



Exploring Entrepreneurial Decision-making in Early-Stage Start-ups within University Business Incubators

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Abstract. University Business Incubators (UBIs) play an increasingly prominent role in supporting early-stage ventures, yet the dynamics of entrepreneurial decision-making within these spaces remain underexplored. This article explores the entrepreneurial decision-making process among early-stage start-ups within UBIs. A qualitative study was carried out with the use of archived meeting records between early-stage entrepreneurs and business mentors within a UBI based in Scotland. The analysis consisted of 55 meeting records, spanning a period of six months, from 23 start-ups. Our analysis reveals that entrepreneurs use UBIs for different purposes; ranging from accessing resources and mentorship to outsourcing critical tasks such as grant writing. We also identify a typology of entrepreneurs: those with high self-awareness who proactively develop their ideas, and those who rely heavily on mentors to act due to limited clarity or confidence. Most importantly, our findings illustrate how entrepreneurial decision-making is developed within UBIs amongst early-stage start-ups via a set of entrepreneurial decision-making stages: i). *configuration*, ii). *set-up*, iii). *scaling*, iv). *configuration and set-up*, v). *configuration, set-up, and scaling*. All these culminate in a framework that conceptualises and explains entrepreneurial decisions amongst early-stage start-ups. The paper contributes to the literature by offering a perspective of decision-making in UBIs and providing practical insights into how UBIs can align their resources with the varying readiness levels and plans of entrepreneurs.

Keywords: university business incubators; decision-making; early-stage start-ups; entrepreneurial process

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1. Introduction

This study investigates the entrepreneurial decision-making processes within University Business Incubators (UBIs), focusing on how early-stage entrepreneurs develop their ventures. UBIs are designed to support start-ups at various stages of their development by providing resources such as mentorship, networking opportunities, and infrastructure, often within an academic setting. UBIs have also been highlighted as a source of innovation and business growth locally and internationally (Clausen and Korneliussen, 2012; Lee and Osteryoung, 2004; Mian, 1996; Somsuk and Laosirihongthong, 2014). UBIs aim to foster innovation and entrepreneurial success by reducing the risks associated with early-stage ventures.

Research shows that there is homogeneity among UBIs in terms of their structure, services, and goals, such as providing shared office space, mentoring, networking opportunities, and access to university resources (Nicholls-Nixon and Valliere, 2020; Redondo and Camarero, 2019). This standardisation in operations and offerings makes UBIs broadly accessible and appealing to a wide range of entrepreneurs. The uniformity ensures a stable support environment, which lowers the entry barrier and encourages participation from both nascent and more developed entrepreneurs who seek formalized institutional backing.

Decision-making at any stage of the entrepreneurial journey is a prerequisite for seeing ideas come to life (Ilonen et al., 2018; McMullen, 2015). Effective decision-making is especially critical for entrepreneurs in UBIs, as businesses face high levels of uncertainty. The ability to make strategic decisions regarding market entry, resource allocation, and growth trajectories can determine the success or failure of these ventures (Arshed et al., 2021; McMullen, 2015). Within UBIs, access to expert advice and academic resources plays a vital role in guiding these decisions, but entrepreneurs must still navigate complex, often high-stakes choices (Guerrero et al., 2017).

Focusing on early-stage startups, understanding entrepreneurial decision-making within UBIs is important because decision-making at this critical phase can shape the future success or failure of the venture. Early-stage start-ups face high levels of uncertainty and resource constraints, making strategic decisions on matters such as market entry, resource allocation, and product development pivotal (Brundin and Gustafsson, 2013). By understanding how entrepreneurs make decisions in this context, UBIs can better tailor support mechanisms to improve the survival rates and growth trajectories of start-ups (Maxwell et al., 2011).

Prior research on UBIs has largely focused on their structural configurations, performance outcomes, and the types of support services offered to entrepreneurs (e.g., Dee et al., 2011; Ratinho and Henriques, 2010; Redondo and Camarero, 2019). This body of work tends to emphasize measurable outputs such as graduation rates, firm survival, or revenue growth, while often overlooking the

processes through which entrepreneurial decision-making unfolds within the UBI context. Furthermore, existing studies have largely treated UBIs as homogenous environments, assuming uniform effects on entrepreneurs, while paying limited attention to the nuanced and situated nature of activities within these spaces. The literature has yet to fully examine the role of UBIs beyond providing a support mechanism but as a structuring environment that influences entrepreneurial cognition, priorities, and trajectories. Extant studies have not captured how entrepreneurial decision-making evolves during the incubation period. This study addresses these gaps by drawing upon detailed meeting records between entrepreneurs and UBI advisors, which offers a unique view of how strategic decisions were framed, negotiated, and enacted. The use of documented interactions enables a more accurate tracing of decision-making episodes over time. The results reveal how entrepreneurs responded to feedback, negotiated uncertainty, and aligned with or resisted institutional advice.

Additionally, insights into these decision-making processes contribute to the theoretical understanding of entrepreneurship, particularly in incubator ecosystems. Studying this dynamic, i.e., the interplay between entrepreneurial decision making and early-stage startups in UBIs, helps to provide support for budding entrepreneurs and to enhance entrepreneurial outcomes. Therefore, there is a need to explore how UBIs influence entrepreneurial decision-making in early-stage ventures. This leads to key questions: *What role do UBIs play in entrepreneurial decision-making, and how do they support the development of early-stage start-ups?* In addressing this question, the contributions to knowledge centre on theory, policy and practice. Firstly, a framework relating to decision-making within early-stage start-ups within UBIs will be developed. Secondly, stakeholders involved in UBIs will be equipped with a clearer understanding on how to provide appropriate support for early-stage entrepreneurs. Based on analysis of extant meeting archived records over a 6-month period, the analysis will outline stages of early-stage start-ups within UBIs that culminate in a theoretical framework.

The rest of the paper is structured as follows: Section 2 contains a literature review, which explores UBIs and the theoretical mechanism between early-stage entrepreneurs and entrepreneurial decision making. Section 3 consists of a methodology; Section 4 presents the findings and Section 5 presents a discussion. Finally, Sections 6 present implications and conclusions of the paper.

