# Business incubation as a community of practice: an emergent cultural web

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# Business incubation as a community of practice: an emergent cultural web

## Abstract

Research on business incubation has been dominated by studies exploring university-industry technology transfer and high technology accelerators. Less is known about Business Incubation Centres (BICs), specifically, how their formal and informal structures may impact upon client development. Drawing on concepts from the community of practice (CoP) literature and organizational culture, we explore if BICs can be considered to be CoPs. We also seek to unravel the key elements which underpin the culture of a BIC and how these elements may provide enabling or constraining conditions for a CoP to emerge. Through a qualitative methodology of regional based BICs in Ireland, we illustrate how the amount of time spent on campus; the nature of the working week; the scalability of the enterprise; and the capacity of the enterprise to meet the criteria associated with high potential start-ups influences clients' perceptions of the value of BICs. We provide new theoretical insights which suggest that BICs are a CoP with a culture that can be studied, captured, and illustrated. Practical and policy implications are suggested to enhance the effectiveness of BICs for both clients and regions.

**Keywords**: Business incubation centres, community of practice, cultural web, small business.

## 1. Introduction

Across many countries, business incubation is a widely utilised policy tool for promoting economic development, innovation and for supporting the emergence of new firms in various sectors (Kiran and Bose 2020). Although large numbers of researchers and policy makers have explored the concept of business incubation, Ayyash *et al*. (2020) identified that the literature is "blurred", because the heterogeneity of incubation models has resulted in a lack of definitional clarity, leading to ambiguity over their purpose. Business incubation research in recent years has

been dominated by studies exploring university-industry technology transfer (Hausberg and Korreck, 2020; McAdam *et al.* 2016) and high technology accelerators (Crisan *et al.*, 2021; Mian *et al.*, 2016). However, less is known about Business Incubation Centers (BICs) which are often regionally based, may not have formal links to universities and target entrepreneurial firms, who are often at an earlier stage than accelerators (Mian, 2014; Tang *et al.* 2021). Furthermore, the clients of BICs often have different relationships dynamics with center managers than in a university context.

BICs are said to be a key tool for accelerating the development and growth of entrepreneurial activities within regions using targeted resources and services (Theodorakopoulos *et al.* 2014). BICs are primarily funded by government, they often receive grants for physical infrastructure and an annual budget for staff and events which are focused on achieving key performance indicators as specified by their sponsors (Azadnia *et al.* 2022). Prior research suggests that government support programmes, including BICs, often do not match to the characteristics, needs and/or expectations of entrepreneurs (Ahmad, 2017; Ayaste *et al.*, 2017; McAdam *et al.*, 2021; Mian *et al.*, 2021; Stephens and Lyons, 2022). Monsson and Jørgensen (2016) suggest that the design of a BIC is imperative to its success. They suggest that the design not only refers to the business support programmes, but also to the internal environment, which should 'fit' the characteristics of the clients. However, the expectations of each client will vary depending upon individual needs (personal aspirations, prior experience and networks) organizational needs (level of capabilities, size and sector) and local business environment (region/country) factors (Belchior and Lyons 2021; Hill, 2018; Pham *et al.*, 2021; Pique *et al.*, 2018). These differentiated needs may create challenges for BICs to develop effective model for business incubation. To date, much of the extant literature is focused on the inputs and outputs of BICs in term of their infrastructure and

components (Bruneel *et al.*, 2012; Ng *et al.*, 2021; Pauwels *et al.*, 2016), whereas less is known about the internal environment of BICs and how this contributes to outcomes. Scholars such as Theodorakopoulos *et al.* (2014) and Ayyish *et al.* (2020) suggest that a BIC should foster a learning community which encourages client entrepreneurs to be not only a recipient of knowledge and support but to be an interactive actor, who share their own knowledge and skills with the community. This will foster reciprocity and higher levels of knowledge exchange, enhancing learning and skills development.

Liu (2020) proposes that effective business incubation should be situated in the broader institutional and cultural contexts, suggesting that entrepreneurship shapes the context within which it occurs. Hughes *et al.* (2007) proposed that a BIC should provide opportunities for firms to access and leverage new knowledge to create value. For firms to truly benefit from a BIC, they need to exhibit resource/knowledge seeking and giving in order to benefit from situated learning embedded within BIC structures and culture. However, much remains unknown on how the key dynamics of BICs, specifically how their formal and informal structures may impact upon client activity and learning (Ayyash *et al.* 2020).

Viewing a BIC as a social-learning mechanism presents many similarities with Lave and Wenger (1991) conceptualization of a Community of Practice (CoP). A CoP is often defined as "*a flexible group of professionals, informally bound by common interests who interact through interdependent tasks guided by a common purpose thereby embodying a store of common knowledge*" (Jubert, 1999, 166). It is based on the dynamics that learning best occurs in group learning systems. Furthermore, Wenger (1998, 7) presents a simplified definition of a CoP as: '*a group of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly*'. Pykro *et al.* (2016) caution that CoPs best emerge organically,

however, investing in an organisations identity can foster the right conditions for a CoP to emerge. The key defining elements of organizational identity has been suggested to be purpose, value and culture. Whilst prior studies have focused on the purpose and value of BICs, less is known on the dynamics of their culture and how this might provide enabling or constraining conditions for a CoP to emerge.

To advance knowledge on BICs, the aim of this research is twofold. First, we explore if BICs are CoPs and second, we seek to advance understanding of the key elements which underpin BIC culture and how this may provide an enabling or constraining condition for a CoP to emerge. To achieve this, we explore the experiences of twenty-four stakeholders, who are based at eight BICs situated in different regions in Ireland. Our findings make several key contributions. We extend the literature on BICs by providing micro level insights into the core activities which underpin a BICs culture. We provide novel insights into the constraining and enabling factors within BICs which impact the development of a CoP. We provide a nuanced understanding of how BICs can be considered to be CoPs and the key defining features within BICs which allow them to leverage social learning and stimulate innovation and growth in firms. Furthermore, we provide new insights into the key defining features of the cultural paradigm of BICs which have practical implications.

The next section presents the theoretical framing, where we analyse the core purpose and values of BICs and theorise whether they provide the right conditions for CoPs. Then, we explore current research on BIC culture and explore Johnson's (1992) cultural web framework as a means to develop a priori constructs which help inform our empirical analysis.

