 0.001.
n.s. = Non-significant p-value.
^{W} = Welch test applied.
[a] Where Welch test applied post-hoc tests used Bootstrapped (1000 subsamples) Games-Howell procedure.

mouth. But, I also have friends from other businesses and sometimes we will just talk and I will say I need someone. So, we just help each other out this way. (Motel B).

Analysis of the qualitative interviews also helped to unpack the cluster analysis results showing AONs to have significantly higher performance outlooks in terms of future sales revenues. Qualitative interviews reveal how social capital developed through online platforms is used as a marketing channel for tourism entrepreneurs to increase potential sales.

The local people, they'll come more than once so we get returns from

Table 5
Discriminant analysis of the three-cluster solution.

Discriminant Functions[a]			Discriminant Function(s) Results[a]					
	Eigenvalues				Wilks' Lambda			
	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation	Wilks' Lambda[b]	Chi-square[b]	df	Sig.
1 through 2	3.30	67.2	67.2	0.88	0.09	644.189	64	***
2	1.61	32.8	100	0.79	0.38	255.464	31	***
			Classification Results					
			Predicted Group Membership			Total no. of Cases		
		Active Online Networkers		Less Engaged	In-person Networkers			
Original Sample[c]	Count	Active Online Networkers	41	1	3	45		
		Less Engaged	0	164	2	166		
		In-person Networkers	1	1	72	74		
	%	Active Online Networkers	91.1%	2.2%	6.7%	100%		
		Less Engaged	0%	98.8%	1.2%	100%		
		In-person Networkers	1.4%	1.4%	97.3%	100%		
Cross-validated Sample[d,e]	Count	Active Online Networkers	34	6	5	45		
		Less Engaged	1	161	4	166		
		In-person Networkers	2	6	66	74		
	%	Active Online Networkers	75.6%	13.3%	11.1%	100%		
		Less Engaged	0.6%	97.0%	2.4%	100%		
		In-person Networkers	2.7%	8.1%	89.2%	100%		

[a] Number of discriminant functions equals number of groups minus one.
[b] The two functions are significant in discriminating between the two groups (at $p < 0.001$) in terms of the thirty two social capital items.
[c] 97.2% of original grouped cases were correctly classified.
[d] 91.6% of cross-validated grouped cases were correctly classified.
[e] Cross-validation is done only for those cases in the analysis. In cross-validation, each case is classified by the functions derived from all cases other than that case.
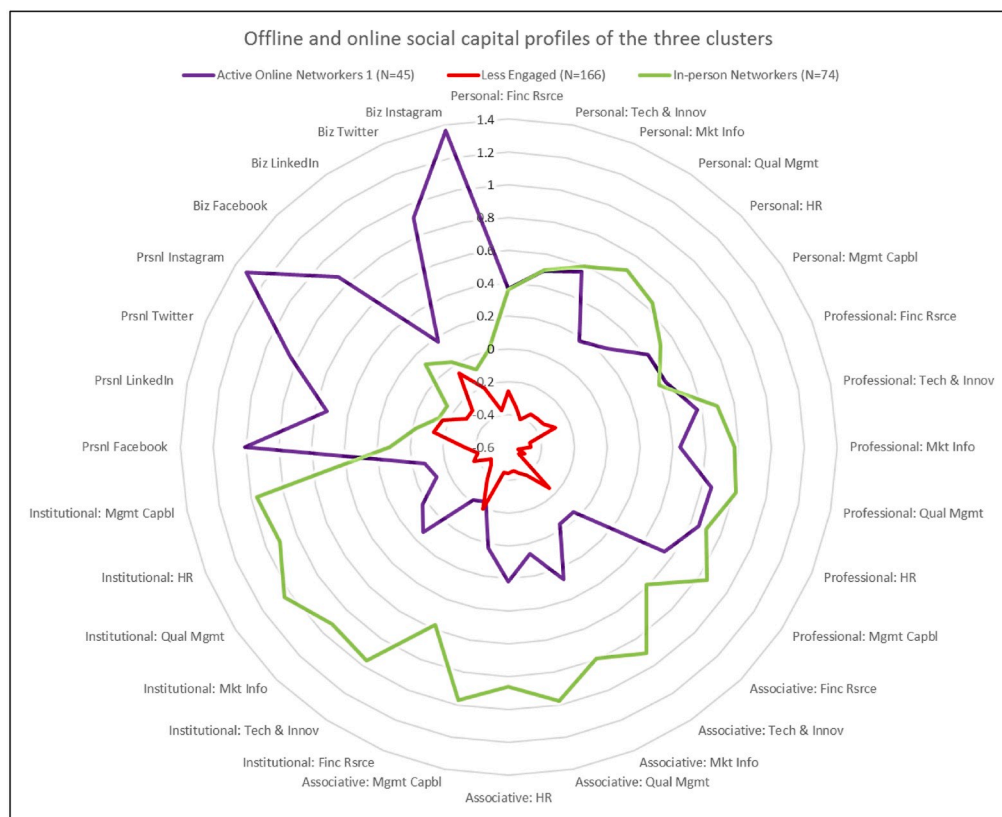
Note: Data points further from the centre indicates that the cluster members have more of a particular type of social capital

