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# **Enterprise Hubs: A Path to Reignite Collaboration Networks in Rural Newfoundland**

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## **Abstract**

The COVID-19 pandemic, which suddenly disrupted the lives of communities and people across the globe, has not only shed light upon social problems and inequalities but has also exacerbated them. For entrepreneurs in Newfoundland and Labrador's Great Northern Peninsula (GNP), the recent struggles are intertwined with a complex history in a province and a region which had already faced economic difficulties. This paper examines the challenges faced by rural entrepreneurs in this region due to the COVID-19 pandemic and explores how a digital enterprise hub can help mitigate these challenges. The research that informs this paper followed a mixed-method case study design through participatory action research (PAR) and a survey. The study discovers how entrepreneurs in the GNP believe that enterprise hubs could help them cope with challenges and foster social capital during and after the COVID-19 pandemic. The study also sought to implement the enterprise hub model in the GNP, while also carrying out a research project that assessed the potential long-term benefits as perceived by the members of the existing community. Informed by the concepts of social capital and embeddedness, research findings indicate that the pandemic has exposed a risk for local entrepreneurs to become over-embedded in their local communities, which is further exacerbated by their lack of connectivity with networks outside of their communities. We argue that enterprise hubs can build local social capital to help take advantage of opportunities presented by the COVID-19 pandemic and may be a way to better re-establish the successful business networks existing prior to the pandemic.

**Keywords:** Entrepreneurship, rural, enterprise hubs, COVID-19, networking

## **Pôles d'entreprise : une voie pour relancer les réseaux collaboratifs dans les régions rurales de Terre-Neuve**

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### **Résumé**

La pandémie de COVID-19, qui a soudainement perturbé la vie des communautés et des personnes à travers le monde, a non seulement mis en lumière les problèmes sociaux et les inégalités, mais les a également exacerbés. Pour les entrepreneurs de la péninsule Great Northern de Terre-Neuve-et-Labrador, les luttes récentes sont étroitement liées à une histoire complexe dans une province et une région qui avaient déjà fait face à des difficultés économiques. Cet article examine les défis auxquels sont confrontés les entrepreneurs ruraux de cette région en raison de la pandémie de COVID-19 et explore comment un pôle d'entreprises numériques peut aider à atténuer ces défis. La recherche qui supporte cet article a suivi une conception d'étude de cas à méthode mixte via une recherche-action participative (RAP) et une enquête. L'étude découvre comment les entrepreneurs de la péninsule Great Northern de Terre-Neuve-et-Labrador pensent que les pôles d'entreprises pourraient les aider à faire face aux défis et à favoriser le capital social pendant et après la pandémie de COVID-19. L'étude visait également à mettre en œuvre le modèle de pôle d'entreprises dans la péninsule, tout en réalisant un projet de recherche qui évaluait les avantages potentiels à long terme tels que perçus par les membres de la communauté existante. Informés par les concepts de capital social et d'intégration, les résultats de la recherche indiquent que la pandémie a exposé un risque pour les entrepreneurs locaux de devenir trop intégrés dans leurs communautés locales, ce qui est encore exacerbé par leur manque de connectivité avec les réseaux en dehors de leurs communautés. Nous soutenons que les pôles d'entreprises peuvent constituer un capital social local pour aider à tirer parti des opportunités présentées par la pandémie de COVID-19 et peuvent être un moyen de mieux rétablir les réseaux d'entreprises prospères qui existaient avant la pandémie.

**Mots-clés :** entrepreneuriat, rural, pôles d'entreprises, COVID-19, réseautage

## **1.0 Introduction**

The COVID-19 pandemic suddenly disrupted the lives of communities and people at many levels across the globe (United Nations, 2020). The pandemic has not only shed light upon social problems and inequalities, but has also exacerbated them (Chan et al., 2020; Rose-Redwood et al., 2020; Thurshen & Thébaud-Mony, 2020). Such divides have been exposed between rural and urban environments, highlighting inequalities for economic development and entrepreneurship. For entrepreneurs in Newfoundland and Labrador's Great Northern Peninsula (GNP), this comes on top of a complex history, and a struggle to thrive in a province which had already faced economic difficulties (Locke & May, 2019). The pandemic has disrupted business operations, brought financial losses, and impacted their ability to work together as a community.

One concept that has received considerable attention in the literature on fostering rural entrepreneurship is that of embeddedness, and how the process of embedding can create social capital (Busch & Barkema, 2020; Granovetter, 1985; Anderson & Jack, 2002; Korsgaard et al., 2015). In brief, this theory captures the important aspect of social networks, and how membership in these networks can both enable and constrain entrepreneurial action (Granovetter, 1985). However, entrepreneurs can become over-embedded in their networks, resulting in a loss of novel information, overdependence on key actors, or developing networks that are either too cohesive or fraught with feuding (Uzzi, 1997). Some research has suggested that digital enterprise hubs are a way to create an optimum level of embeddedness for rural entrepreneurs, yet these researchers claim there is much to be explored in this area (Busch & Barkema, 2020; Rundel et al., 2020). This is especially true in the context of a global pandemic. Moreover, various sources suggest that some of the trends instigated by the pandemic may be here to stay, and businesses will need to adapt permanently (Ludwig, 2020; Syed, 2021).

This research paper sheds light on this area by examining the challenges faced by rural entrepreneurs due to the COVID-19 pandemic, and specifically the challenges associated with maintaining the structure of and relationships in their networks, and by exploring how a digital enterprise hub can help mitigate these challenges. The setting of this study is the GNP of Newfoundland and Labrador, and it draws upon a participatory action research project carried out in partnership with local stakeholders and communities.

We argue that the restrictions brought about by the pandemic have exposed the degree in which the entrepreneurs in these communities are over-embedded in their local networks, and that a digital enterprise hub can offer a way to better integrate the networks in these communities. A hub may help take advantage of opportunities presented by the COVID-19 pandemic and may be a way to better establish the successful business networks existing prior to the pandemic. We also provide recommendations for how such a hub might be designed to mitigate the effects from possible future disruptions.

This paper continues by reviewing the literature on embeddedness for entrepreneurs, the challenges of rural entrepreneurs during COVID-19, and how enterprise hubs promote entrepreneurial success and network development. It then moves onto the research methods, followed by the results and the conclusions and recommendations.