## 2. Business Incubation Centres as a Community of Practice

Over the last twenty years, the number of countries investing in business incubation initiatives has increased. BICs are now accepted as a key element within regional entrepreneurial ecosystems (Kansheba and Wald, 2020; Theodoraki *et al.* 2018; Mian *et al.* 2021). The key purpose of a BIC is to provide an environment which stimulates the growth and development of new and early-stage firms by improving their opportunities for the acquisition of resources leading to the development and commercialisation of new products, new technologies and new business models (Albort-Morant and Ribeiro-Soriano, 2016; Ahmad, 2017; Eshun, 2009; Pergelova and Angulo-Ruiz, 2014). It is suggested that BICs also contribute to the functioning of a region through the provision of support which stimulates firm growth, consequently creating employment, stimulating innovation and enhancing economic development (Fernández, *et al.*, 2015).

There is substantial academic literature which discusses key aspects of business incubation including its components, inputs and outcomes (Ahmad, 2017; Baraldi and Havenvid 2016; Bruneel *et al.*, 2012; Lukeš *et al.*, 2019; Monsson and Jorgensen, 2016; Nair and Blomquist, 2021; Torun *et al.*, 2018). Furthermore, numerous conceptual frameworks relating to BICs exist within the literature. These frameworks comprise of different variations of design and operations (Mian, 1997; Mrkajic, 2017; Pauwels *et al.*, 2016; Sgath *et al.*, 2019; Stephens and Onofrei, 2012; Theodorakopoulos *et al.*, 2014; Voisey *et al.*, 2006). BICs typically comprise of the provision of physical infrastructure and services. The physical infrastructure usually includes a variety of office space, R&D facilities and small-scale manufacturing suites (Bruneel *et al.*, 2012; Ng *et al.*, 2021; Pauwels *et al.*, 2016; Torun *et al.*, 2018; Wang *et al.*, 2020). Whereas services include, flexible lease terms, access to technology, financing, technical assistance; and access to experts in a range of areas including marketing, legal matters, finance, human resources, and online platforms

(Ahmad, 2017; Alaassar *et al*., 2021; Hausberg and Korreck, 2020; Hillemane and Satyanarayana, 2019; Lai and Lin, 2015; Mrkajic, 2017; Pauwels *et al*., 2016; Sagath *et al*., 2019). Scholars such as Ayyish *et al*., (2020), Petrucci, (2018) and Theodorakopoulos *et al*. (2014) identify that despite an increase in interest amongst academics and policymakers, there still lacks a consensus on the factors which contribute to the effectiveness of business incubators and how they can improve the success rate of incubated firms. Research which has explored the outcomes of business incubation has frequently focused on, tangible outcomes like growth, financial support, turnover and profitability (Albort-Morant and Ribeiro-Soriano, 2016; Hackett and Dilts, 2004; Messeghem *et al*., 2018; Stephens and Onofrei, 2012; Voisey *et al*., 2006). Kiran and Bose (2020) suggest the need for empirical studies which explore the tacit factors which influence BIC outcomes and client performance. It is suggested that these tacit factors may exist through formal and informal structures within a BIC but also encapsulate the networks and relationships that surround the BIC.

Thierstein and Willhelm (2001) put forward that a business incubator should be "a locational community", where client firms play an active role in contributing to the value which is created. This is akin to the concept of a CoP. Lave and Wenger (1991) assert that within a CoP, situated learning bridges a firms cognitive learning processes and those social practices associated with the 'lived-in world'. It is suggested that the CoP model builds on research on the concepts of knowledge (Nonaka and Takeuchi, 1995) which holds that knowledge, and particular tacit knowledge, cannot be separated from practice. Prior studies have attempted to understand CoPs, their various forms, structures, developments, impacts, and the factors that influence them across varying contexts (Contu, 2014; McAdam *et al*., 2017; Mutch, 2003; Roberts, 2006; Pykro *et al*., 2019). Amin and Roberts (2008) explain that the core underpinning concepts of CoPs can be used to explain learning and knowledge generation across a variety of work, organisational and spatial

settings. A variety of characteristics for a CoP are reported in the literature (Aljuwaiber, 2016; Amin and Roberts; 2009; Corso *et al*., 2009; Contu, 2014; Pykro *et al*., 2019; Yamklin and Igel, 2012). However, Wenger *et al*. (2002) conceptualization is most widely adopted by scholars and is used within this paper to explore if BICs internal environments may present opportunities for CoPs to emerge. Wenger *et al*. (2002) propose that for a CoP to exist, there needs to be three components:

1. There needs to be a *domain*. A CoP has an identity defined by a shared interest. We suggest that within a BIC, this is illustrated as a commitment to an entrepreneurial journey and importantly to developing an entrepreneurial ecosystem which fosters learning. It is a commitment towards both engagement and action.
2. There needs to be a *community*. Members must interact and engage in shared activities supported by trust. In a BIC, we suggest that these engagements are formal and may be coordinated by BIC management. Alternatively, member interactions and engagement could ad-hoc and facilitated by the design of shared spaces within the BIC or supported in an online community.
3. There needs to be a *practice*. A CoP involves people who have a shared portfolio of stories and skills. Adopting the role of a mentor or mentee is a key part of the entrepreneurial journey. In a BIC, we suggest that the focus may be on improving the provision of hard and soft supports in response to collective needs. There should be a recognition of the importance of social learning.

Tocher *et al*. (2015) propose that community and social resources are fundamental to effective businesses opportunity development and exploitation. CoPs develop their practice through a variety of methods, including problem solving, requests for information, seeking the experiences of others, reusing assets, coordination and synergy, discussing developments, visiting other members, mapping knowledge and identifying gaps (Aljuwaiber, 2016; Corso *et al*., 2009; Pyrko *et al*., 2017; Weller, 2020; Yamklin and Ingle, 2012). Contu (2013) explains that a CoP uses shared repertoires, language and artefacts in a process of increasing mutual engagement. In a BIC,

this could be in the form of a website, campus layout, campus branding, similar office types and equality of access to the resources of the BIC. In order to facilitate the creation a CoP, a BIC manager need to be aware that the process is both fluid and dynamic and that a CoP should emerge as self-organizing entity. BIC management can encourage and support, gaining great advantages, without owning or controlling them totally (Corso *et al*., 2009, 74). Once established, Yamklin and Ingle (2012) propose that a CoP is an effective tool for managing, capturing, and sharing knowledge within an organization. Therefore, in sum, the BIC managers role is to develop enabling conditions for a CoP to emerge. A stream of research which has sought to identify the key success factors such as incubation manager competencies, incubation mangers relationships with tenants, design of office space and support programmes. Limited research has provided a micro level analysis of the factors which may provide the right conditions for relationships to develop and grow in an incubator (Apa *et al.* 2017; Scillitoe and Chakrabarti, 2010; Theodorakopoulos *et al*. 2014). We suggest that that the purpose and values of a BIC are important to direct activities within BICs and their clients, however, this needs to be accompanied by an enabling culture internally within the BIC. This will now be explored.