Fig. 1. Radar chart showing offline and online social capital profiles of the three clusters.

locals. We deal with them a bit through local Facebook stuff. And then, we Boost stuff for the international market, so that's paid advertising. I can target it right down to who's travelling and who's on a cruise ship. After each paid advertising, you get two or three bookings which has paid for that and is quite a cheap way to do it (Tour Operator G).

These results mirror findings presented in Kasavana et al. (2010), where engagement in online social capital mostly involved using social media platforms to interact with customers to increase guest loyalty and satisfaction, which in turn leads to increased purchase behaviour. Therefore, the AONs are leveraging their strong social media presence to

Table 6
ANOVA results.

	ANOVA results					Post-Hoc Tests[a]		
	Active Online Networkers (I)	Less Engaged (II)	In-person Networkers (III)	F-Value	Sig.			
	(N = 45)	(N = 166)	(N = 74)					
	Mean Scores					I-II	I-III	II-III
Expected growth in employees in the next 12 months	2.84	2.40	2.66	4.68[b]	**	0.12–0.76	n.s.	[-0.51]-[-0.03]
Expected sales revenue growth in the next 12 months	3.07	2.73	2.78	4.00	*	0.11–0.55	0.05–0.55	n.s.
Expected net profit growth within the next 12 months	2.91	2.62	2.67	2.87	*	0.04–0.54	n.s.	n.s.
Age of the business owner	4.91	5.49	4.84	15.45[b]	***	[-0.96]-[-0.28]	n.s.	0.40–0.95

Note: Only significant results shown.
***$p \leq 0.001$; **$p \leq 0.01$; *$p \leq 0.05$; n.s. = non-significant.
[a] Bootstrapped (1000 resamples) Bonferroni procedure applied for post-hoc tests. Bootstrapped (1000 resamples) Games-Howell procedure applied for variables where Welch test was applied.
[b] Welch test applied as variable did not meet criteria for homogeneity of variances across groups.

Table 7
Kruskall-Wallis results.