## **2.0 Literature Review**

### ***2.1 Rural Entrepreneurship***

Rural economies across the world have been under pressure to shift from their traditional resource extractive industries to diversified and knowledge-based models, particularly since the 1980s (Carter & Vodden, 2017). Technological advances, coupled with the fragility of resource-based economies have led to this increasing need to diversify (De Roest et al., 2018). Economies that traditionally relied on practices such as agriculture or forestry are being encouraged to diversify and shift to what Chan & Dukelow (2013) call an innovation economy.

Entrepreneurs are widely considered to be economic engines, catalysts of change and innovation, and powerful contributors to the local community (Fortunato & Alter, 2015). The crucial role of entrepreneurs in building resilient, local economies is acknowledged by numerous academics and practitioners (Carter, 2017; Di Gregorio, 2017; Fortunato & Alter, 2015). Entrepreneurs are seen as agents that foster better performing economies by converting gaps in services or products into business opportunities (Lundström & Stevenson, 2002), and as vital contributors to the much-needed processes of economic diversification and environmental sustainability in rural regions (Vik & Mcelwee, 2011). Because the entrepreneurial landscape is uncertain and challenging, entrepreneurs need a supportive community to thrive, one that provides opportunities for learning, adapting, and networking (Jack & Anderson, 2002). Fostering this community of entrepreneurship requires supports for entrepreneurship education, access to financial support and other resources (Baptista & Leitão, 2009). The role of government is identified as crucial in either facilitating or hindering this culture through policy (Gilbert et al., 2004; Williams, 2013).

### ***2.2 Embeddedness and Social Capital***

There is a considerable body of scholarly work dedicated to exploring how an entrepreneur's embeddedness in a network impacts its level of social capital, and ultimately in its success (Busch & Barkema, 2020; Jack & Anderson, 2002; Korsgaard et al., 2015; Ozdemir et al., 2016; Uzzi, 1997). Embeddedness has been defined as “the nature, depth, and extent of an individual's ties into an environment, community or society” (McKeever et al., 2014, p. 222), and we will apply this definition in the context of community.

Entrepreneurs and networks of small businesses can be under-embedded, integrated, or over-embedded (Uzzi, 1997). Structurally, these types of networks are comprised primarily of weak ties, offer a mix of weak and strong ties, or rely too heavily on strong ties, respectively. There are well-known advantages to an integrated network, namely that it (a) allows entrepreneurs to access resources from others (Ozdemir et al., 2016); (b) increases trust among members; (c) increases joint problem solving, fine-grained information sharing (Uzzi, 1997), and unintended serendipitous discoveries (Busch & Barkema, 2020). It can also lead to credibility, knowledge and experience for rural entrepreneurs (Jack & Anderson, 2002). Alternatively, networks can become over-embedded, or insular. This can result in a lack of outside information, feuding within the network, and an overreliance on key third parties (Busch & Barkema, 2020; Uzzi, 1997).

There is an ongoing debate on how entrepreneurs develop an integrated network to become optimally embedded. Korsgaard et al., (2015) suggest that rural entrepreneurs should develop personal ties within their local communities, and ties to acquire business and financial resources outside of those communities. It is also possible that entrepreneurs lack time, energy, or resources to establish a wide range of close-knit social ties and must be more strategic in how to become embedded (Ozdemir et al., 2016).

As a result, the process of embedding generates and maintains social capital (Busch & Barkema, 2020). This concept has gained significant attention among community development agents as they shift their focus toward building upon local assets that can be harnessed to improve lives (Etzioni, 2000; Lowery et al., 2020; Townsend, 2016). Social capital is informed by the idea that personal connections and relationships build trust and form the basis for communities to collaborate (Chen et al., 2008). This network of relationships and trust is argued to play a vital role in enhancing rural economic development (Dale, 2014). Overall, the development of social capital through an integrated network is optimal for fostering rural entrepreneurship, however the impacts of COVID-19 on this process is relatively unknown.

### ***2.3 Impact of COVID-19 on Rural Businesses***

The COVID-19 pandemic affected rural businesses, including their ability to stay connected to others. This has arguably curtailed their ability to remain integrated and develop social capital. Additionally, the digital divide—the gaps of internet accessibility between various sectors of society (Townsend, 2016)—has become more evident. The term relates to the access and ability to use information and communications technologies (ICTs) which includes internet services and cellular coverage. In Canada, this divide is acutely notable between urban and rural regions (McKeown et al., 2007) with Indigenous and First Nations communities much more seriously underserved (McMahon et al., 2011). This divide can be detrimental to rural economic development since it can limit local access to information (Reimer & Bollman, 2019).

The difference between rural and urban access to ICTs has become highly noticeable and problematic during the COVID-19 pandemic as needs increased due to the trends of moving work, study, and other daily activities to online platforms (Hambly & Rajabiun, 2021). Public health restrictions have resulted in a rapid shift to “remote working and an increase in online shopping” (Smailes et al., 2021; p. 1) and both possibilities have been harder to implement in rural settings. Smailes et al. (2021) posit that remote work is a possibility for only 17.5% of rural businesses while 35.1% of urban business could make the shift. Additionally, they find that online sales have always been different for urban and rural businesses with a 6.3% of rural business sales and a 30% for urban businesses in 2020.

Another aspect to be considered in relation to the pandemic’s effect on local economies relates to the type of industry that is at the heart of communities. Studies show that owners of smaller firms (Dua et al., 2020) in the sectors of “retail, arts and entertainment, personal services, food services, and hospitality businesses” (Bartik et al, 2020, p. 3) have been left particularly vulnerable. Tourism, often a critical contributor to rural economies (Hall & Richards, 2000), was one of the most affected industries during this period (Breen, 2021). Communities that rely heavily on tourism experienced increased unemployment and, at times, “tensions between residents and urban visitors” instigated by fear that urban visitors would bring the

virus to rural communities or that they would exhaust local health care capacity (Breen, 2021, para. 4). Purchase (2020) suggests that these communities will face a longer post-pandemic recovery period. This will likely affect their ability to network with their guests, tourists, and other resources.