## 3. Culture as an enabler of CoPs

A BIC should provide an environment which develops social and business ties between both clients and external actors (Apa *et al.* 2017; Gerlach and Brem, 2015; Mian, 2014). According to Alvesson (2013), culture is central to everything in organizational life, and is what guides the behaviour of members. It underpins the structure of an organization and encapsulates the values, ideas and beliefs held by members. Culture is something which is deeply embedded, organic and develops through social learning and mutual experiences over time; consequently, it is not easily observable (Dabic *et al.* 2018).

Authors have proposed a number of different frameworks for studying organizational culture, which Buschgens *et al.* (2013) suggests has led to a fragmented concept of culture. Quinn and Rohrbaugh (1981) Competing Values Framework is widely used within literature to explore culture archetypes of organizations based on varying dimensions which underpin the performance of an organisation. However, the inherent contextual characteristics of a BIC, where tenants may be from varying sectors, and at varying stages in their growth patterns, does not lend itself to utilizing a framework which is reliant upon the examination of factors such as position in the market. Therefore, we suggest Johnson's Cultural Web (1992) is more appropriate for this context. The Cultural Web has been used across a range of organizational contexts to perform a cultural analysis (Cooper *et al*., 2019; Doherty and Stephens, 2019; Mossop *et al*., 2012). The cultural web is based on six interrelated and overlapping elements, which influence and are influenced by the central cultural paradigm. The elements are rituals, stories, symbols, power structures, organisational structure and control systems. McDonald and Foster (2013) explain that the cultural web is an all-encompassing framework which allows the mapping of culture in an organization and incorporates many of the ideas and opinions of other theorists into a single framework. For example, the artefacts identified by Schein (1985) are represented in the six outer layers of the web. Scholars suggest that the cultural web can be used to aid our understanding of the existing culture in an organization, and for making recommendations in relation to certain aspects of that culture (Freemantle, 2013). It is also an intuitive tool for managers to utilize when wanting to explore how to make changes to a culture (Johnson, 2020). Furthermore, the cultural web closely corresponds to what Schein (1985) refers to as underlying assumptions. These assumptions are seldom discussed and are difficult to change (Elsmore, 2017). We propose that the cultural web may be a useful framework which can be used as 'a priori' constructs to understand the culture of

a BIC. Furthermore, Johnson's Cultural Web (1992) may help provide explanatory reasoning on the role culture might play in presenting an enabling or constraining condition for a CoP to emerge within BICs.

## 4. Methodology

This research adopted a qualitative methodology which has been suggested to be suitable to facilitate the contextualized explanations needed to explore culture (Paavilainen-Mantymaki, 2020). Unravelling culture is challenging due to its implicit nature, consisting of underlying assumptions, which members are often unaware of (Schein, 2004). Therefore, we need to explore how culture is socially constructed and interpreted through generating a 'thick description' (Yin, 2018). The nature of stakeholders who engage with business incubators vary across regions and this can influence the cultural context (Monsson and Jørgensen, 2018; Nair and Blomquist, 2018; Petrucci, 2018; Rice, 2002). In this study, we explored BICs that have a regional development focus and which are funded by a government agency in Ireland. The BICs are embedded across disparate regions, but all emphasise innovation when nurturing the growth of knowledge-based business and commercial research. Since the launch of the BIC initiative in Ireland, in the late 1990s, the support system has grown to twenty four BICs each supporting circa fifty companies. The BICs have a remit to support indigenous entrepreneurs with a focus on spin-outs and spin-offs from the traditional industrial bases in their region. The phenomenon of interest is the lived experience, of key stakeholders in a BIC. We interviewed this group in order to explore if a BIC can be viewed as a CoP and the role culture might play in this process.

Data collection comprised of interviews with key informants who shared their experiences relating to the culture within BICs. First, the manager of all 24 BICs in Ireland were invited to take part in the study, 8 agreed. To gain a holistic view of the culture of the BICs. A sample of consultants who work with clients at a BIC (n=8) and clients who were availing of the business

incubator facilities (n=8) were also interviewed. Table 1 provides a profile of the interviewees, the BICs and the regions.

**Table 1 Participants**

The interviewees were asked: about their approach to working in/for/with the BIC; to describe a typical working week at the BIC; to discuss supports provided by the BIC; to provide an assessment of their relationships and knowledge flows with other tenants and stakeholders; and to recount some good and bad experiences of life in the BIC. We also asked the participants to reflect on how the BIC had changed over time and to reflect on the future for their BIC. Data collection took place online via videoconferencing software (due to Covid-19 restrictions) between October 2020 and April 2021. The interviews lasted between forty-five minutes and an hour, audio recording and note taking enabled the capturing of data which was transcribed and notes were collated (Bryman, 2012; Saunders *et al.,* 2015) to capture the emergent narrative. To ensure validity, participants were sent a copy of their responses to facilitate checking (Miles *et al*. 2012). A thematic data analysis process was followed (Braun and Clarke, 2012), which utilized key constructs from Johnson's Cultural Web (1992) as a priori themes. First data was open coded in order to systematically find patterns of meaning (themes) across the dataset (Braun and Clarke 2012, 57). Next, a process of theoretical coding facilitated mapping of core data into categories relating to the culture of the BICs.

## 5. Findings

The findings will be discussed using key power quotes (Pratt, 2009) in order to understand the different dimensions which are important to understand the culture of the incubator. Findings are grouped into the different a priori constructs of cultural web dimensions (Johnson 1992) and will then be interpreted to explore whether BICs can be considered as CoPs.

*Rituals and Routines*

The findings reveal that rituals and routines are important in order to organically create a culture based on informal networking and the transfer of knowledge. It was suggested that creating routines such as a set time and place where individuals can meet for coffee or drop in for a talk helped to foster knowledge sharing.

> *The challenge is creating a supportive environment to ensure that the clients can develop into a proper business.* [2b Manager]
>
> *I have a coffee morning once a week, which works well, but it is same faces. What works better is formal talks either lunchtime or once month on a Friday.* [1a Manager]

However, the interviews revealed that there are challenges in developing routines, which result from the often very different work patterns of clients. This can impact upon social learning and a sense of community.

> *We really should be 24/7 at this stage. Our clients come and go at all hours.* [6f Manager]
>
> *I think the 9-5 companies are on the same page. But my staff are on early (often at home) and I don't think that they really feel part of the place.* [20d Client]
>
> *The challenge at the start is getting to meet the established businesses. Everything is done with the people on your training scheme. But you see them the whole time with the hot-desking. But I wanted was to talk to the people with offices … the people who had success.* [19c Client]

The system of rituals was also found to create a significant issue in the provision of support due to the managers typically working set hours from 9am until 5pm. The BIC managers identified that clients who worked 9-5 availed of additional benefits such as superior access to consultants which creates a divide between the 9-5 clients and those who follow a different work schedule/routine.