Variables	Group	Cluster size	Mean Rank[a]	Chi-Square*	Significance
Number of full time staff	Active Online Networkers (I)	45	189.19 [II&III]	26.89	0.000
	Less Engaged (II)	166	124.00 [I&III]		
	In-person Networkers (III)	74	157.54 [I&II]		
Number of part time staff	Active Online Networkers (I)	45	168.06 [II]	10.09	0.006
	Less Engaged (II)	166	130.35 [I&III]		
	In-person Networkers (III)	74	156.14 [II]		

Note: Only significant results shown.
* = Kruskal-Wallis χ2; [a] = superscript on mean ranks indicates a significant difference between two groups at $p \leq 0.05$ using Mann-Whitney Post Hoc Tests.

personalise the marketing of their products and services to the right customers, increasing their sales effectiveness. However, this sheds a different light to the proposition of Smith et al. (2017), as instead of using social networking sites to increase their connections to individuals/groups to extract resources such as business expertise and knowledge, tourism entrepreneurs in this study predominantly use social networks as a marketing tool to increase sales opportunities by gathering business intelligence about their customers and competitors to create customised products and services. This was evident by how respondents summed up their attitudes towards online and offline social capital.

Business networks, as in friends, family, and mentor type things are more about working on the business where things are more inwards. Whereas, something like Facebook would be working in the business. So, that's used as a business tool to spread outwards. (Café A).

We also found that the AONs consisted mostly of restaurants/cafes/bars (Table 8). This reflects the current trend of the foodservice industry in New Zealand where firms need to have a strong digital presence to remain competitive. For example, a Euromonitor International (2019) report assesses that foodservice businesses need to adapt their business in response to the Instagram and Selfie trend by focusing on the appearance of the menu and the outlet given the high connectivity of their clientele and the importance of good online reviews for increased patronage. On the other hand, the LEs were predominantly hotel/-motel/backpacker businesses. To an extent, the findings match the qualitative data as, among the seven respondents, only a motel owner did not have a presence on any social media platforms.

Customers/guests have enough opportunities to express themselves via TripAdvisor, Booking.com, Agoda, or Expedia comments. They don't want to follow the Facebook page of a small motel. (Motel B).

In line with the future staffing growth measures, both the AONs and the IPNs employed significantly more full- and part-time staff compared to the LEs. This reflects the results of Bosma et al. (2004) which found that entrepreneurs with high levels of social capital, such as contact with associative networks, generated higher levels of employment, which was also highlighted in the qualitative findings.

I get staffing recommendations from my staff and the Southland Softball Association. Because we play and I coach as well, that's where I get a lot of staff. Half of our staff have come from Softball and the other half have come from other staff`. (Motel F).

LEs were significantly older compared to owners in the AON and IPN clusters. This finding is consistent with studies of internet usage in New Zealand, indicating that non-users of the internet are predominantly found in adults aged 65 and above (bib_Díaz_et_al_2018Díaz, Hedges, Karimika, & Techatassanasoontorn, 2018). In addition, studies have shown that older entrepreneurs may receive negative judgements from family, friends, and clients with regards to their entrepreneurship activities (e.g. being too risky, social stereotypes of youthful entrepreneurs), leading to a withdrawal of financial and emotional support and the shrinking of social networks (Kibler, Wainwright, Kautonen, & Blackburn, 2015).

6. Conclusion

This study expands on the body of knowledge on tourism entrepreneurship by uncovering: 1) configurations of tourism entrepreneurs online and offline social capital, and 2) the outcomes of social capital configurations on tourism firms' performance outlook. Our analysis revealed three distinct clusters of tourism entrepreneurs based on their social capital configurations. The first cluster (Active Online Networkers) developed social capital through online networks, with a lesser focus on face to face or 'offline' connections with associative and institutional networks. Online social capital was facilitated through Facebook, LinkedIn, and Instagram as the predominant platforms. These

Table 8
Cross-tabulation results.