#### **2.4 Digital Enterprise Hubs**

Within the COVID-19 and eventual economic recovery contexts, digital enterprise hubs emerge as a possible way for different actors to strengthen social capital to help businesses navigate this time of heightened uncertainty. Spaces that bring together resources for entrepreneurs, small and medium business owners, or innovators are often referred to as enterprise hubs (Kovács & Zoltán, 2017), digital (European Investment Bank, 2019) and innovation hubs (Youtie & Shapira, 2008). The names allude to the goals of the hub or type of service they offer. Enterprise hubs can be described as flexible spaces, either physical or virtual (Cowie et al., n.d.), that serve as a location for entrepreneurs to avail of resources and/or networks for collaboration according to their business needs (Zahara, 2015). Resources offered by a hub may be physical resources such as a desk, workspace, internet connection, and so forth, or service-based such as training, or networking.

Cowie et al. (n.d.) define enterprise hubs as follows: “A hub will be the central point in a business network. This could be a physical point or, given the development of information and communication technology (ICT), it could be a virtual point” (p. 8). In this paper we will refer to ‘digital enterprise hubs’ to highlight the centrality of these initiatives in supporting local entrepreneurship using primarily ICTs. Rundel et al. (2020) argue that “only when a hub specifically targets businesses or community members to either improve their digital literacy or make use of better internet connectivity should one speak of a rural digital hub” (pg. 35).

Globally, enterprise hubs have provided benefits in diverse rural contexts. For example, they have been instrumental in bringing together small landowners and landless peasants in South Korea to build cooperatives through networking (Baig et al., 2019). In Africa, digital hubs help digital entrepreneurs gain access to reliable internet to facilitate digital product development in what are considered “resource-scarce environments” (Friederici, 2019, p. 10). In Hungary, enterprise hubs that utilize existing resources in rural communities such as existing buildings have helped develop local synergies of resources (Kovács & Zoltán, 2017). In these contexts, hubs have helped build capacity and infrastructure in rural communities so that entrepreneurs can face the uncertainty of entrepreneurship and the added challenges inherent in rurality (Cowie et al., n.d.).

#### **2.5 Linking Digital Enterprise Hubs, Embeddedness, and Social Capital**

Townsend (2016) posits that ICTs implemented in digital hubs have a role in enhancing social capital for rural businesses since they offer an opportunity to overcome the challenge of physical distance and put businesses in contact with resources and other businesses beyond their communities. These hubs can create the community and context in which entrepreneurs can become embedded (Busch & Barkema, 2020), and develop social capital (Kovács & Zoltán, 2017). That is, by coming together, hub members bring human capital in the form of knowledge from industry and connections. Several mechanisms facilitate knowledge creation through formal knowledge sharing such as presentations and programming, and informal knowledge sharing through idea exchange, etc. (Zahara, 2015).

For Townsend (2016) networking can help small businesses develop the social capital needed to overcome challenges inherent in rurality such as physical distance and remoteness, which isolate them from clients and suppliers. Networking can connect businesses, expand their reach, and integrate services toward reducing logistics costs as businesses find solutions to common problems together. However, as Townsend notes, networking effectively does not come easily for rural entrepreneurs and, though essential in their contexts, networking becomes much more difficult with rurality.

Information and communication technologies (ICTs) can facilitate these networks and thus strengthen social capital for rural businesses (Deakins et al. 2004) by building a rural business infrastructure (Dyba et al., 2020). A benefit of technology-facilitated networks, such as social media platforms, is that they build a business identity through targeted campaigns (Szatkowski, 2019), can expand the reach, and give access to a wider and more diverse array of resources, suppliers, and even potential customers (Townsend, 2016). Townsend (2016) sees access to technology as “empowering rural business people” (p. 33) by connecting those who have been traditionally disconnected because of geographical isolation. However, Townsend also notes that online networking works more effectively in rural contexts when an in-person relationship has already been established.

Studies show that online environments can build a sense of community among individuals, facilitate knowledge creation, and build social capital (Aldosemani et al., 2016; Tiwari et al., 2019). Tiwari et al. (2019) see social media platforms as tools to build this capital in rural communities. However, several challenges need to be overcome when turning toward digital tools for networking and learning. Writing within the field of education, Aldosemani et al. (2016) argue that online environments need to foster a feeling of connection among participants as well as help them to find “common interests and values” (p. 1021), and objectives. Informal learning can be facilitated when the online environment becomes a place for people to meet informally and casually exchange knowledge and experiences (Aldosemani, et al., 2016). From an e-commerce perspective, the internet has enabled the emergence of networks and possibilities for collaboration, while expanding markets (Syrjänen & Kuutti, 2004). However, building social capital through digital platforms does require attention and new ways to address aspects of trust-building and transparency.

To summarise our review, embeddedness plays a significant role in rural entrepreneurship, and entrepreneurs can be over-embedded due to their remoteness. Unfortunately, the challenges of COVID-19 have exacerbated the digital divide among entrepreneurs. This divide, coupled with the need to have a well-integrated network suggests that an enterprise hub focusing on improving the ICT use of rural entrepreneurs will help in achieving an integrated network. The challenge is to address how exactly COVID-19 has impacted the embeddedness of rural entrepreneurs, as only once this is understood, can recommendations be made on fostering social capital through embeddedness.

### **3.0 The Case Study Context: NL’s GNP**

This study focuses on a project implemented in partnership with the Community Business Development Corporation of the Great Northern Peninsula in



Newfoundland, Canada (CBDC Nortip)<sup>1</sup> and which engaged rural entrepreneurs in the region. Many characteristics of the GNP fit the definition of rural that are most often agreed upon, namely population density and distance from high-density centers (Hambly & Rajabiun, 2021; Lowery et al., 2020). With a population of 11,315 dispersed into 51 communities in 2016 (Carter & Vodden, 2017; Community Accounts, n.d.), this geographically vast region is located on Newfoundland's West coast and spans 10,472 km<sup>2</sup> for a population density of 1.08 resident per km<sup>2</sup>. The community with the largest population is St. Anthony which was home to just under 2,500 people in 2016 (Community Accounts, n.d.). The region is often defined using areas demarcated by the former St. Anthony to Port au Choix Rural Secretariate region (Carter & Vodden, 2017; Community Accounts, n.d.) (see Figure 1). This demarcation identifies the southwestern limit of GNP at River of Ponds. The area then continues to Quirpon, which is located on the northern tip, and then to Englee on the southeastern side (Community Accounts, n.d.). Other sources identify the region as spanning further south to include Bonne Bay and other communities in Gros Morne National Park (Lagasse & Columbia University, 2018).