2. Literature Review

2.1. University Business Incubators – An Overview

University Business Incubators (UBI) are central to entrepreneurship ecosystems given its combination of business with the academy. UBIs are distinctively situated to nurture entrepreneurship locally and internationally. As such, UBIs

enable the launch of start-up ventures by different participants such as professors, students, student alumni, local and foreign entrepreneurs. UBIs are run on a not-for-profit basis (Grimaldi and Grandi, 2005; Lee and Osteryoung, 2004). Schillaci et al. (2011) point out that UBIs are peculiar; especially in the way they, as non-profit entities, allocate knowledge resources, exercise control over strategic decisions and foster inter-organisational relationships.

UBIs are also akin to conventional corporate business incubators but there are differences due to how UBIs are formed and operate (Pellegrini and Johnson-Sheehan, 2021). Universities and UBIs have a symbiotic relationship in formation and operation. This is because the locus of entrepreneurial activities is based on the expertise universities possess in the form of knowledge embedded within (Patrício and Ferreira, 2022; Hassan, 2024). To an extent, UBIs are a fulcrum of the “third mission”, i.e., the collaboration between university and industry on setting up ventures. In other words, inventions are systematically channelled via universities to be market ready. As such, aspiring entrepreneurs have the strategic choice to explore what UBIs could give them to increase the chance of achieving entrepreneurial success.

Furthermore, UBIs facilitate the availability and access to external financial resources, fostering business networks and capacity building (Alpenidze et al., 2019; Somsuk and Laosirihongthong, 2014). This support helps early-stage start-ups overcome resource constraints and accelerates their growth and development within a collaborative, resource-rich environment. Another crucial support offered by UBIs are mentoring services for participants in its ecosystem. The mentors could be involved with the entrepreneurs for an unlimited period (Wonglimpiyarat, 2016). This is important because continuous mentor involvement provides entrepreneurs with ongoing guidance and support throughout all stages of their business development, increasing their chances of long-term success.

Mentors could also assist entrepreneurs in developing critical thinking skills and strategic perspectives necessary for effective decision-making (St-Jean and Audet, 2012). Mentors help entrepreneurs enhance their critical thinking by challenging assumptions and encouraging them to consider different perspectives when evaluating business situations (Cull, 2006). By sharing strategic insights and experiences, mentors guide entrepreneurs in developing the strategic planning skills necessary for effective decision-making. These mentors work as a conduit to get access to funders and potential investors. Unlike mentorship in traditional incubators, UBI mentorship typically combines academic expertise with practical industry experience, creating a more dynamic approach to supporting entrepreneurs.

In summary, UBIs play a pivotal role in fostering entrepreneurship by combining academic knowledge with practical business expertise, supporting the launch and growth of start-up ventures. UBIs are distinct in their not-for-profit structure, enabling the allocation of knowledge resources and the fostering of

inter-organizational relationships. Their close ties to universities provide a symbiotic relationship, leveraging academic expertise to guide entrepreneurial ventures toward market readiness. UBIs also facilitate access to financial resources, business networks, and capacity-building opportunities, helping early-stage entrepreneurs overcome critical challenges. Additionally, UBI mentorship offers a unique blend of academic and industry insights, providing long-term support and access to potential investors. This sets the stage for exploring how entrepreneurial decision-making occurs within UBIs.

2.2. Entrepreneurial Decision-making

The literature on entrepreneurial decision making is wide-ranging and extensive, covering topics from how entrepreneurs behave differently to non-entrepreneurs (Busenitz and Barney, 1997) to investigating judgement (González-Cruz and Devece, 2018) and conflict in stakeholder relationships influencing decision making (Appelhoff et al., 2016). However, the literature, as is typical of other literature within entrepreneurship, is fragmented. Shepherd et al. (2015) explain this fragmentation makes it more difficult to establish our current understanding of entrepreneurial decision making and how this connects with research within the field. Nevertheless, the entrepreneurial decision-making literature demonstrates consensus that entrepreneurial decision-making decision is not necessarily based on logic alone and includes nonlinear approaches (Busenitz and Barney, 1997; Shepherd et al., 2015). Sarasvathy (2001) stresses that experience, both experimental and iterative, influences entrepreneurs' decision making. Groves et al. (2011) describe creativity, emotions, and intuition as components of the entrepreneur's decision making. Hence, linear and logical judgement alone does not explain entrepreneurial decision-making.

Other behaviours which impact the entrepreneur's decision making include being risk-averse, with experienced entrepreneurs taking less risks (Emami et al., 2020), and the extent of the entrepreneur's self-confidence, which can influence judgment and willingness to commit to a venture and risk (Brundin and Gustafsson, 2013; Mueller et al., 2012; Nouri et al., 2012). Milanesi (2018) contributes to the role of emotions with the assertion that passion plays an important role in decision-making. Milanesi's (2018) study found that passion drives the entrepreneur forward to establish a venture, which has been used by centre capitalists as a measure for investment decisions (Elsbach and Kramer, 2003). Entrepreneurial passion is described as "consciously accessible intense positive feelings experienced by engagement in entrepreneurial activities associated with roles that are meaningful and salient to the self-identity of the entrepreneur" (Cardon et al., 2009, p. 517).

Given that entrepreneurs often operate in environments of uncertainty where time and information are limited, heuristics and biases also play a significant role in the entrepreneurial decision-making mindset. In such settings, entrepreneurs tend to rely on heuristics – mental shortcuts that simplify complex decision-

making (Bryant, 2007; Cossette, 2014; Cristofaro and Giannetti, 2021). While heuristics help entrepreneurs make quick decisions, they can also lead to cognitive biases, such as overconfidence or optimism bias, which may affect judgment and lead to risky decisions (Busenitz and Barney, 1997). For instance, overconfidence may lead an entrepreneur to underestimate market risks, while an escalation of commitment may cause them to continue investing in failing ventures. These biases are critical in understanding how entrepreneurs make decisions under pressure and uncertainty.

Within UBIs, external support can temper decisions not based on logic or recognise decisions which would not be advantageous to the entrepreneur, thereby supporting entrepreneurs to make decisions that are better suited to the market and organisational capabilities. Moreover, entrepreneurs need support with information-processing and developing their ability to recognise and navigate around strategic challenges. University business incubators (UBIs) have been shown to develop absorptive capacity (Zahra and George, 2002), therefore they are in a key position to deliver successful information-processing support. By extension, UBIs can play an important role in supporting start-ups to develop into sustainable ventures.