Variables			Groups			Chi-square χ^2	Cramer's V
			Active Online Networkers (I)	Less Engaged (II)	In-person Networkers (III)		
Have you completed any qualifications in entrepreneurship?	Yes	Count	2	29	26	18.06 (p = 0.000)	0.25 (p = 0.000)
		Expected Count	9	33.2	14.8		
	No	Count	43	137	48		
		Expected Count	36.0	132.8	59.2		
	Total	Count	45	166	74		
Have you completed any qualifications in tourism/ hospitality?	Yes	Count	16	41	31	7.64 (p = 0.022)	0.16 (p = 0.022)
		Expected Count	13.9	51.3	22.8		
	No	Count	29	125	43		
		Expected Count	31.1	114.7	51.2		
	Total	Count	45	166	74		
Which of the following best describes your business?	Hotel/Motel/Backpackers	Count	8	102	35	37.74 (p = 0.000)	0.26 (p = 0.000)
		Expected Count	22.9	84.5	37.6		
	Holiday Park	Count	1	4	5		
		Expected Count	1.6	5.8	2.6		
	Tour Operator	Count	11	21	13		
		Expected Count	7.1	26.2	11.7		
	Travel Agent	Count	0	2	0		
		Expected Count	0.3	1.2	0.5		
	Restaurant/Café/Bar	Count	19	27	17		
		Expected Count	9.9	36.7	16.4		
	Attraction (e.g. museum, amusement park, etc.)	Count	6	8	4		
		Expected Count	2.8	10.5	4.7		
	Retail/Souvenir shop	Count	0	2	0		
		Expected Count	0.3	1.2	0.5		
	Total	Count	45	166	74		

Note: Only significant results shown.

platforms enable tourism entrepreneurs to present larger content (e.g. Twitter only allows 280 characters) and to be actively engaged with customers in response to the Instagram and selfie trend (Euromonitor International, 2019). The second cluster of entrepreneurs (In-person Networkers) build social capital through offline connections, cultivating strong and weak ties with associative and institutional networks (i.e. sports and restaurant associations and national and regional tourism organisations) for accessing market information, business advice, and human resources. The largest group (58%) from our sample of tourism entrepreneur in New Zealand were categorised as the Less Engaged due to their limited accrual of both online and offline social capital, with evidence showing this group having significantly more pessimistic outlooks for business growth and performance compared to the other two clusters.

Deficiencies in social capital causes firms to lose access to resources and network advantages and has a negative effect on their competitive advantage. Specifically, evidence from this study shows accruing social capital through professional, associative, and institutional ties are key for supporting tourism entrepreneurs HRM capabilities. In addition, social capital through strong online social media networks is leveraged as an important marketing channel, enabling businesses to target and interact with their key customers, increasing guest loyalty and satisfaction, which leads to increased sales revenue (Kasavana et al., 2010). This is evidenced in our study where the AONs cluster of entrepreneurs were had significantly higher outlook for business performance, including staff growth, sales and profitability.

These findings present several practical implications for the tourism industry. Evidence supports the importance of tourism entrepreneurs'

social capital as vital resource for enterprise performance. Tourism entrepreneurs should not operate as independent silos and are advised to establish ties with associative and institutional networks such as industry associations and national/regional tourism organisations. These networks allows access to industry and market, as well business support services. While strong ties developed through personal and face to connections are important, an expanded network of 'weak ties' developed through online platforms such as Facebook and Instagram enable tourism businesses access to customers, suppliers, other businesses, and human resources. Engagement in these platforms can support the entrepreneur to build strong a strong digital presence (Euromonitor International, 2019).

Technology is transforming the tourism experience and tourist purchasing behaviours, and this significantly influences the growth and development of new business models that adopt mobile technologies, travel apps, sharing economy, and social media platforms. The use of big data, Google trends, and search engine query data also provides deeper insights into the tourism consumer and their behaviours. The majority of tourism enterprises are small and micro enterprises, often operating in regional destinations with limited capabilities to build social capital and face barriers to adoption of technologies. This research suggests that despite their size (and geography), tourism businesses can build social capital through engagement in online platforms. Thus, industry associations, local government authorities, and destination managers have an important role in supporting tourism entrepreneurs to 'get connected'. Investment is needed in technologies that enable tourism businesses to reach and access international markets and high value tourists, as well as support and investment into upskilling the sector through online courses

and education programs aimed to support entrepreneurial capabilities, building human and social capital.