Figure 1. Map of the Great Northern Peninsula.



Source: Gibson, 2013.

<sup>1</sup> CBDC NORTIP (Community Business Development Corporation) is a not-for-profit organization that offers financial and other support to small businesses. <http://cbdcnortip.ca>

Traditionally, the region's most salient industries have been based on primary resource extraction (Community Accounts, n.d.) with a focus on fish harvesting and fish processing (Schrank & Roy, 2013), and forestry (Sinclair et al., 2006). However, the region now faces increasing challenges after the collapse of the cod fisheries in 1992 and later cuts in shrimp quotas (Carter & Vodden, 2017). The cod fisheries collapse marked a turning point in the socioeconomic history of Newfoundland and Labrador. This historic event caused an economic crisis which led to high rates of unemployment, prompting out-migration of young men and women as they look for employment opportunities (Gaspard & Allen, 2019, p. 15).

These drastic changes prompted the GNP to turn toward tourism as local businesses took advantage of the region's unique geology and landscape (Stoddart & Sodero, 2015) and this has translated into regional strategies and collaborations such as the Viking Trail Tourism Association in the last several decades (Immigration, Skills and Labour, 2020). Several towns and regions across Newfoundland have tried to diversify their economies with a combination of tourism, forestry, and fisheries (Gaspard & Allen, 2019). In agreement with Foster and Main (2020), this has been a 'last resort' for the communities in the region.

#### **4.0 Methods**

Our research approach followed a mixed-method case study design through participatory action research (PAR) and a survey<sup>2</sup>, as the researchers initially sought to address the challenges of rural entrepreneurs emerging from COVID-19 restrictions. The research was designed collaboratively with the partner organization (CBDC Nortip), allowing for a strong setting to implement the PAR method. PAR allows researchers and stakeholders to enter collaborative alliances to jointly investigate and gain clarity about a given problem or situation, and to find solutions that can be put into action (McIntyre, 2008). It is also a method that encourages reflection, observation, and interaction with a community to foster collaboration and collective learning (Raza, 2020). The case study design was selected to help researchers understand a complex contemporary phenomenon within its concrete real-life context while further developing existing theory (Eisenhardt, 1989; Farquhar, 2012).

Preliminary conversations with the partner organization were carried out via video conferencing and e-mail prior to the submission of the project's funding application and every step thereafter. This included defining the project's research design in all its aspects including research questions, data collection, etc. The partner organization brought to this process previous knowledge and experience of the region's history of networks, an emerging need for internet accessibility, the challenges faced by rural entrepreneurs in the Great Northern Peninsula of Newfoundland, and the potential for enterprise hubs to support entrepreneurship. While the objectivity of the data analysis process was safeguarded throughout, the project set out to find out if enterprise hubs could foster the much-needed networking possibilities for local entrepreneurs. This goal was identified in discussions with the partner organization and built on the organization's preliminary assessments of the needs of their clients and other entrepreneurs.

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<sup>2</sup>This project obtained clearance from Grenfell Campus, Memorial University's Research Ethics Board and it followed all requirements related to participant consent and other ethical considerations. The project was funded by Mitacs with industry contribution from CBDC Nortip.

The original goals of the study were twofold. The first was to discover how entrepreneurs in the GNP believe that enterprise hubs could help them cope with challenges and foster social capital during and after the COVID-19 pandemic. The second was to explore the applicability of the enterprise hub model in the GNP, while also carrying out a research project that assessed the potential long-term benefits as perceived by the members of the existing community. To attain these goals, the project needed to identify existing resources and supports in the region. Thus, these goals led to the following four research questions for this paper:

- What are the perceived challenges and conflicts faced by entrepreneurs due to the COVID-19 pandemic in rural communities in the Great Northern Peninsula, NL?
- What supports are available for entrepreneurs and small businesses?
- What other supports are needed for entrepreneurs and small businesses?
- Can enterprise hubs bring together available resources and stakeholders to mitigate challenges faced by rural entrepreneurs due to the pandemic? If so, how can they be implemented in the context of the GNP?

#### ***4.1 Data Collection and Analysis***

Primary data were collected through (a) an anonymous online survey, (b) participant observation during a blended online and in-person public discussion session organized by the partner organization, and (c) implementation of trial workshops in the region. Gillham (2000) argued that participant observation is the “most direct way of obtaining data” (p. 46). With this in mind, the researcher was involved as a listener and note-taker to obtain data during the blended discussion session and workshops. The survey was designed to complement the narrative, qualitative data that emerged during group discussions and add to our understanding of the issues raised and solutions suggested by participants (Edwards & Dardis, 2014). These data collection methods allowed us to get a thorough understanding of the perceptions of the entrepreneurs and to triangulate our findings among the different types of data sources (Yin, 2009). This was very important, as the range of sources have complementary strengths and weaknesses. As suggested by Flick (2007), diversifying our sources allowed us to extend our knowledge and strengthen the quality of the research.

Recruitment for the online survey was carried out via an e-mail sent to existing entrepreneur lists available to CBDC Nortip. The survey was sent to 50 small business owners and entrepreneurs. The link to the survey was also included in local newsletters and social media platforms and was shared with participants of the four online workshops held as part of the project. A total of 30 entrepreneurs from the GNP completed the anonymous, online survey. The survey included 16 questions as well as a consent form and was administered using the Qualtrics survey platform. A list of all survey questions is included in Appendix A.

A total of 29 participants joined the blended public discussion session, during which data was collected through participant observation. During the blended session, detailed notes were taken by the principal investigator and graduate research assistant for later analysis. This session included 14 entrepreneurs, 11 people representing institutions that provide various types of support, and four panelists. Recruitment was carried out via e-mail and through social media platforms of

Memorial University Grenfell Campus, and its local entrepreneurship centre. E-mail invitations were sent to entrepreneur lists available to CBDC Nortip and were included in local newsletters. A list of questions used to guide group discussions is found in Appendix B.