Entrepreneurial decision-making acts as a mechanism in the mindset in how it guides individuals through assessing opportunities, evaluating risks, and committing to actions that shape their ventures. Sarasvathy (2001) points out that the different approaches entrepreneurs may take in decision-making are through effectuation (i.e., adaptability, leveraging available resources, and adjusting to emerging opportunities) and causation (i.e., decisions are made with clear goals and a structured plan). The implication of these decision-making approaches is that decision-making is rarely linear but rather a process of iterative thinking and learning. With regards to early-stage entrepreneurs, Stroe et al. (2018) observe that early-stage entrepreneurs are going through a particularly stressful period as the early business stage “is a time when risk-taking and proactiveness are at their peak” (p. 60). Risk and uncertainty are further exacerbated by early-stage entrepreneurs’ typically limited access to resources, such as capital, knowledge, or access to talent (Deakins et al., 1998; Van Rijnsoever and Eveleens, 2021). All of which can impact upon the early entrepreneur’s development, including the development of their passion.

Entrepreneurial decision-making is shaped by opportunity recognition, heuristics, biases, and motivation. Entrepreneurs must balance analytical reasoning with the flexibility to pivot when necessary. Decision-making mechanisms are critical in navigating uncertainty and leveraging opportunities, making it a central component of the entrepreneurial mindset. The next section explores the role business incubators may play in entrepreneurial decision making.

2.3. *The Role of Business Incubators in Entrepreneurial Decision-making*

Business incubators are a valuable source of knowledge and expertise in fostering entrepreneurship. Incubators are a platform to provide advice, information, viability plans, infrastructure, and facilities services for business start-ups, especially ones in their early stage. Zhao et al. (2017) point out that the content and services provided by incubators are considered as a knowledge-based resource. Incubators are a valuable source of knowledge and expertise in fostering entrepreneurship. As part of the start-up process for entrepreneurs, Gately and Cunningham (2014) suggest that an entrepreneur's ability to write a business plan seems to lead to the path of getting legitimacy amongst stakeholders. They did find out that entrepreneurs preferred a market-led approach as opposed to an operational one. On the other hand, McAdam and McAdam (2008), in their longitudinal study of high-technology business firms in University Science Park incubators, explored the development lifecycle of these firms. These authors found out that the developmental stage of the firm determines how resources are deployed. This is because firms within a UBI become increasingly capable of deploying available resources as they progress through their lifecycle. Over time, as they develop, these firms also begin to seek greater independence and autonomy from the incubator.

Speed to market is outside the agency of the entrepreneurs but depends on how much the incubator insists and persists on the need for speed to go to the market (Clausen and Korneliussen, 2012). In other words, the time it takes from the initial development to the introduction of a product varies amongst firms. Similarly, team dynamics within the start-up plays a significant role in the ability of the firm to achieve its highest potential. As such, the locus of decision-making is more localised to the founders. However, despite the widespread research into entrepreneurial decision-making, there has been little focus on the same drivers at the very early stages of the venture.

Entrepreneurial decision-making can be a means of fostering creativity, especially in the development of new products (Blauth et al., 2014). As such, entrepreneurial decision-making is often investigated with a processual approach or with heuristics (Ahmad et al., 2021; Gabrielsson and Politis, 2011). Such approaches to studying entrepreneurial decision-making often result in false positives and negatives in relation to business ideas (Zivdar et al., 2017). Entrepreneurial decision-making is frequently used to spark creativity, particularly in product development, but relying on process-based or heuristic approaches can sometimes lead to inaccurate assessments of which business ideas are truly viable.

Central to decision-making amongst entrepreneurs is their interaction with their appointed mentors (McKevitt and Marshall, 2015; Memon et al., 2015; St. Jean and Audet, 2013; Sullivan, 2000). Mentors provide support and advise for newstart entrepreneurs. This phenomenon has been examined in various contexts. For instance, McKevitt and Marshall (2015) and Sullivan (2000) studied the

learning process in small and medium-sized firms. However, the context in which their research has been carried out is not within an ecosystem where entrepreneurs are looking to start-off a business, as is the case of the present research, where the focus is on entrepreneurs that are starting off (or are about to).

St. Jean and Audet (2013) carried out a study on the role of mentoring in the learning development of the novice entrepreneur. The study conceptualised the types of learning that emerged between mentors and mentees within an entrepreneurship mentoring program. Furthermore, Brodie et al. (2017) carried out exploratory research on the added value of mentoring amongst five start-ups. They arrived at a set of conclusions that centre on mentors supporting entrepreneurs in their journeys.

Memon et al. (2015) also provide a guide for mentors in mentoring entrepreneurs. They however outline a typology of entrepreneurs that could benefit from support from mentors. This is consistent with Kunaka and Moos (2019), who observe that the mentors help in four ways; through skills transfer, knowledge transfer, increasing entrepreneurs' resilience and supporting business outcomes. Thus, entrepreneurs face significant stress and challenges during the early stages, affecting their passion, cognition, and confidence, but mentorship can play a crucial role in overcoming these barriers by offering skills and knowledge transfer, building resilience, and supporting business outcomes. However, this conceptualisation does not explicitly contextualise ecosystems where entrepreneurs' habit. There is also little mention of the profile of the mentors themselves – and the level of expertise they possess.

Despite the importance of decision-making in early-stage start-ups, there is a lack of studies that explore this process, particularly the role of UBIs in supporting early-stage entrepreneurship. The extant literature has primarily focused on ranking the factors that influence the management of UBIs (Kiani Mavi et al., 2019) and their contribution to economic growth (Salem, 2014). However, little research has examined entrepreneurial decision-making within early-stage start-ups, especially those housed in UBIs. This is important because UBIs support startups with access to university resources, research facilities, and expertise from faculty and students, as opposed to support offered by regular business incubators.

3. Methodology

3.1. The Study

This section describes the research perspective, the paradigm that has been adopted, the research design, the methodology, data collection and analysis. This research follows an interpretivist paradigm and abductive approach. The essence of an interpretivist paradigm, ontologically, assumes that reality can be constructed via maps of meanings and understandings that are developed

experimentally as well as socially (O’Leary, 2014). An abductive approach has been useful in providing explanations that could lead to the development of theory for an empirically unmet phenomenon (Van Maanen et al., 2007). Our study employed qualitative thematic analysis of 55 meeting records from 23 early-stage startups operating within a Scottish UBI over a six-month period from May 2020 – November 2020. These records provided insight into entrepreneurs’ decision-making processes and how they engaged with the incubator’s support structures.