*Stories*

Interviews revealed that the sharing of stories across entrepreneurs can help aid learning but the sharing of stories across the BIC managers sometimes led to a siege mentality. The BIC managers reported that they were undervalued in their community and society. The felt that questions were

raised by outsiders in relation to the value of the BIC, its clients and their activities. The interviews identified that internally, the sharing of stories was a positive and helped to develop a greater internal community across client entrepreneurs. However, stories also did have some negative connotations through developing a collective sense of frustration with the external dynamics.

*Really, it's all about the potential start-up and growth, and not looking at the smaller entrepreneur that might be employing two or three people, to help them grow their business'* [3c Manager]

*'When you look at the figures for Ireland and you look at the importance of the retail sector to the country, and how narrow the range of supports, if any, are available to them. There is a disconnect there somewhere, they are huge in terms of their contribution'* [14f Consultant]

The Bic managers also expressed disharmony about the (perceived) absence of support across the wider regional ecosystem.

*We are in here [the BIC] because there is no room for us anywhere else. My clients do not have what the IDA and others want. So, we drive them on to be the best at what they do.* [4d Manager]

However, it became clear across the different cases that there is a bond, linked to resilience, which the clients developed in the BICs from sharing stories of previous failures, doubts about their ambitions and/or ongoing challenges.

*They clients are often at a low when they start, family and money issues. But they come together and work to prove people wrong, that could be friends, former colleagues etc.* [9a Consultant]

The (shared) stories were suggested to provide a cohesiveness that comes from a shared narrative, one which the majority of members stated that they can relate to. This encouraged them to share their own stories, helping to develop a consistent narrative.

### Symbols

The respondents identified that the name of some BICs can be viewed as a "brand" which can be viewed as having advantages in being associated with that 'brand' to external stakeholders. Some clients reported that the BIC brand enhanced their own branding and marketing activities.

*'I think the BIC is doing a good job trying to create this feeling of an umbrella that all these businesses can brand more or less, that they can unite under, and that they might feel it applies to them and they identify with'* [21e Client]

*There needs to be change of mindset. The logo should be a badge of honor ... like the guaranteed Irish symbol.* [15g Consultant]

However, there were concerns expressed by the clients about the lack of online presence some BICs have and the support that clients receive regarding virtual branding, which was important to the entrepreneurs who had an online business model.

*We need to be better on IG and LinkedIn, we need a brand. But when I tried to do this people were not happy. They could not relate to my concepts.* [21 Client]

The BIC managers identified that space and specifically office space often becomes a symbol of success.

*We try and get the clients to see their progress as based on moving from hot desks to bigger offices. Originally, I want different spaces to be in distinct parts of the building, but it works better having mixed provision.* [1a Manager]

*This might sound silly, but I really wanted to get to the second floor because that is where the bigger companies are housed.* [22f Client]

In addition, invites to be a guest speaker or engage in part-time lecturing are also seen as highly significant and impact on the status of clients within the BIC.

### *Power Structures*

There are significant differences in the experiences of the participants in relation to the working relationship that exists, or in some cases do not exist. During the interviews, we explored if the differences related specifically to the BIC environment or if it was connected to the manager – client relationship. The majority of the participants indicated the experience came from the BIC rather than individual relationships. However, some clients identified challenges with their manager – client relationship:

*The manager has no interest in me or my business. He spends all day upstairs with the techies talking rubbish about all their great plans.* [23g Client]

*I am so reliant on Ms A* [the manager] *and Mr B* [consultant] *they nearly do all my planning and I just follow their advice. The way I look at it they have helped so many others, so it would be stupid to try different ways.* [24h Client]

The collective meetings that focus on consultation were also suggested to cause conflict, due to disparities across the sizes of clients and their needs depending on their newness.

*I get so frustrated when we have our monthly meeting with clients. It is the smaller ones that complain and want more stuff. I need to be making sure the better companies are pushing on.* [5e Manager]

A final source of power was suggested to be associated with impact of "outsiders" who are distinguished from the regular pool of consultants. The interviews identified two types of "outsiders", academics and successful business owners. It was suggested that academics often lack an understanding of the needs of the clients.

*The academics land over like they are the only ones with ideas. They don't listen to your problem and just want you to use their kit and do things that meet there needs.* [22f Client]

Furthermore, it was identified that there are challenges in obtaining expert external speakers/advisors who can relate to the clients.

*I have brought in supposed experts and they have been dreadful. Sometimes they miss the point and some are just very poor at presenting their ideas.* [1d Manager]

### *Organisational Structures*

BICs in Ireland place a key emphasis on their ability to connect with Higher Educations Institutions (HEIs) despite being separate entities. It was identified that the BICs could greatly benefit from increased engagement with HEIs however, differencing motivations across the institutions and varying organizational structures do cause challenges. For example, it was identified that the BIC and their clients would benefit from student placements and projects, however, HEI structures and

complexities over module credits, placement supervision and international student visa issues and can make this complex.

> *I would like to see the HEI get more involved. The BIC is a wonderful place and there's no reason why there shouldn't be loads of student placement opportunities there, paid work over the summer.* [16h Consultant]

From the HEI perspective, it was identified that a continued focus on research outputs and attraction of research grant income, means that engagement with BICs is not that attractive to academics.

> *We need more of a research culture. And to be honest I am not sure how working there would help me publish in high impact journals.* [13e Consultant]

Furthermore, a number of organizational structure issues were identified. First it was identified that the BICs need to be embedded more fully within regional ecosystems.

> *The local agencies never come here. We must go see them.* [17a Client]

> *When I work with other agencies nobody ever talks about the BIC. They should be. They surely must be in contact with the manager and going there for events.* [12d Consultant]

Participants called for the establishment of a dedicated government support agency representative to be associated with the BICs.

> *Looking at the range of companies we have in this BIC, you could easily justify the allocation a dedicated EI liaison officer. (11c Consultant)*

> *I would have a funding agency person onsite here in the BIC. That person would be a single point of contact. (1d Manager)*

It was suggested that engaging with external individuals and entities may support the activities of the BIC however this would need to be carefully managed due to government agency bureaucratic processes which could lead to blurring of boundaries on the roles of the BIC manager and the associated consultants.

A further theme was identified regarding organizational structure relating to challenges in fostering a culture of collaboration rather than competition. It was identified that competitive

funding initiatives often meant that clients within the BIC were in competition with each other, which negatively impacted their willingness to collaborate and share knowledge on how to successfully win funding bids.