The session was held concurrently at four locations in the GNP, namely, Cow Head, Hawke’s Bay, Plum Point, and St. Anthony. A facilitator was present at each location and a small group of entrepreneurs and representatives from local agencies joined—adhering to the current public health policies. The four locations connected virtually to a common online platform where a main facilitator was joined by four panelists and other virtual attendees. The discussion began with a short presentation by each panelist and was followed by small group discussions and a plenary discussion. The target audience for the subsequent online workshops were entrepreneurs and small to medium business owners in the GNP, however, the sessions were open to anyone from across Newfoundland.

We implemented a similar recruitment method for the workshops. The organizers shared the invitation primarily online, since in-person opportunities for sharing the invitation were negligible because of the limitations on gatherings due to the pandemic. There was a notable increase in attendance in subsequent sessions when the focus of the online invitations shifted from calling the session a ‘networking’ session, to calling it a ‘hands-on workshop’. The organizing team also decided to hold these sessions fully online. The increased uptake may suggest that the focus on tangible outcomes for participants, and simplified format may have encouraged entrepreneurs to join the sessions. Table 1 offers a list of the names of all online workshops and the attendance numbers. It should be noted that while there was some overlap in participants from one virtual session to the other, each session had increasing numbers of new attendees. Regarding the survey, since this data collection was disseminated using the same networks that were used to recruit participants for the hybrid and online session, it is likely that there is overlap. However, this detail cannot be further defined as personal identifying information was not captured in the survey for ethical reasons.

Table 1. *Names and Attendance for Workshops Conducted for the GNP*

<b>Workshop Title</b>	<b>Number of participants</b>	<b>Breakdown of participants by type</b>
Innovative networking for business	29	4 P, 11 RP, 14 E
Taking your business online	31	1 P, 3 RP, 27 E
Social media marketing tools	53	1 P, 3 RP, 49 E
Email Marketing	46	1 P, 3 RP, 42 E
Search Engine Optimization (SEO)	60	1 P, 3 RP, 56 E

RP: Resource Persons, P: Presenter, E: Entrepreneur

## 4.2 Analysis

Coding of quantitative data from the online survey was done using SPSS (Davis & Davis, 2016). While the data collected may not be statistically significant due to the

low number of respondents compared to the number of entrepreneurs and small business owners in the GNP, this approach looks for tendencies and how these may answer the research questions, utilizing pre-determined codes (Kennedy & Thornberg, 2018). See Appendix C for additional details regarding codes and their connection with the research questions.

Coding qualitative data from our sources took what Dubois & Gadde (2002) would call an abductive approach. This requires an iterative coding approach that allows researchers to move back and forth from the data in the case and the theory to develop a model that was both theoretically sound and empirically grounded. After grouping the data into common themes, we revisited the literature and saw an obvious connection to embeddedness. We then associated our initial codes with themes from this theory.

## **5.0 Research Findings**

### ***5.1 Challenges and Conflicts Faced by Rural Entrepreneurs due to the COVID-19 Pandemic***

Through our analysis, we argue that the pandemic has exposed a risk for local entrepreneurs to become over-embedded in their local communities, which is further exacerbated by their lack of connectivity with networks outside of their communities. Our data highlighted three over-arching difficulties faced by entrepreneurs during the pandemic related to this argument, and these were (a) challenges from an over-reliance on a few key actors, including financial difficulties, (b) challenges in implementing new skills and ICT-based tools, and (c) issues in connectivity. The following section will provide an elaboration on these themes as reflected in the data collected by participant observations of group discussions and by the online survey.

*5.1.1 Over-reliance on a few key actors.* Over-embedded networks are characterised by an over-reliance on key actors (Uzzi, 1997). Similarly, our data showed a high level of reliance on previous champions and the government.

*Group Discussions.* A challenge that was noted regarding the establishment and sustainability of networks in the GNP even before the pandemic is the difficulty in finding community champions or leaders. In addition, discussion participants suggested that when leaders are present, they need to find a way to ensure that all members of a network share responsibilities to ensure its long-term survival. Describing lessons learned from past successful networks in the GNP, a panelist expressed the following: “A leader is important, but in almost all of those cases, those leaders were driven to share it. They demanded that the people in the network did something and tried not to become the star”. This panelist described the risk of relying too heavily on champions as follows: “when they became the star it was: star led, star retires, thing collapses”. In the words of this panelist the goal of a leader “is to help illuminate the things they haven’t seen about themselves that would be complementary that would bind them together”. This sense of common or complementary vision or goals is important since entrepreneurs need to see themselves in the formation of the network and share in its responsibilities and roles. Finding and working toward this complementarity and common goals was identified as crucial for the survival of any network.

Participants also spoke about additional challenges and opportunities that relate specifically to the pandemic. Entrepreneurs are dealing with the mental load of having to worry about the financial survival of their business. One participant stated that “people don’t want to talk about how to get innovative because they are trying to pay their bills”. This participant believes that the financial assistance provided by government has helped entrepreneurs and small business owners stay afloat temporarily while encouraging them to focus on pivoting their business and digitizing during and after the pandemic. This finding suggests that while innovation for entrepreneurs appears to be stifled by the pandemic, entrepreneurs look to government to help them survive to further curtail innovation.

*Survey.* An interesting finding under this theme relates to entrepreneurs’ perspectives on ‘existing resources’ they had in their communities. Survey participants acknowledged that there are many resources already available for businesses in the GNP and that could be better harnessed to strengthen the support for entrepreneurs. These include institutions such as (a) CBDC Nortip, (b) Gros Morne Co-operating Association, (c) Navigate Entrepreneurship Center, (d) Newfoundland and Labrador Organization of Women Entrepreneurs (NLOWE), and (e) the Chamber of Commerce. However, respondents also mentioned that compared to other provinces, NL has fewer options available, and the biggest challenges faced by new businesses are the lack of financial resources and the lack of support in building their consumer network. We noted that all resources listed referred to support organization, and not referring to community-based assets or the community’s history or geography. This suggests that these resources may be under-utilized within the communities.

*5.1.2 Challenges in implementing new skills and ICT-based tools.* Both the survey and group discussions pointed toward a need to build capacity through learning and funding.

*Group Discussion.* Eighty percent of survey respondents mentioned that their communities desperately need improved technology capacity and resources. In relation to our first theme, participants expressed that they would like to see more involvement from the government in supporting their businesses with the process of implementing ICTs. This support would be best if it came in the form of additional financial support to create online platforms and through training programs to enhance technical and online marketing skills.