The data was coded using NVivo, following a two-stage hierarchical coding process (Braun and Clarke, 2006). The first-order categories were generated directly from archival data, identifying recurring decision-making patterns and interactions between entrepreneurs and mentors. The second-order themes were developed through iterative comparisons, leading to the emergence of a five-stage decision-making framework. This emergent framework aligns with grounded theory principles, which emphasize developing theoretical insights based on real-world observations rather than imposing existing models onto data.

3.2. Research Design and Sample Description

The research considers early-stage entrepreneurial start-ups in a UBI that are operating in the early years of their business with a focus on their decision-making processes. The population sample ranged from entrepreneurs at ideation to seed stage and who evidenced a full-time commitment to developing their business. The entrepreneurs were all members of a UBI based in Scotland’s central belt. Table 1 shows which participants were students and non-students. It should be noted that early-stage startups are newly founded businesses in the initial phase of development, while student entrepreneurs are individuals who start businesses while still in school, often combining their academic pursuits with entrepreneurial activities.

This UBI provides users of its service an office space, networking, and funding opportunities. The UBI also provides advisory services in relation to business banking, insurance, and legal expertise, such as UK Entrepreneurship visas, through a series of workshops. The goal of the UBI is to be a space for individuals with entrepreneurial ambitions to develop and grow their business idea into a viable, successful enterprise. To achieve this vision, the UBI offers training, mentorship, business and legal advice and support for applying to grants and funds. Further, the UBI offers co-working spaces and opportunities to grow the entrepreneur’s network. These resources create an ecosystem which enable the entrepreneurs to build and grow their business from ideation to seed funding. Entrepreneurs can access these resources by becoming members of the UBI.

The entrepreneur, however, is expected by the UBI to be the driver of their business growth and this is made clear to the entrepreneurs before they are accepted as members of the UBI. Once an entrepreneur expresses interest to become a member, they and a mentor meet to discuss the business idea, the

support anticipated and the business goals. This is also an opportunity for the mentor to assess whether the entrepreneur's goals align with the vision of the UBI. In doing so, an ecosystem which supports the vision of the UBI can be sustained. At the point of data collection, the UBI was nine months old and had 23 entrepreneurs as members, ranging from staff and faculty to individuals not related to the university. All members of the UBI were included in the data collections.

Table 1 provides an overview of start-ups engaged with the UBI, capturing key attributes of each venture. It includes the name of the business, which has been coded C1-C23. The next column contains the sector in which the startup operates, followed by a brief description of the product or service offered. Each start-up is classified according to its development stage: ranging from early ideas (E) to seed stage (S) and growth (G). The table also identifies the founder's affiliation with the university, indicating whether they are faculty (F), staff (S), alumni (A), or unrelated to the university (U). It notes whether the start-up intended to apply for a United Kingdom (UK) Tier 1 visa. Also, Table 1 records the number of people involved in each venture. Engagement with the UBI is reflected in the number of meetings held (face-to-face, email, or Zoom) and the number of workshops attended (out of a possible five during the study period). Finally, the table indicates whether the start-up applied for any funding and whether they successfully received any financial support.

Table 1. An overview of the sample start-ups within the University Business Incubator

Business	Sector	Description	Stage: Early ideas (E), Seed stage (S), Growth (G)	Faculty (F), Staff (S), Alumni (A), Unrelated to the university (U)	Tier one visa (start-up visa)?	Number of people involved in start-up	Number of meetings with UBI (t2f, email, Zoom)	Number of workshops attended [5 total during the period]	Applied for any funding?	Granted any Funding?
C.1	Sustainability	Developing reusable coffee cups made out of sustainable materials	S	S	No	2	2	2	Yes	Yes
C.2	Sports- Football	Developing a Fantasy Football social enterprise for encouraging more support and investment into their country's football league	S	S	No	1	3	4	No	No
C.3	Fashion / Sustainability	A social enterprise for promoting sustainable fashion in Scotland and creating a community for encouraging sustainable fashion	S	S	No	1	2	3	No	No

C.4	Mental health support	Create an app for children and teenagers for their own use and, if needed, to use with a medical health professional	E	S	No	1	2	1	No	No
C.5	Consultancy	Providing high quality consultancy for international trade and customs	G	U	No	5	2	0	No	No
C.6	Consultancy	Offering financial and consultancy services , speciality in advising small business for R&D government grants	S	A	No	1	2	1	Yes	Yes
C.7	Sustainability	Creating re-usable or recyclable wrapping paper as an alternative to current non-reusable choices	E	A	No	1	2	1	No	No
C.8	IT	Offer Cyber security services to organisation across all sectors	S	S	No	2	2	0	No	No
C.9	Consultancy	Risk management and technology advice to SMEs	E	S	No	1	1	0	No	No
C.10	Consultancy	Risk management advice to organisation across all sectors	E	S	No	1	1	2	No	No
C.11	Tourism	Setting up a B&B	E	S	No	1	1	0	Yes	No
C.12	Fashion	Selling authentic in-trend, Nigerian clothing	S	S	No	1	1	0	No	No
C.13	IT	HR software. Create a software that develops team building efforts within organisations, offers group performance analysis and supports recruitment efforts	S	S	Yes	1	1	0	No	No

C.14	IT	Hardware support. Provide support for people with physical disabilities, such as hearing impairment or blindness.	E	A	No	1	1	0	No	No
C.15	Gaming	An app for smart phones	E	A	No	1	1	0	No	No
C.16	Food and drinks	Creating an accessible environment for learning more about wine	S	A	Yes	1	3	1	Yes	No
C.17	IT	User-friendly mobile application/ remote control for car control/ safety	E	S	No	1	1	0	No	No
C.18	Education	Developing a game to teach risk in policy making to be used as training by organisations or in HE-level education	S	F	No	2	1	1	No	No
C.19	Advertising	Digital advertising on and in cars	E	U	No	1	2	0	No	No
C.20	Medical	Medical consultancy & R&D (specialisation epilepsy)	E	U	Yes	2	1	0	No	No
C.21	Medical	Medical innovations , many ideas and not settled on one idea	E	U	Yes	1	3	0	No	No
C.22	IT	Develop a social network platform for international students and other expats living in the UK	E	A	No	1	1	0	No	No
C.23	Food and drinks	Authentic ethnic restaurant	E	S	No	2	1	0	No	No

3.3. Method

This was a qualitative study, using archived meeting records/logs between mentors and mentees in the UBI. The UBI had two business advisors that were business lecturers within the university. A total of 55 meeting logs entries were analysed. These meeting logs include information about the purpose of the meeting, a summary of the discussion that took place, the actions to be followed by the entrepreneur and/or the business advisor and, if a follow-up meeting was asked for, an outline of the agenda for the next meeting. The meeting logs provide insight into the decision-making processes of early-stage entrepreneurs. The

meeting logs are also a valid source of data as they can be prerequisite evidence to show that the entrepreneur is actively engaging with the UBI. As it serves a minute of the meetings and can be used as a substantiate visa/immigration application (also see Table 1). The minutes can be assessed from a certain time horizon as well as across entrepreneurs.