In terms of limitations and future research directions, the sample for this study came from small, independently owned and operated tourism businesses in New Zealand. There could be specific economic and environmental factors unique to this industry which influences these firms in ways that differ from firms in other industries and/or other countries. Thus, further research is needed in a broader industrial or national context. In addition, owing to the relatively unexplored domain of online social capital, our measures of this construct could be developed further in a similar fashion to the measures of offline social (Hernández-Carrión et al., 2017) to understand more comprehensively the resources that online connections provide access to. We recommend future studies to explore other potential ways entrepreneurs can develop their online social networks within these platforms such as through group memberships, affiliations, forums, or discussion boards. In addition, while our measure of online social capital captures network size, it does not currently measure network strength or density. Thus, further studies could attempt an in-depth measure of entrepreneur's engagement practices in online social networking sites to elucidate the nuanced effects specific behaviours within these platforms can contribute to building online social capital.

Declaration of competing interest

None.

CRediT authorship contribution statement

Craig Lee: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing - original draft, Writing - review & editing. **Rob Hallak:** Conceptualization, Methodology, Supervision, Validation, Writing - original draft, Writing - review & editing.

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Appendix 1. Selected demographic information of the survey sample

Variable	Category	N	Valid %
Type of business	Hotel/Motel/Backpackers	145	50.9
	Holiday Park	10	3.5
	Tour Operator	45	15.8
	Travel Agent	2	0.7
	Restaurant/Café/Bar	63	22.1
	Attraction (e.g. museum, amusement park, etc.)	18	6.3
	Retail/Souvenir Shop	2	0.7
Personal Facebook friends	0	55	19.3
	1–100	60	21.1
	101–200	47	16.5
	201–300	44	15.4
	301–400	26	9.1
	401–500	13	4.6
	501 and above	40	14.0
Personal LinkedIn connections	0	141	49.5
	1–100	84	29.5
	101–200	22	7.7
	201–300	8	2.8
	301–400	4	1.4
	401–500	5	1.8
	501 and above	21	7.4
Personal Twitter followers	0	242	84.9
	1–100	30	10.5
	101–200	6	2.1
	201–300	1	0.4
	301–400	1	0.4
	401–500	0	0
	501 and above	5	1.8
Personal Instagram followers	0	186	65.3
	1–100	52	18.2
	101–200	19	6.7
	201–300	9	3.2
	301–400	6	2.1
	401–500	5	1.8
	501 and above	8	2.8
Facebook Business followers	0	71	24.9
	1–100	42	14.7
	101–200	25	8.8
	201–300	23	8.1
	301–400	13	4.6
	401–500	11	3.9
	501 and above	100	35.1
Linked Company connections	0	254	89.1
	1–100	15	5.3
	101–200	6	2.1
	201–300	3	1.1

(*continued*)

Variable	Category	N	Valid %
	301–400	2	0.7
	401–500	0	0
	501 and above	5	1.8
Business/Company Twitter followers	0	240	84.2
	1–100	20	7.0
	101–200	9	3.2
	201–300	4	1.4
	301–400	0	0
	401–500	3	1.1
	501 and above	9	3.2
Business/Company Instagram followers	0	181	63.5
	1–100	25	8.8
	101–200	19	6.7
	201–300	13	4.6
	301–400	3	1.1
	401–500	8	2.8
	501 and above	36	12.6
General Education	Did not complete high school	15	5.3
	Completed high school	72	25.3
	Certificate/Diploma	75	26.3
	Bachelor's Degree	78	27.4
	Postgraduate Degree	33	11.6
	Other	12	4.2
Entrepreneurship qualifications/formal training	Yes	57	20
	No	228	80
Tourism/hospitality qualifications/formal training	Yes	88	30.9
	No	197	69.1
Gender	Female	129	45.3
	Male	156	54.7
Age	18–25	4	1.4
	26–35	13	4.6
	36–45	37	13.0
	46–55	90	31.6
	56 and above	141	49.5