Survey results also highlight that the primary challenges that small to medium businesses in the GNP face in trying to take their businesses online as a result of the pandemic are (a) the lack of financial resources to digitize their business and manage online platforms, (b) the lack of skill or knowledge to adopt new technologies, and (c) a lack of additional staff to manage online platforms. These difficulties are exacerbated by the decreased cash flow brought about by the pandemic, as expressed by survey participants.

*5.1.3 Lack of ICT connectivity and learning.* During the discussion, most participants observed that the pandemic has heightened the need for learning networks while also noting the challenges to establish them. The discussion highlighted that the increasing need for connectivity and technology to conduct business during the pandemic pointed toward a need for training and capacity-building. Small business owners need to continue learning and updating themselves to keep up with global technology trends and networking was discussed as a way to

facilitate this. One participant indicated that global trends toward sustainability, while posing a challenge, also represent opportunities. They stated the following:

Different countries in the world are moving into a just transition that includes moving toward more sustainable ways of running businesses...whether that is innovative through technology or not, it is still jumping on the train whether you are environmentally savvy or not, you are learning and adjusting and that is a value add for businesses whether they realize it or not.

This participant sees networking with other businesses as a tool that can help fill knowledge gaps, strengthen their own small business, and generate benefits for communities such as waste reduction.

One additional challenge observed by the researchers, and which was not discussed by participants was the issue of internet connectivity in the forum itself. The blended discussion's format posed some noticeable challenges to participants and organizers primarily precipitated by the limited access to high-speed internet across the GNP. Out of the five locations, the quality of the connectivity was low in three locations, causing technical issues such as delays during the panel presentations. Additionally, one location's connectivity was completely dropped, and that group could not join the plenary after the small group discussion. This lack of reliable connectivity can impede networking and learning opportunities as it did during the session.

*5.1.4 Advantages of the level of embeddedness.* Based on our research findings, we suggest that entrepreneurs in the GNP experience a level of over-embeddedness as evident in the reliance of a few key actors and the alienation they experience because of low connectivity. Although our conclusions suggest something of a 'negative' nature, this is not our intention as there are advantages to this situation. Moreover, not all entrepreneurs share this over-embeddedness on an individual basis. For example, the pandemic has presented small business owners in the GNP and other areas of NL with opportunities such as increased access to learning opportunities and networks through online platforms and greater interest to support local businesses. A discussion participant expressed this as follows: "with the virtual space, my network is expanding because I don't have to travel". A second participant noted that, even though the pandemic has brought about serious challenges for rural businesses in NL, there are opportunities. People are encouraged to buy local products and support local business, and this has helped their food business in some ways. These participants noted that business need to harness these opportunities going forward.

## **5.2 How Enterprise Hubs Can Create an Integrated Network**

Data analysis indicated that enterprise hubs may facilitate networking and learning opportunities in the GNP, thus helping to address the risk for over-embeddedness. The analysis also highlighted existing resources and networks, the role of hubs in providing training and physical resources, hubs as places for learning and networking, and existing resources and network history of the GNP. The possible role of hubs can be summarized as (a) training and physical resources, (b) learning and networking, and (c) building upon previous local networking history.

*5.2.1 Enterprise hubs for training and physical resources.* Survey participants stated that enterprise hubs could help to improve their access to tools and resources, even if they are operated online for now. They expressed that support in creating marketing content, hands-on training on marketing and online platforms is essential to ensure their survival. Survey participants also alluded to the fact that businesses in rural NL often lack technological resources such as computers, WIFI and high-speed internet access, scanning, and other technology. A total of 73% of the survey respondents mentioned having an enterprise hub equipped with technological resources in rural communities would help small businesses to improve their operations.

*5.2.2 Hubs as place for learning and networking.* Analysis of data emerging from group discussions indicated that most participants believe that the primary focus of hubs should be skills building through workshops that aim to address specific knowledge gaps. Networking is always important, especially during and after the pandemic. However, it is a process that needs to happen organically and not be forced or imposed, and hubs can help facilitate this process by bringing people together for capacity building and learning. A participant mentioned that networking happens on its own, almost as a secondary benefit from bringing people together and offering skill-building programming.

Some suggestions emerged regarding how to increase entrepreneur participation during events and in networking. It was suggested by several discussion participants that, when recruiting for events, there must be a clear business benefit. The value added of being on a network must be clear for business owners to want to be involved in the extra work. One of the panelists mentioned that the pandemic has made casual gatherings impossible, and in the past informal gatherings have been conducive for networking. They also mentioned that organizers need to be aware of timing and consider holding events outside of work hours to make it easier for entrepreneurs to join.

*5.2.3 Existing resources and network history.* Most discussion participants articulated the need to bring together existing resources to establish a sustainable network of support for entrepreneurs. Some participants also discussed the challenge of finding the right level of structure and ensuring support and buy-in from others. They noted that there are existing resources and informal networking practices among businesses in the GNP. One participant asserted that their business would not have been successful without networking. They expressed that they have a well-established network with local producers and businesses selling their products and looking for environmentally sustainable practices. This generates a cycle of mutual benefit while strengthening the local economy and tourism industry. One panelist asserted they have seen a lot of networking happening in the GNP already. He stated the following:

I think the business community in the Northern Peninsula and around the world is quite capable of finding the people they want to work with, and they do it, but they might just not call them networks. All kinds of relationships are built!

A participant who identified as a resource person highlighted that previous networks in the GNP have left valuable lessons which can inform future business networks. This participant was involved in the coordination of the former Northern Peninsula



Business Network which he described as “more structured than a lot of the stuff we have been trying to do”. They suggested that finding a balance regarding structure will be important. Too little or too much structure has not been conducive, and they argued the following: “maybe we are a little light in structure a little more would be helpful, in terms of getting a group of people...too much structure may not be the answer either”.

Another entrepreneur stressed that networking has been key in the past in helping the tourism sector become established in the GNP. The current situation will require the same level of collaboration if the sector is going to survive. This participant articulated this as follows:

For the tourism industry to thrive again, we need to get back to our roots. We need to work together in order to build that tourism industry. That is how it started; people came together and talked about how to market themselves. They were too small to do it individually, but as one group representing the GNP, they managed to build the industry. We will need to network to bring the industry back.