3.4. Data Analysis

A thematic analysis was carried out following the qualitative data collection. The data collected was analysed by means of coding with the NVivo software. This coding template was useful in arranging, encapsulating, and extracting themes that were identified from the archival data set. There was a two-stage hierarchical coding process (see Figure 1), which consisted of formulating broad themes that contained sub-themes that were more specific to the phenomenon observed (see Table 2). To ensure objectivity in the data analysis, the first two authors carried out a first round of coding independently. To ensure rigour and consistency, the themes identified from the separate coding were compared and corroborated with one another. Data saturation, as conceptualized by Low (2019), was reached during the analysis of meeting logs for case C11, indicating the rigour and consistency of the emerging themes.

Figure 1. Data Structure

First Order Categories (Archival Entries)

Second Order Themes

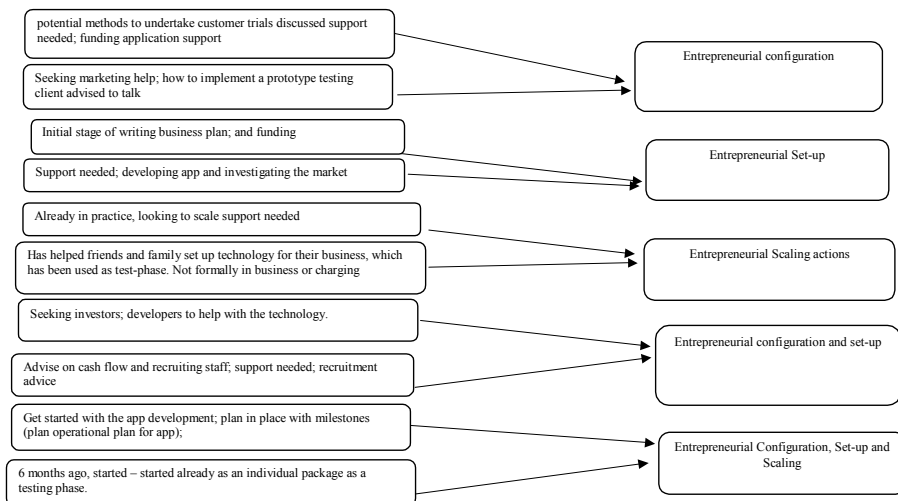


Table 2. Representative Archival Entries Underlying Second-order Themes

Theme 1: Entrepreneurial Configuration Actions	
Mapping in the pre-ideation talks	Seeking marketing help; how to implement a prototype testing; potential methods to undertake customer trials discussed; support needed; funding application support; marketing advice - test prototype & customer trials Visa and immigration critical for international and non-British entrepreneurs (C5)
Theme 2: Entrepreneurial Set-up Actions	
Ideation	Marketing support; particularly, expanding the customer base and moving to physical space tier 1 visa support funding; funding application support marketing business operations advice. (C2)
Theme 3: Entrepreneurial Scaling Actions	
Business Goal Setting	The entrepreneur has an event organised for her business, a few questions around the event and how to encourage interest in the business post-event. Suggestions that can be used for marketing purposes from the owner's event are discussed; e.g. Film the pitches (can be uploaded on the website), take videos of attendee's opinion of the event, take videos of behind the scenes, ask attendees to fill in short feedback forms (what did they like, how would they like to be supported with their own sustainable business challenges, etc). (C12)
Theme 4: Hybrid Configuration and Set-up Actions	
Business Goal Setting and Prototyping (experimentation)	Setting up plan on branding and marketing; Customer segment is fragmented – football association, users of app (the companies to advertise and the football fans); Target customers geographically using Facebook and Instagram. Graphic designer needed to improve the brand aesthetics (suggested look for a module leader within graphic design). Student involvement can be used as marketing campaign - in line with brand vision of community and helping; Marketing campaign; building up the buzz for the league, campaign for the app. C2 asked to consider issues such as budget, resources available, networks, priority message to the target audience (C2)
Theme 5: Hybrid Configuration, Set-up and Scaling	
Post-prototyping Stage	... started in Iran, as individual package as a testing phase. Software developed based on individual profile of company. Software to help companies to build teams and conduct group analysis of performance. Also, individual package available for personal development, career path, recruitment. Type of support: Tier 1 (visa) advise, Funding; Funding application (C13)

4. Findings

The purpose of this section is to present and discuss the key themes extrapolated from the UBI under study. The emergent findings unearth five sets of entrepreneurial actions within the UBI settings. The themes are broken down into core and hybrid actions. Our thematic analysis revealed that entrepreneurial decision-making in UBIs does not follow a linear, pre-defined trajectory. Instead, entrepreneurs engage in iterative processes where their decisions evolve based on mentorship interactions, market feedback, and access to incubator resources. In

Sections 4.1 to 4.5, a breakdown of the findings will be provided according to the key themes of 1) entrepreneurial configuration actions, 2) entrepreneurial set-up actions, 3) entrepreneurial scaling actions, 4) Hybrid Configuration and Set-up actions, 5) Hybrid Configuration, Set-up and Scaling.