*Any time there is funding call they (clients) all hide in their office or at home and there is not much interaction. (3c Manager)*

The BIC managers identified that collaboration was key to ensuring effective networking and mentoring, which are the core activities of a BIC. They identified that originally, the organisational structure in the BICs were designed for full-time, on campus start-ups over a 24-month period. However, over time, a greater diversity of clients joined the BICs. Some of the clients were part of formal support programmes and other clients were engaged in multiple programmes and running multiple businesses. All of this has created a disjointed community and has led to challenges with developing an organizational design which meets the needs of all.

### Control Systems

The final component of the cultural web is control systems. Through the interviews, it was revealed that the managers try and customise the generic supports and facilities to individual client needs. This requires the personal, soft skills of the manager or consultant.

*I mean, there are plenty of supports, but I always find people need guidance, people you know, they don't understand what applies to their own situation.* [8h Manager]

*The accessibility they have in terms of getting grants and getting innovation funding and stuff like that is very narrow and is very onerous in terms of trying to access it.* [12d Consultant]

Respondents identified that there are challenges with how "performance" is reported and publicized. Clients suggested that the emphasis on recording performance and setting hard outcomes can cause frustrations.

*It is just form after form. All I do is try and show that I am meeting targets, but that is a long way from the reality of how I am doing and what my accounting is saying.* [18c Client]

The final insight refers to how performance is reported internally and externally. This is an important aspect of the BIC experience and requires careful consideration by the manager.

> *On a general basis its only high potential start-ups, that have profile in the town. They get to be on the radio or a big write up. But there are loads of us doing great things and well we are just left alone.* [22f Client]

Overall, the findings identified that the complexities involved in understanding the culture of the BICs. Culture is a tacit concept to explore, however, the cultural web unraveled key activities and mechanisms associated with the BICs culture. IT was clear from the findings that developing collaboration and a sense of a shared community was fundamental to the BICs culture. This will be reflected upon and discussed in the next section.

## 5. Discussion

This research had two core aims. First, to explore if BICs can be understood as CoPs and second, to advance our understanding of the key elements which underpin BIC culture and how these elements may provide enabling or constraining conditions for a CoP to emerge. In addressing the first aim, the findings reveal that BICs are characterised by key conditions which link to a CoP. Table 2 presents a synthesis of the core activities identified within the BICs, which can be mapped against the three components of a CoP.

**Table 2 Dimensions of CoPs within BICs**

In relation to domain, the findings reveal that BICs and their clients do have a shared interest (creating a new business) and that the stakeholders in a BIC are committed to engaging with external stakeholders to support the development of an ecosystem. In relation to community, it was evident that the stakeholders interact and engage in shared activities, facilitated by the BIC manager. These activities include on-campus networking, collective branding, external engagement and collective decision-making about the activities and services of the BIC and its

role within the local ecosystem. In relation to practice, varying activities took place with an emphasis on knowledge sharing, both in terms of the entrepreneurial journey, but also in terms of technical and skill-based challenges.

Reflecting on the second aim, the findings reveal a range of perspectives relating to the underpinning factors which form the culture of a BIC. It was clear that several elements of the BIC culture were aimed at developing collaboration and a community both internally across the clients and in turn ensuring effective links to external ecosystems and actors. Activities and mechanisms which encouraged shared learning were found to be of positive benefit for the clients, which are also akin to the benefits which can be associated with a community of practice. However, it was also highlighted that clients expressed a disparity of experiences depending on factors such as, the time they spent on campus; the timeline of their working week; the scalability of the enterprise, their engagement with external representatives and the capacity of the enterprises to meet the criteria associated with performance. These factors were suggested to be a constraining force, limiting the benefits which could be achieved from the CoP. Table 3 synthesizes the findings relating to each of the cultural web dimensions and maps them across the three dimensions of a CoP to illuminate the cultural factors in a BIC which are more conducive to strengthening the CoP.

**Table 3: BIC culture as both an enabler and constraining force on CoPs**

As seen in Table 3, positive (+) and negative (-) symbols are used to capture how the various elements of the culture of a BIC may impact on the development of a CoP, specifically, its domain, community and practice. Based on the findings and to aid theoretical development, we posit that certain elements of a BICs cultural web will have a disruptive impact (minus symbol) on the creation of a CoP. We provide two examples from Table 3 to help readers interpret its contents and purpose. Differences in rituals and routines may limit the capacity for interactions (a vital

driver of the creation of a CoP). Differences in rituals and routines may also lead to misconceptions, divisions and the emergence of cliques. In contrast certain elements of a BICs cultural web will have a cohesive impact (positive symbol) on the creation of a CoP. Similarities in the members stories will enhance a sense of a shared identity (a vital driver of the creation of a CoP). In other cases, the impact an element is unclear, and no symbol is included in Table 3 (i.e., rituals and routines: on-campus). The process of creating Table 3 and an assessing the impact of the elements, offers a useful opportunity for readers to consider the impact of culture within BICs that they are familiar with. Importantly the process also has practical benefits for BIC managers who wish to influence the development of a CoP.

Prior literature identifies that a key role of the management of a BIC is to create an internal culture that is conducive to the collective success of its clients (Apa *et al*. 2017; Gerlach and Brem, 2015; Mian, 2014; Scillitoe and Chakrabarti, 2010; Theodorakopoulos *et al*. 2014) and in turn will facilitate more effective incubation. However, to date, there is a lack of empirical knowledge on what this might involve and what this might look like. Therefore, in order to contribute to these gaps in research, Table 4 summarizes the key findings relating to the culture of the BIC and maps it against the dimensions of Johnsons (1992) Cultural Web.

**Table 4 Mapping Johnson's Cultural Web to the Cultural Dimensions of a BIC**

From Table 4, eight key elements emerged as being important for the culture of the BIC. A visual representation of these elements and the associated factors which positively contribute to an effective culture and development of a CoP within a BIC is presented in Figure 1. Each of the eight elements which are important for a BIC cultural web will now be discussed.

**Figure 1: A Cultural Web for Business Incubation Centres**

***We are in this together***:  Although BIC clients have significant differences, they are united by fundamental characteristics. They want to start and grow a small business that will benefit

themselves, their families, the BIC and the local ecosystem. The sharing of experiences and the supportive environment fostered by the managers and consultants is key to establishing a sense of unity based in a community.

*Emphasis on on-campus*: Despite the proliferation of online and virtual networking and communication systems there is a noted difference between the on-campus experience and that of the clients who work remotely and/or work nonstandard hours. The change in service model during the COVID-19 crisis may have afforded the BICs an opportunity to redress this imbalance.