## **6.0 Discussion and Recommendations**

We have argued that communities in the GNP have tended to become cut off from their wider network, that their level of over-embeddedness has been exacerbated by the COVID-19 pandemic, and that the establishment of an enterprise hub may help create a more integrated network. Our findings are summarised in Table 2. They reflect what Rundel et. al, (2020) argued for, a rural digital hub, being one that “uses co-location with other services to safeguard a sufficient user-threshold...[being] a place for the rural community to get into contact with digital developments and to receive assistance...[and] ought not to be too specialised, yet fitting the regional and local needs.” (p. 37).

Research findings suggest that generally entrepreneurs are concerned about the decrease in income brought about by the pandemic, coupled with the increased demand on their resources such as the labour-intensive tasks of cleaning and the effort required to move their business to online platforms as appropriate. This has moved them to express a need for more government presence and support, and to reflect on the strong role of key actors in establishing a local community. The federal government’s COVID relief has helped them survive at a minimum. However, they argue that additional training opportunities for practical tasks related to digitization would have been beneficial.

A digital hub may meet this challenge by bringing actors together so that new champions can step up, community members can unite, and new innovations can form (Busch & Barkema, 2020). The GNP has several resources available, and networking does happen at some levels. However, lessons from past experiences in the region suggest that a well-integrated network can help increase local social capital by harnessing knowledge and resources, thus filling in the gaps that the different levels of government have not been able to fill. Enterprise hubs can be a concerted effort by local institutions and communities whereby they work together to help entrepreneurship flourish in the GNP.

Table 2. *Key Research Findings*

Challenges due to over-embeddedness	How enterprise hub can mitigate the challenge
Over-reliance on key actors	<ul style="list-style-type: none"> <li>• Bringing together existing resources and local actors</li> <li>• Fostering complementary visions and common goals</li> </ul>
Challenges in implementing new skills and ICT-based tools	<ul style="list-style-type: none"> <li>• Blended online and in-person training opportunities</li> <li>• Training programs to enhance digitization skills</li> </ul>
Lack of ICT connectivity	<ul style="list-style-type: none"> <li>• Physical location providing in person services (i.e., internet, physical space)</li> <li>• Some in-person programming</li> <li>• Location with best possible internet connection</li> </ul>

Our analysis also showed a challenge in implementing ICT tools and processes. The online environment can certainly contribute toward building social capital in Newfoundland’s GNP. However, any program or project needs to carefully implement lessons learned from other contexts such as online education (Aldosemani et al., 2016). Workshops and programming as part of an enterprise hub initiative would need to ensure that the platforms build trust, that people feel connected to each other, that there is ongoing multi-level communication, and that people share common goals and objectives. Additionally, as Townsend (2016) notes, an element of in-person interaction will be needed since this type of connection seems to be essential in rural contexts. The COVID-19 pandemic has certainly magnified and made evident existing challenges. It has also brought to the forefront past experiences of networking, providing an opportunity to face challenges together. Networking has proven to be the way for the GNP to build its social capital in the past, specially related to tourism development. Based on our research findings, we suggest that networking will be the way in which entrepreneurs move forward and recover in the years ahead and they continue to face uncertainty and challenges.

Finally, our data also point to over-embeddedness through a lack of connectivity to establish ties outside of the community during the COVID-19 pandemic. Finally, our data also showed a challenge in implementing ICT tools and processes. This finding points toward a blended in-person and digital enterprise hub model as the most conducive to implement in the GNP. An enterprise hub initiative exclusively focused on a physical location would not be successful in the GNP since its vast distances and harsh winters make travel from one community to the other inconvenient. The uneven availability of high-speed internet will require some level of in-person services, support, or events in the future. While the physical spaces with

resources such as workspace, internet connection, and so forth, are important and would meet the real needs of some entrepreneurs, these resources must be accompanied by activity and programming designed to support the local culture for entrepreneurship. As the literature and our research findings suggest, access to ICTs in the GNP continues to be difficult in many of its communities. However, enterprise hubs can help bridge the rural-urban divide as government support for larger infrastructure continues to trickle in (Rundel et. al, 2020).

Building on these findings, we put forward the following recommendations for professional practice: (a) implementation of a blended hub model, (b) hub programming focused on training on digitization and business operations, and (c) coordinating a hub-based, semi-structured regional business network.

## 7.0 Conclusion

The uncertainty precipitated by the COVID-19 pandemic is likely to continue to affect livelihoods across the globe and at various levels in the years to come. Strong networks that build social capital are likely the best way for rural entrepreneurs and communities to continue to strengthen local economies. Our research findings indicate that through a robust system of support for small businesses and through an enterprise hub that provides services to small businesses in rural communities, it is possible to guide entrepreneurs towards success. By bringing together existing, yet dispersed resources, a blended model hub with a physical presence and online programming may offer just enough structure for ongoing exchange among local stakeholders and entrepreneurs. This coming together may facilitate idea-sharing and collaboration and may prove to be the spark that can reignite lasting networks in the GNP.

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## **Appendix A: Online Survey Questions**

1. Are you a small or medium-scale business on the Great Northern Peninsula (GNP)?
  - a. Yes
  - b. No
  - c. Other
  
2. What is the nature of your business?
  - a. Service Business (Giving advice or providing a service to customers)
  - b. Manufacturing Business (Going through a production process)
  - c. Merchandising Business (Buying and selling products)
  - d. Hybrid Business (Combination of Manufacturing and merchandising)
  - e. Other (please specify)
  
3. What worries you about Covid-19? (Check all that apply).
  - a. Economic repercussions
  - b. Emotional stress
  - c. Cash flow problems
  - d. Limited access to government support
  - e. Access to personal protective equipment
  - f. HR issues such as staffing, refusal to work or layoffs
  - g. Long-term business impacts
  - h. Ability to keep up with rapid pace of digitization
  - i. Other (please specify)
  
4. The COVID-19 Pandemic has brought about various challenges for small businesses. Which of the following would you say apply to you? (Check all that apply).
  - a. Financial difficulties
  - b. Lack of skilled workers
  - c. Decrease in customers
  - d. Increase in labour-intensive tasks such as cleaning, organizing etc.
  - e. Additional workload
  - f. Challenges in moving towards an online platform
  - g. Changing consumer demands and expectations
  - h. Other (please specify)

5. Which of the following statements are true for you regarding the ‘new normal’ (Social distancing, wearing masks and PPE, sanitizing, reduced capacities due to space restrictions, etc.) and other public health regulations in NL?
  - a. The new normal has greatly impacted my business.
  - b. The new normal has somewhat impacted my business.
  - c. The new normal had not impacted my business.
  - d. None of the above applies to my business.
  