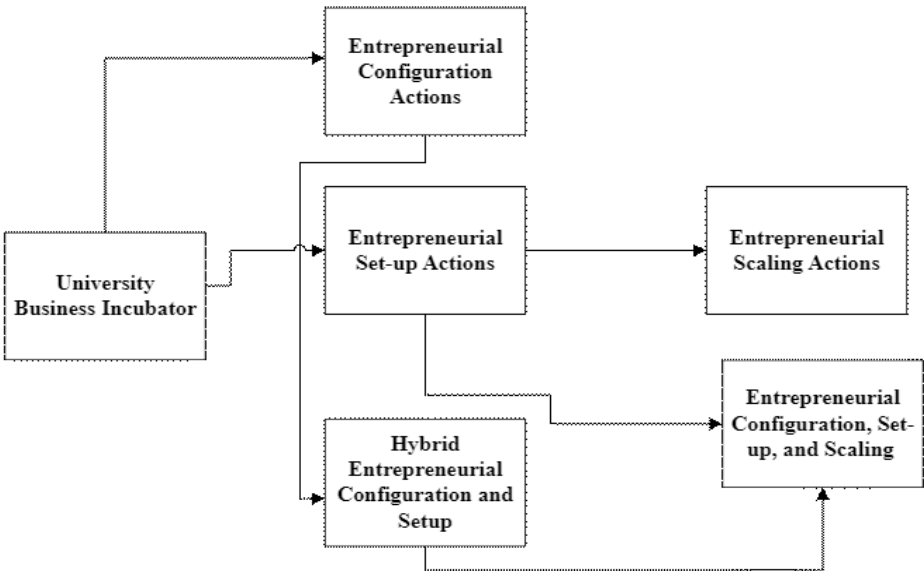
Table 3 provides a structured breakdown of the five emergent stages detailing their characteristics, associated decision-making patterns, and the role of the UBI at each stage, while Figure 2 depicts the interaction between the stages.

Table 3. Structured breakdown of the five emergent stages

Stage	Decision-Making Characteristics	UBI Role
Configuration	Pre-ideation and idea refinement, market research	Providing mentorship, legal and financial advisory
Set-up	Developing a business model, product development	Offering co-working spaces, training workshops
Scaling	Seeking funding, entering new markets	Connecting entrepreneurs to investors, advanced mentorship
Hybrid: Configuration & Set-up	Revisiting business model, early pivots	Providing iterative support, refining goals
Hybrid: Configuration, Set-up & Scaling	Simultaneous iteration, scaling, funding search	Tailored mentorship, resource mobilization

Source: Authors

Figure 2. Towards a UBI start-up ecosystem



Source: Authors

4.1. Entrepreneurial Configuration Actions

Entrepreneurial configuration has been derived from outlining the cognition of the entrepreneurs that were in the pre-ideation stage of their business. Entrepreneurial configuration actions are defined as a set of moves that indicate an early-stage entrepreneurs' attention and intention towards specific entrepreneurial goals. As pointed out in Table 2, the representation of the actions by the entrepreneurs was a recurrent theme that formed part of the core of what UBIs had to manage as a service. Thus, mapping in the pre-ideation talks is central to entrepreneurial configuration actions. To put things into context, the early-stage start-ups sort assistance from the UBI for marketing and implementing prototype testing.

Figure 1 represents the key ideas emerging from data from first order categories to the key concepts restructured as second order categories. First order categories emerged from the archival data to establish the mapping of the entrepreneurs within the UBI, which were further analysed to establish the key themes from the data to create second order categories.

Our data reveals a typology of entrepreneurs within the UBI setting, distinguished by differing levels of self-awareness and motivation. On one end there are those who require consistent prompting from mentors to act on their ideas. These individuals often enter the incubator with underdeveloped concepts and display a reactive engagement style, relying heavily on external validation and direction. On the other end are entrepreneurs who demonstrate a clear understanding of their venture from the outset and are self-driven in their decision-making and goal setting. They actively seek out resources, take initiative, and engage with the UBI in a proactive manner. This emerging typology suggests that entrepreneurs interact with the incubator environment in distinct ways, shaped by their readiness and clarity of purpose.

Given the nature of the entrepreneurial and legal landscape in the United Kingdom (UK), non-British entrepreneurs required visas to start and set-up their businesses. Thus, the UBI spent a lot of time and resources in providing advice on immigration for business, such as reviewing business plans. For example, the business plans had to meet certain criteria from the Home Office, such as the viability, scalability and innovativeness of their business ideas. Part of the core function of the UBI is securing funding from external bodies. Most of the talks at the beginning of the entrepreneurial journey also then centered on financing options. It is important to note that most funding was subject to competition, where entrepreneurs must pitch and defend their ideas.

Entrepreneurial configuration refers to the entrepreneur assembling their ideas for the business, and the UBI's role is to streamline these ideas into a viable business proposition. Configuration could refer to pre-ideation and ideation stages. The former refers to the research phase, where the entrepreneur is still researching the viability of their idea. There is no set time for this phase and some entrepreneurs stay in this phase longer than others while still others may come

back to this stage later. This was the case with C.7, whose idea for developing a recyclable wrapping paper experienced various problems that needed to be addressed and, as a result, the entrepreneurs had to revisit the pre-ideation stage several times. The latter, ideation stage, refers to the phase where the entrepreneur uses their research to take their business idea forward. The entrepreneur has a plan in place, whether formal or informal, and a vision they wish to achieve. These guide the next steps taken by the entrepreneur to reach the next stage of set-up.

Fourteen businesses were in the configuration stage, with four having start-up visa requirements. Given the relative youth of the UBI and the way it has promoted itself (to support would-be entrepreneurs to develop their business idea), it is logical that most of the businesses within the UBI are at this stage. It is also logical that start-up visas were amongst the needs for which entrepreneurs were seeking support; the entrepreneurs would be seeking support and guidance from the UBI before making the decision to commit financial and personal resources to starting a business. The needs of the entrepreneurs at the entrepreneurial configuration phase, as established from the meeting logs, could be categorised into support for funding, funding application support, marketing and human capital. In response to this, the UBI's workshop included 'The basics of marketing' and 'How to write a business plan' and discussed various funding opportunities in the mentor meetings. Meeting logs demonstrate requests from most of the fourteen businesses for work focused on funding opportunities. As a result, a guest speaker from a prominent start-up founder was invited to offer a workshop to the UBI members.

A notable pattern that emerged from the meeting records was the tendency of several entrepreneurs to approach the UBI not as a capacity-building environment, but as a service provider. Participants often sought direct assistance in having these tasks completed for them. For example, multiple founders requested support in applying for grants or expected guidance to be provided in a ready-to-use format, rather than engaging in skill-building workshops or seeking to understand the underlying processes. This behaviour suggests a transactional orientation in which the UBI is viewed to an end, i.e., to secure resources or advance short-term goals, rather than a developmental space for learning, reflection, and capability development.