*Connection to the Brand*: The evolution of BICs has seen an emphasis on branding, often starting with a unique name that is used to build an identity within the ecosystem. This is valuable for clients who can associate with the brand. However, the success of the manager in publicizing the name/brand is key. If the BIC and its activities are not known by external stakeholders, this can be damaging.

*Connection to the Manager*: The manager is key to the culture in a BIC. They share the first stories with clients, explain norms and values and coordinate rituals. They also play a key role in the interaction between clients and importantly with external stakeholders. There is a high level of trust in the manager and the information and connections they provide.

*Outsider Influence*: An entrepreneurial ecosystem has many agencies, actors and supports. Engagement and with the ecosystem by clients, is often be predicated on the guidance from within the BIC. If other clients and/or the manager are not supportive then the client may wish to retain their focus on the relationships that exist within the BIC.

*External Perceptions*: It is important to the clients that the BIC is a recognised and understood element of their ecosystem. This creates a legitimacy for the routines, activities and also a positive expectation of the likely outcomes. Managers must balance their focus on internal, on campus activity with the need to promote the BIC externally within the ecosystem.

*Personal Experience*: Each member of the BIC will have a variation in experience. There are many elements to this experience and the manager must adapt their generic offerings to ensure inclusivity. But the managers must also personalize their interventions to support

clients who may not be fully integrated into the community either through a lack of awareness of culture or a rejection of some of the elements of the cultural paradigm.

***Performance outcomes*:** There are many aspects of the entrepreneurial journey that can result in positive outcomes in terms of personal learning and development. However, the design of BICs and their funding and support infrastructure is predicated on business success. Therefore, the value of the community will be judged through the lens of business growth, sustainability and income.

The findings of our study have important practical implications for BICs, their clients and the wider ecosystems within which they are situated. Therefore, we put forward a number of recommendations which can help improve the experience that clients have in a BIC. The four recommendations address issues relating to the cultural paradigm (see Table 4 and Figure 1) and the effective development of CoPs within BICs (see Table 3).

1. BICs need to increase their collaborative spaces and develop enhanced virtual spaces. As the nature of work changes, and remote working mainstreams, it is important that BICs develop a hybrid model so that all their clients are active participants in the community and share an understanding of the key elements of the BIC culture.

2. There is a need for continued work to integrate the BIC into the local ecosystem. The development of brand awareness is key to community identity. This is a two-way process. Key stakeholders must be invited on campus and clients must be supported to engage with key stakeholders. The promotion of a BIC and its services must be done in conjunction with the promotion of the products and services of its clients.

3. The emergence of a unique cultural web, within a BIC, creates the capacity for managers to customise their interventions, supporting the development of a CoP. Managers must be cognisant that certain elements of the cultural web will have a disruptive impact on the creation of a CoP while other elements will be key enablers of the development of a CoP. Managers can use the approach to creating Table 3 and Figure 1 (and the contents) to help identify the key activities and mechanisms by which they can enhance the development of a CoP.

4. BIC mangers must not treat their clients as a homogenous group. They must adopt a flexible approach to communication so that all clients are included. This will necessitate the need to run both in person and virtual events. There is also a need to run events that occur outside of the standard working day/week. This will establish a greater sense of a shared experience and support the sharing of a greater diversity of experiences.

## 6. Conclusion and contributions

The impact of business incubation on successful business development has received increased attention (Sagath *et al*., 2019). Variances in incubation models has led to a dominant focus on the facilities, services and activities related to business incubation (Azadnia *et al*., 2022) and how these differ across different types of incubators. In this research we explored a particular type of business incubation, Business Incubation Centers (BICs) which are regionally based across Ireland.

A limited number of studies have explored the context of BICs. This is despite the importance of BICs for a functioning regional innovation ecosystem (Azadnia *et al*. 2022). Existing studies on BICs largely focus on how design features impact the incubation process (Bruneel *et al*., 2012; Pauwels *et al*., 2016; Sagath *et al*., 2019; Thierstein and Willhelm, 2011; Theodorakopoulos *et al*., 2014; Voisey *et al*., 2006). There have been calls for researchers to explore how cultural aspects within BICs influence the activities, outcomes and experiences of clients (Blomquist, 2019; Nair and Canovas-Saiz *et al*., 2021Rice, 2002; Scillitoe and Chakrabarti, 2010). This research helps to address this gap by providing empirical insights into the core elements of a BICs culture (as shown in Table 4 and Figure 1). BICs can be understood as a CoP with a culture that can be studied, captured and illustrated. We have provided insights into how different elements of a BIC culture can be enablers or constraints to the effective development of a CoP (see Table 3). In doing so, we provide important theoretical contributions which advance the general business incubation literature and in particular the literature on BICs. Our findings also

expand the CoP literature by providing insights into an underexplored context, BICs. These contributions will now be outlined.

We extend the literature on business incubation by providing new insights into how internal environmental design elements are as important as physical design of BICs. We provide new knowledge on how designing a BIC as a CoP may lead to greater learning and knowledge sharing during incubation processes. Our findings provided novel insights which led to the development of eight core elements and associated with culture within a BIC (Figure 1). The findings also illustrate that key elements of a BIC culture may also have both a supportive and constraining impact on the development of a CoP.

We also extend prior research on business incubation by stressing that a one size fits all approach is not possible in BICs (Ayyash *et al*. 2020). This is due to the diversity of clients and because clients' perceptions on the value of BICs will vary depending on the type and size of firm. In particular, the amount of time spent on campus at the BIC and the nature of a clients working week will influence if they can benefit from activities and events which have been traditionally organized in person during a standard 9-5 working week. Furthermore, the scalability of the enterprise and the capacity of the enterprise to meet the criteria associated with high potential start-ups will significantly impact a client's relationship with the BIC manager, other clients and key stakeholders.

Our findings also extend prior research on the importance of the incubator manager (Kakabadse *et al*. 2020). Our findings indicate that the BIC manager is fundamental to the culture and development of a CoP. We found that BIC managers must possess the skills to balance their focus on developing an internal environment on campus which encourages collaboration, sharing of knowledge and learning, with activities which promote awareness of the BIC externally.

Our findings and associated Cultural Web (Figure 1) also have value for researchers and practitioners who are involved in supporting entrepreneurs and interested in providing better support to business incubation. The findings highlight that each BIC needs to create their own culture, which will need to be designed in accordance with the types of clients and through consideration of external regional ecosystem dynamics and actors. BIC managers can use our findings (Table 3 and Figure 1) to examine their current culture and as a guide to identify changes they can make to encourage the development of a learning community (a CoP). Our findings highlight how the internal cultural elements of BICs play an important role in the incubation process and impact the value that clients associate with BICs. We identify the need for a greater focus on tacit indicators of performance and the development a culture which is conducive to socialisation, shared learning and community action. A focus on these types of indicators will improve the experiences of clients and nurture the development of a CoP.