6. How has the pandemic influenced your community’s technological capacity?
  - a. The businesses in the community are desperately in need of improved technological capacity and resources.
  - b. The businesses in the community need technological capacity and resources to some extent.
  - c. The businesses in the community are content with the technological capacity and resources currently available.
  - d. Other (please specify)
  
7. Have the restrictions on public gatherings and face-to-face interactions negatively influenced your community’s networking capacity? Rate based on the frequency of networking during the pandemic.
  - a. Strongly agree
  - b. Agree
  - c. Somewhat disagree      Strongly disagree      Does not apply
  
8. What additional changes do you think might need to happen for your business to thrive in 2021? (Check all that apply)
  - a. Increased technological support
  - b. Increased financial support
  - c. Increased interaction with entrepreneurs for the purpose of exchanging knowledge and networking
  - d. Having a physical place (hub) available with internet access and technological resources in each community
  - e. Adapting my products and services to changing customer needs and habits
  - f. Other (please specify)

9. Which of the following technological challenges have you regularly faced when doing business (even prior to the pandemic)? (Check all that apply).
  - a. Lack of internet access / Network presence
  - b. Lack of skill in using technology
  - c. Lack of resources (computers, WI-FI, camera, scanner etc.)
  - d. Lack of cell phone service
  - e. Other (please specify)
  
10. An Enterprise Hub is a physical place allocated for small businesses to use technology resources and online training to face challenges. Do you think the small and medium-scale businesses in your community could benefit from an enterprise hub? (example: a reservable board room equipped with computers, internet, scanner, photocopier, camera, microphone, and video conferencing platforms that can be accessed to meet your online business needs.)
  - a. Strongly agree
  - b. Agree
  - c. Somewhat agree
  - d. Disagree
  - e. Strongly disagree
  - f. Does not apply
  
11. What training would you require to work towards innovation amidst challenging times? (Check all that apply).
  - a. Technology
  - b. Online platforms
  - c. Managing finances
  - d. Innovation and networking
  - e. Skills for innovation
  - f. Workshops about certification, micro-credentials
  - g. Training on how to pivot my business
  - h. Other (please specify)
  
12. If you were to do business online, what challenges would you foresee having to overcome to do it successfully? (Check all that apply).
  - a. Use of technology (skill required)
  - b. Time availability
  - c. Equipment needed (resources, computer, internet, etc.)
  - d. Financial resources to build the platform
  - e. Additional staff to help manage it
  - f. Other (please specify)

13. What support can the government offer for entrepreneurs on the Great Northern Peninsula? (Check all that apply).
  - a. Access to technology
  - b. Financial compensation
  - c. Training on developing technological skill
  - d. Training on online marketing and business
  - e. Financial support to create online marketing materials
  - f. Other (please specify)
  
14. What would encourage entrepreneurs to start new businesses in your community?
  - a. Access to grants and other financial resources
  - b. Training on technology, market, and customer segments
  - c. Training on innovation and networking
  - d. Physical space available to use and conduct their businesses
  - e. Business incubator
  - f. Other (please specify)
  
15. What resources are currently available to entrepreneurs and small businesses in your community?
  
16. What additional skills would you like to receive training on to help grow the success of your business?

## **Appendix B: Guiding Questions for Blended Session**

### **Questions for panelists:**

#### **Main overarching question:**

1. What is the most important innovation for rural businesses to adopt to advance their business?

#### **Additional questions:**

2. Newfoundland and Labrador is one of, if not the, most resource rich provinces in all of Canada, yet most of our resources are exported with minimal processing or value-add. Why is that?

What type of regulatory changes are needed to create more value from our resources locally?

What type of business environment and enterprise attitudinal changes are needed for this type of transition to a circular, value-added NL economy?

### **Questions for breakout group discussions:**

#### **Breakout Group Questions:**

1. Has the COVID-19 pandemic brought about new challenges to your businesses or community? What are these challenges?
2. How are you adapting to the new normal (i.e., with technology, innovation)? What are the positives and negatives of the new normal?
3. Are there existing resources that can support businesses in the region? If so, what are these resources? Or what regional resources do you wish you had to support your business?
4. How are you preparing for 2021? What business tactics or innovative methods do you think could help you succeed in 2021?

## Appendix C: Data Sources and Codes

Research Question	Survey Questions	Group Discussion Questions	Codes Emerging from Survey	Codes Emerging from Group Discussions
1. What are the perceived challenges and conflicts faced by entrepreneurs due to the COVID-19 pandemic in rural communities in the GNP, NL?	3–9, 12	3	<ul style="list-style-type: none"> <li>• Financial challenges</li> <li>• Lack of access to technology and internet</li> <li>• Lack of skills</li> </ul>	<ul style="list-style-type: none"> <li>• Over-reliance on key actors.</li> <li>• Role of community champions</li> <li>• Financial burden</li> <li>• Lack of ICT-based tools</li> <li>• Lack of training</li> </ul>
2. What supports are available for entrepreneurs and small businesses?	15	4, 5	<ul style="list-style-type: none"> <li>• Existing resources</li> <li>• Presence of key actors</li> </ul>	<ul style="list-style-type: none"> <li>• Existing supports</li> </ul>
3. What other supports are needed for entrepreneurs and small businesses?	11, 13, 14, 16	1, 2	<ul style="list-style-type: none"> <li>• Training</li> <li>• Funding</li> <li>• Access to ICT</li> <li>• Capacity building</li> </ul>	<ul style="list-style-type: none"> <li>• Learning networks</li> <li>• Capacity Building</li> </ul>
4. Can enterprise hubs bring together available resources and stakeholders to mitigate challenges faced by rural entrepreneurs due to the pandemic? If so, how can they be implemented in the context of the GN	10	6	<ul style="list-style-type: none"> <li>• Access to tools, technology, and resources</li> </ul>	<ul style="list-style-type: none"> <li>• Hubs and skills building</li> <li>• Hubs and networking</li> </ul>