Appendix 2. List of items used in scale data

Variable	Mean	S.D.	Skewness	Kurtosis
Offline Social Capital				
Personal networks for Financial Resources	1.950	1.426	1.273	0.080
Personal networks for Technology & Innovation	2.090	1.243	0.884	−0.322
Personal networks for Market Information	2.220	1.197	0.669	−0.591
Personal networks for Quality Management Capabilities	1.890	1.127	1.145	0.380
Personal networks for Human Resources	2.160	1.313	0.850	−0.528
Personal networks for Management Capabilities	2.100	1.193	0.908	−0.150
Professional networks for Financial Resources	1.700	1.143	1.530	1.244
Professional networks for Technology & Innovation	2.690	1.317	0.175	−1.122
Professional networks for Market Information	3.050	1.235	−0.104	−1.028
Professional networks for Quality Management Capabilities	2.750	1.289	0.166	−1.101
Professional networks for Human Resources	2.550	1.327	0.292	−1.181
Professional networks for Management Capabilities	2.750	1.288	0.251	−1.001
Associative networks for Financial Resources	1.350	0.791	2.429	5.391
Associative networks for Technology & Innovation	1.770	1.110	1.172	0.078
Associative networks for Market Information	2.330	1.256	0.436	−1.108
Associative networks for Quality Management Capabilities	2.040	1.185	0.773	−0.655
Associative networks for Human Resources	1.970	1.142	0.976	−0.015
Associative networks for Management Capabilities	1.880	1.163	1.092	0.036
Institutional networks for Financial Resources	1.980	1.404	1.148	−0.154
Institutional networks for Technology & Innovation	1.680	1.008	1.424	1.200
Institutional networks for Market Information	2.060	1.191	0.863	−0.323
Institutional networks for Quality Management Capabilities	1.880	1.114	1.059	0.074
Institutional networks for Human Resources	1.610	0.963	1.537	1.594
Institutional networks for Management Capabilities	1.820	1.085	1.201	0.498
Online Social Capital				
Number of personal Facebook friends	3.440	1.995	0.515	−0.907
Number of personal LinkedIn connections	2.120	1.712	1.909	2.693
Number of personal Twitter followers	1.280	0.914	4.861	26.236
Number of personal Instagram followers	1.750	1.401	2.332	5.100
Number of Facebook Business followers	4.050	2.509	0.062	−1.702
Number of LinkedIn Company connections	1.260	0.955	4.670	23.174
Number of business Twitter followers	1.420	1.247	3.561	12.320
Number of business Instagram followers	2.300	2.124	1.435	0.479
Business and Owner Demographics				
Number of full time employees	3.880	7.605	4.179	23.073

(*continued on next page*)

(continued)

Variable	Mean	S.D.	Skewness	Kurtosis
Number of part time employees	5.540	9.557	6.179	55.408
Age of the business	19.968	17.816	2.630	10.773
Owner's work experience in tourism and hospitality	17.510	11.559	0.527	−0.379
Age of the business owner	5.230	0.940	−1.221	1.090
Future Growth Outlook				
Expected growth in employees in the next 12 months	2.680	0.736	−0.147	−0.211
Expected sales revenue growth in the next 12 months	2.800	0.710	−0.331	0.135
Expected net profit growth within the next 12 months	2.540	0.923	0.809	−0.956

Note: We acknowledge some items have non-normal distributions. For Cluster Analysis using the Offline and Online Social Capital measures, this technique does not rely on the usual assumptions for hypothesis testing (e.g. normally distributed data) rather, the two requirements of data are first, that the clusters are spherical, and second, that the clusters are of similar size. For Business and Owner Demographic measures, where variables were non-normal the appropriate non-parametric test was applied and reported in the results.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.tourman.2020.104128.

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