## 6.1 Limitations and Future Research

This research has a number of limitations which helps inform an agenda for future research. First, this research was qualitative and used the method of narrative story telling in order to understand cultural dimensions. This can be considered to lead to retrospective bias despite interview questions being designed to encourage reflection and identification of key critical incidents and actions to reduce bias. Future research would benefit from longitudinal studies tracking firm experiences over time within a BIC. Furthermore, quantitative studies which analyse relationships between varying cultural dimensions and firm performance over time would provide rich insights into the importance of BIC culture as a determinant of enterprise growth. This research focused on BICs which are a particular type of incubator, with their own inherent context and culture. Future research should explore incubators of different types to explore how different stakeholder dynamics influence key cultural dimensions and whether all incubators effectively lead to the

development of CoPs. This would provide rich insights and further validate the need for practitioners and policy makers to explore how incubation is evaluated.

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**Table 1 Participants**

|  | Participant BIO | BIC | Region |
|---|---|---|---|
| **1a** | Originally worked for a SME in the ICT industry. Working as a BIC manager for over 10 years | Agri-Food and BioTech spinoffs. High proportion of FinTech firms. | Large urban hub. Major transport facilities. No dominant industry. |
| **2b** | Worked as a civil servant, before upskilling. Working as a BIC manager for 20 years. | Health & Safety and FinTech spinoffs. High proportion of consultancy start-ups. | Large urban hub. Large number of MNCs in MedTech and Fintech. |
| **3c** | After university worked in a small family business. Took on a role with a public agency and started as a BIC manager 8 years ago. | Fintech and Consultancy firms dominate. No established core activity. | Large urban hub. Mix of Public Employment a MNCs. No dominant industry. |
| **4d** | Worked as a small-scale farmer and part-time consultant for a public agency for 10 years. Working as a BIC manager for over 5 years. | ICT and micro engineering spinoffs. High proportion of Agri-Food start-ups | Rural hinterland. Traditional agricultural base in decline. No dominant industry. |
| **5e** | Started an online training company while based at a BIC. But continued with education, up to an MSc. Became a BIC manger 6 years ago. | ICT and Software spin-offs. High proportion of business services start-ups. | City based. Major transport facilities. Large number of MNCs and indigenous companies in ICT and International Services |
| **6f** | Worked in a small finance company. Undertook some consultancy work and delivered training at various BICs. Became a BIC manger 4 years ago. | ICT and Business Services spin-offs. High proportion of Online Business Consultancy start-ups. | Large urban hub. Mix of Public sector and MNC employers. No dominant industry |
| **7g** | Worked for a MNC in an ICT role. Switch to a business development role with a public agency. Became a BIC manger 6 years ago. | MedTech and Digital Health spinoffs. High proportion of R&D staff. | City based. Major transport facilities. Large number of MNCs in Pharmaceuticals and MedTech. |
| **8h** | Started a HRM consultancy company. Worked as a consultant for small business owners. Became a BIC manger 3 years ago. | Health and Safety and Tourism related spin-offs. High proportion of Consultancy start-ups. | Rural hinterland. Traditional Tourism base. No dominant industry |
|  |  |  |  |
| **9a** | Over 10 years' experience in variety of marketing and sales roles. Currently works as a lecturer at a HEI. Has worked with BIC clients for 10 years. | Agri-Food and BioTech spinoffs. High proportion of FinTech firms. | Large urban hub. Major transport facilities. No dominant industry. |
| **10b** | Successful career in HRM in the public service. Recently took on consultancy roles. Has worked with BIC clients for 3 years. | Health & Safety and FinTech spinoffs. High proportion of consultancy start-ups. | Large urban hub. Large number of MNCs in MedTech and Fintech. |

| | | | |
|---|---|---|---|
| 11c | Initial role in procurement for an MNC before starting a marketing consultancy. Has worked with BIC clients for 10 years. | Fintech and Consultancy firms dominate. No established core activity. | Large urban hub. Mix of Public Employment a MNCs. No dominant industry. |
| 12d | After a short career in HRM she started a work as a business coach, specializing in group sessions. Works p/t at a HEI. Has worked with BIC clients for 7 years. | ICT and micro engineering spinoffs. High proportion of Agri-Food start-ups | Rural hinterland. Traditional agricultural base in decline. No dominant industry. |
| 13e | Worked in a UK based engineering firm before returning to Ireland to start a work safety consultancy. Works p/t at a HEI. Has worked with BIC clients for 4 years. | ICT and Software spin-offs. High proportion of business services start-ups. | City based. Major transport facilities. Large number of MNCs and indigenous companies in ICT and International Services |
| 14f | Worked in the tourism industry before starting an e-commerce support company. Has worked with BIC clients for 3 years. | ICT and Business Services spin-offs. High proportion of Online Business Consultancy start-ups. | Large urban hub. Mix of Public sector and MNC employers. No dominant industry |
| 15g | Worked in senior management for MNCs. After redundancy started working as a business planning consultant. Has worked with BIC clients for 8 years. | MedTech and Digital Health spinoffs. High proportion of R&D staff. | City based. Major transport facilities. Large number of MNCs in Pharmaceuticals and MedTech. |
| 16h | Worked as a HR manger for a MNC. Started a consultancy for SMEs and has worked with BIC clients for 15 years. | Health and Safety and Tourism related spin-offs. High proportion of Consultancy start-ups. | Rural hinterland. Traditional Tourism base. No dominant industry |
| | | | |
| 17a | Worked in a range of service industry jobs. Always sold items of art but a return to education led to a decision to undertake a business start-up programme at a local BIC. In business 18 months. | Agri-Food and BioTech spinoffs. High proportion of FinTech firms. | Large urban hub. Major transport facilities. No dominant industry. |
| 18b | Worked as an admin for a construction company before starting a safety consultancy. In business 3 years and now employs 16 staff in two offices. | Health & Safety and FinTech spinoffs. High proportion of consultancy start-ups. | Large urban hub. Large number of MNCs in MedTech and Fintech. |
| 19c | Worked as manager in range of SMEs before starting a security business with a retired police force member. In business 3 years. . | Fintech and Consultancy firms dominate. No established core activity. | Large urban hub. Mix of Public Employment a MNCs. No dominant industry. |
| 20d | Recently left a career with a large MNC. Created a spin-out firm with 3 former colleagues focused on IT Security. In business 18 months. | ICT and micro engineering spinoffs. High proportion of Agri-Food start-ups | Rural hinterland. Traditional agricultural base in decline. No dominant industry. |