Our findings also reveal that upon getting full-time jobs, some participants moved to drop entrepreneurial actions. This finding suggests that some participants viewed entrepreneurship as a provisional or transitional pursuit rather than a long-term commitment. Their decision to abandon entrepreneurial activity upon securing full-time employment highlights the influence of perceived job security and stable income on entrepreneurial persistence. It also underscores the tension between entrepreneurial aspirations and practical career choices, particularly within university incubator settings where participants may be testing the feasibility of their ideas while remaining open to alternative career paths. This

has implications for how UBIs support and assess commitment levels among its members.

4.2. Entrepreneurial Set-up Actions

Entrepreneurial set-up actions are defined as a set of moves by an early-stage entrepreneur to move past ideation which is geared towards establishing a business. The literature on ideation is rich within the entrepreneurship literature. Based on the data analysis, entrepreneurs at the start up stage have been through a configuration process of streamlining their business idea into a developed business plan and have either established the business or established the vision for their business. The UBI at this stage played an instrumental role of steering the entrepreneur, either guiding entrepreneurs with the vision for their business or through more practical matters, such as improving their prototype (C.1, C.4).

There were five entrepreneurs at this phase during data collection, with all having links to the UBI as either students (C.1, C.4 and C.8), faculty (C.18) or alumni (C.6). The steering offered by the UBI for these businesses were marketing (C.1, C.6, C.8) or seeking networks (C.8, C.18) and developing a business plan (C.1, C.4, C.8, C.18). Thus, a major finding was a network effect based on the alumni or faculty in the host university incubator system. This is not to say that outsiders did not engage effectively with the UBI, but there was a major pull to attract alumni and faculty. There is no clear evidence that there was a high level of intentionality on the part of the UBI.

In addition, mentors support the entrepreneurs' self-efficacy in setting up a business through various support such as setting plans for milestones or breaking down bigger milestones into achievable goals as well as guiding entrepreneurs through their decision-making process. Workshops provided by the UBI that were relevant for this stage include the 'How to write a business plan' and 'Getting your product to the marketplace'. All entrepreneurs took on an active role within the UBI, making use of the varied resources the UBI offered and actively seeking support from the mentor. As with the previous phase, the entrepreneurial set-up phase is not a linear phase in that entrepreneurs could revisit the configuration phase if certain aspects of this stage are not satisfactory. According to the meeting logs, this has not been the case for this stage. C1, C6, C8 and C18 appear to be satisfying current entrepreneurial set up needs and all mentor meetings were focused on the future of their business and their future needs. Further, the meeting logs showcase that the entrepreneurs used their experiences from the previous phase to grow within the entrepreneurial set-up phase, such as recognising strengths (C. 6), learning from failed prototypes (C.1), and being aware that accessing networks may take time (C.18).

4.3. Entrepreneurial Scaling Actions

Entrepreneurial scaling actions have been induced from moves identified from early-stage start-ups which are aligned to the intent to grow their business.

Entrepreneurial scaling actions are defined as a set of moves that indicate an early-stage entrepreneur's intention to grow their business beyond the initial set-up stage. At this stage, the entrepreneur has their business established, whether informal or formal, and are taking actions to start trading (e.g., C.9) or are already operating (e.g., C.3, C.12 and C.16). The meeting logs demonstrate that four businesses are at this phase: C.3, C.9, C.12 and C.16. Entrepreneurs within this phase may start the set-up stage gradually, such as testing their ideas with friends and acquaintances before launching (C.3) or selling to family before officially entering to the market (C.9). Others may decide to start trading as soon as their plan and resources are in place (C.12 and C.16).

The role of the UBI in all four of these businesses has been to guide the entrepreneur in meeting their trading visions, such as introducing them to the appropriate networks or supporting entrepreneurs to find additional income. In addition, four UBI workshops were relevant to the entrepreneurs at this stage ('the basics of marketing', 'using social media', 'getting your product to the market place' and one about funding advice from a guest speaker). Meeting logs show that the main concerns for the entrepreneurs at this stage was to scale as entrepreneurs needed various support, such as financial, knowledge or marketing, to achieve their visions for scaling.

Entrepreneurial scaling actions are underpinned by the business goal setting intent to grow their business. A set of activities from the meeting logs that signalled intentional moves to grow the business were identified. The UBI therefore positioned itself to provide information to the entrepreneurs on how to grow their businesses (see Table 2). It is important to note that at this stage entrepreneurs begin to provide granular details on how they intend to grow their businesses. Entrepreneurs go through a set of moves that delineate the way in which they intend to build their businesses to a desired state. In turn, the UBI seeks a way to support these businesses as they seek to grow. Scaling forms the third core intention identified in the data. The following themes depict hybrid — i.e., a combination of the configuration, set-up and scaling — themes that have been identified from the data.

4.4. Hybrid Entrepreneurial Configuration and Set-up

From the data analysis a set of hybrid moves by early-stage start-ups within the UBI ecosystem were identified. Hybrid configuration and set-up actions is a combination of moves by early-stage entrepreneurs that oscillate between activities of setting goals to move past the ideation stage. This stage differs from the set up only stage in that the entrepreneur is not on the verge of trading but has been trading. At this stage, the entrepreneur is experiencing new challenges associated with its trading role, such as seeking investors (C.25) or cash flow advice and its impact on recruitment (C.5). There were two businesses (C.5 and C.25) at this stage, with the meeting logs demonstrating that these businesses arrived at this stage in a linear manner. There were instances where businesses,

such as C7, were constantly iterating their ideas and proposals. Surprisingly, there was the admittance by entrepreneurs that they felt the ideas were mature enough, but they wanted to explore all options and services offered by the UBI.

Given the scheme of things, the entrepreneurs in this hybrid phase completed a configuration and set-up stage before arriving at a configuration and set-up milestones for their businesses. The role of the UBI for these entrepreneurs is, once again, to guide their decision making. However, this stage is different to the previous stages in that the entrepreneur's experiences of setting up a business is not likely to be transferable in guiding decision making in the same way it may have been for the set-up, configuration, and scaling stages. Therefore, the support of the UBI becomes important in the entrepreneur's ability to focus on new challenges ahead. Moreover, given the granular nature of the moves the entrepreneurs seek to make, the UBI mentors oscillate and balance between configuration and setting up actions.