| | | |
|---|---|---|
| **21e** | After 15 years in the hospitality industry decided it start a company building online marketing/sales platforms for food businesses. In business 2 years. | ICT and Software spin-offs. High proportion of business services start-ups. | City based. Major transport facilities. Large number of MNCs and indigenous companies in ICT and International Services |
| **22f** | After graduation started a consultancy business to help small business owners with their social media activities. In business 6 months. | ICT and Business Services spin-offs. High proportion of Online Business Consultancy start-ups. | Large urban hub. Mix of Public sector and MNC employers. No dominant industry |
| **23g** | After completed his degree worked as a personal trainer. Now developing an online training analysis system for amateur sports teams. In business 12 months. | MedTech and Digital Health spinoffs. High proportion of R&D staff. | City based. Major transport facilities. Large number of MNCs in Pharmaceuticals and MedTech. |
| **24h** | Worked for an SME as electronical engineer before developing a wireless technology company specializing in health monitoring. In business 3 years. | Health and Safety and Tourism related spin-offs. High proportion of Consultancy start-ups. | Rural hinterland. Traditional Tourism base. No dominant industry |

**Table 2: Mapping the characteristics of a CoP to the activities in a BIC**

| Characteristics of a CoP | Activities in a BIC |
|---|---|
| **Domain** | - Establishing a scalable business based on a diverse range of products or services.<br>- Sharing similar patterns of work often supported by having access to generic facilities and services.<br>- Working to promote a product/service in order to generate sales.<br>- Engaging with external stakeholders to support the development of an ecosystem. |
| **Community** | - Working as part of group of clients in a shared space to foster a positive environment.<br>- Attending training seminars and networking events.<br>- Participating in collective decision making about the activities and services of the BIC.<br>- Pooling needs and resources to facilitate shared facilities, services and supports both in the BIC and within the ecosystem. |
| **Practice** | - Providing guidance to other entrepreneurs on technical and skill-based problems.<br>- Sharing insights from positive and negative experiences, including engagements with key institutions and external actors.<br>- Active participation in the decision making which informs and shapes the development of the BIC and the ecosystem. |

**Table 3: BIC culture as both an enabler and constraining force on CoPs**

| Cultural Web | | Domain | Community | Practice |
|---|---|---|---|---|
| Rituals and routines | Informal networking | + | + | + |
| | Knowledge transfer | + | + | |
| | Differences | - | - | - |
| | On-campus | | | |
| Stories | In this together | + | + | |
| | Not valued enough | + | - | - |
| | Same challenges | + | - | - |
| | Similar journey | + | + | |
| Symbols | Branding | | | |
| | Alignment | + | - | - |
| | Digital badge | | + | |
| | Status | - | - | - |
| Organisational structures | Connections to HEIs | | | |
| | Culture clash | - | - | - |
| | External awareness | | + | |
| | External expectations | | | |
| Power structures | Insider v Outsider | - | - | - |
| | Working relationships | + | + | + |
| | Manager/client dynamic | - | - | + |
| | Consultation | | | + |
| Control systems | Customisation | - | - | + |
| | Personalisation | + | + | + |
| | Hard outcomes | | | + |
| | Publicity | | + | |

**Table 4: Mapping Johnson's Cultural Web to the Cultural Dimensions of a BIC**

| Johnson's Cultural Web | | BIC Cultural Dimensions |
|---|---|---|
| Rituals and routines | Informal networking | We are in this together<br>Emphasis on on-campus<br>Personal Experience |
| | Knowledge transfer | Emphasis on on-campus<br>Connection to the Manager<br>Personal Experience |
| | Differences | Emphasis on on-campus<br>Connection to the Manager<br>Connection to the Brand<br>External Perceptions<br>Performance outcomes |
| | On-campus | Connection to the Manager<br>Personal Experience |
| Stories | In this together | We are in this together<br>Connection to the Brand<br>Connection to the Brand |
| | Not valued enough | Emphasis on on-campus<br>Connection to the Manager<br>Connection to the Brand<br>Personal Experience |
| | Same challenges | We are in this together<br>Personal Experience<br>Performance outcomes |
| | Similar journey | We are in this together<br>Connection to the Brand<br>Personal Experience<br>Performance outcomes |
| Symbols | Branding | Connection to the Brand Outsider Influence<br>External Perceptions |
| | Alignment | Emphasis on on-campus<br>Connection to the Manager<br>External Perceptions<br>Personal Experience |
| | Digital badge | We are in this together<br>Outsider Influence<br>External Perceptions |
| | Status | Emphasis on on-campus<br>Personal Experience<br>Performance outcomes |
| Organisational structures | Connections to HEIs | Connection to the Manager<br>Outsider Influence<br>External Perceptions |
| | Culture clash | Connection to the Brand<br>Personal Experience |
| | External awareness | Connection to the Brand<br>Outsider Influence<br>External Perceptions |
| | External expectations | Connection to the Brand<br>Outsider Influence<br>External Perceptions |
| Power structures | Insider v Outsider | Emphasis on on-campus |

| | | |
|---|---|---|
| | | Connection to the Brand<br>Connection to the Manager<br>Outsider Influence<br>External Perceptions |
| | Working relationships | We are in this together<br>Connection to the Manager<br>Outsider Influence |
| | Manager/client dynamic | Emphasis on on-campus<br>Connection to the Manager<br>Outsider Influence<br>Personal Experience |
| | Consultation | Emphasis on on-campus<br>Performance outcomes |
| Control systems | Customisation | Connection to the Brand<br>Connection to the Manager<br>Personal Experience |
| | Personalisation | Emphasis on on-campus<br>Connection to the Manager<br>Personal Experience |
| | Hard outcomes | Emphasis on on-campus<br>Personal Experience<br>Performance outcomes |
| | Publicity | We are in this together<br>Connection to the Brand<br>Outsider Influence<br>External Perceptions<br>Performance outcomes |

# Figure 1. A Cultural Web for Business Incubation Centres



**Rituals & Routines**
- Informal networking
- Knowledge transfer
- Differences
- On campus

**Control Systems**
- Customisation
- Personalisation
- Hard Outcomes
- Publicity

**Stories**
- In this together
- Not valued enough
- Same challenges
- Similar journey

**The Cultural Paradigm**
- We are in this together
- Emphasis on on-campus
- Connection to the Brand
- Connection to the Manager
- Outsider Influence
- External Perceptions
- Personal Experience
- Outcomes

**Power Structures**
- Insiders Vs Outsiders
- Working Relationship
- Manager/Client dynamic
- Consultation

**Symbols**
- Branding
- Alignment
- Digital Badge
- Status

**Org Structures**
- Connection to HEIs
- Culture Clash
- External Awareness
- External Expectations