4.5. Entrepreneurial Configuration, Set-up, and Scaling

Moving on, it was further induced, albeit surprisingly, a further hybridization of themes from the data. Hybrid configuration, set-up and scaling is a combination of moves by early-stage entrepreneurs that oscillate between goal-setting activities, activities to move past the initial business idea, and actions to grow. It was striking that only one entrepreneur (C.13) was at this stage. C.13 became a member of the UBI six months into their founding and trading as a business and developed individual packages as a testing phase for their business. The UBI, at this stage, provided the means to achieve the growth sought by the entrepreneur and the support in decision making as they navigate around new challenges.

Entrepreneurs may seek UBI support at this stage because they have been scaling actions but do not have the knowledge, networks, or resources to do so. As the UBI was young (nine-month-old at the start of data collection), the workshops were developed based on demand. As a result, a workshop meeting the needs of an entrepreneurial Configuration, Set-up and Scaling stage was not developed yet; however, C.13's meeting log shows the entrepreneur's current interests and needs were around funding (resources) and marketing expertise (knowledge). In addition, the UBI was also important to C.13 as part of their start-up visa requirements. The business under view that oscillated between configuration, set-up and scaling had been in a unique position of being at a stage where they had a prototype of their products. Thus, even though the business was still ruminating on the idea, it had gone past the prototyping stage. There were moves that indicated that the entrepreneurs were keen to grow but also willing to go through an iterative process of refining their ideas. In this instance, the entrepreneur was already testing out their idea but also at the same time seeking advice on immigration visa and funding opportunities.

5. Discussion

The purpose of this section is to present a discussion based on the interplay between our findings and the extant literature. The literature on ideation is rich within the entrepreneurship literature in relation to UBIs (Cooper et al., 2012; Grimaldi and Grandi, 2005; Guerrero et al., 2017; Guerrero et al., 2020; Mian, 1996). Our discussion provides the groundwork to understanding the early start-up entrepreneurial decision-making in UBIs, in line with the set of actions induced from the findings.

This study extends existing literature on entrepreneurial decision-making by illustrating how UBIs act as catalysts in an iterative decision-making process rather than simply facilitating business creation. Previous research (McAdam and McAdam, 2008; Gabriellsson and Politis, 2011) has examined entrepreneurial incubation environments, but our study contributes by conceptualizing the dynamic nature of decision-making within UBIs through the five-stage model developed. Thus, by comparing our emergent findings with prior theoretical frameworks, we note that, like Sarasvathy's (2001) effectuation model, entrepreneurs in UBIs demonstrate adaptive decision-making. In doing so, entrepreneurs in UBIs leverage available resources rather than following rigid plans. The findings also extend existing literature on mentorship as a catalyst for decision-making. Our findings align with studies emphasizing the role of mentorship in shaping entrepreneurial cognition (St-Jean and Audet, 2012), particularly in hybrid stages where startups oscillate between different decision-making modes. As such, mentors provide critical guidance during these preliminary stages of starting a business. Furthermore, UBIs act as Knowledge Ecosystems. Unlike traditional incubators that provide fixed pathways, UBIs serve as flexible repositories of knowledge (Patrício and Ferreira, 2022), allowing entrepreneurs to iterate between stages based on real-time feedback.

UBIs provide a distinctive environment where mentorship goes beyond traditional business advice. Mentors in UBIs often have academic backgrounds combined with industry experience, offering a holistic approach to problem-solving and innovation (Pellegrini and Johnson-Sheehan, 2021). This setting encourages a learning culture that deeply influences how entrepreneurs make decisions, fostering both theoretical understanding and practical application. It is important to note that some of the people that engage with the UBI were scoping for opportunities based on what was offered via the incubator (Grimaldi and Grandi, 2005; Lee and Osteryoung, 2004; Redondo and Camarero, 2019; Wonglimpiyarat, 2016). Our findings also reveal that upon getting full-time jobs, they dropped entrepreneurial actions. The absence of this finding in the extant literature presents an important opportunity to advance our understanding of entrepreneurial persistence within UBIs. Our finding that some entrepreneurs discontinue their ventures after securing full-time employment suggests that UBIs may also be incubating individuals exploring entrepreneurship as a backup

option. This challenges the implicit assumption in much of the UBI literature that entry into an incubator reflects long-term entrepreneurial intent.

Some entrepreneurs approached the UBI as a service provider and not as a means of capacity building. Interestingly, entrepreneurs were in search of business advice, such as how to apply for grants or writing business plans. This phenomenon can be attributed to universities serving as a repository of knowledge (Patrício and Ferreira, 2022). In line with the notion of UBIs serving as a one-stop-shop for entrepreneurs, we found out that participants were not particularly interested in developing certain skills such as grant writing or social media marketing. Instead, they seemed to be more interested in getting things done via the UBI such as grant writing. This could be linked to where the entrepreneurs are in their journey. Instead of treating the UBI as a capacity-building environment, these entrepreneurs often approached it as a service provider, outsourcing tasks rather than internalizing learning. This highlights a transactional rather than developmental orientation in their engagement with the UBI.

All entrepreneurs were interested in learning about the benefits which suggests the mentor is a catalyst for encouraging memberships and those with more contact with a mentor were more likely to become members and show active participation in workshops and arranging mentor meetings. Based on evidence from the field and the meeting records, a recurrent occurrence in relation to the engagement between the UBI and the entrepreneurs depended on how definitive the first meeting was. In other words, this signified if the entrepreneur was going to sign up to get onboard to the UBI (Nouri et al., 2012). Members were required to pay an annual membership fee of £50. In terms of exploring entrepreneurial decision-making, this moment captured from the data begs the question of why people seek to start a business in the first place (Shepherd et al., 2015). It was therefore important to probe the data even further to ascertain the differentiating factors between those who had only one touch point or contact and never returned, compared to those that stayed and got onboard – ultimately being part of the UBI's ecosystem. We posit that in outlining intentionality, this sample of entrepreneurs tended to be just testing the waters within the UBI space.

On the other hand, it was instructive to understand why people stay and what makes them stay to be part of the ecosystem (Kolympiris and Klein, 2017; Nicholls-Nixon et al., 2021). We go further to contextualise the drivers to stay and be part of the ecosystem; could it be that people who made enquiries, in addition to testing the waters, were not impressed with what was on offer from the UBI? We also argue that their willingness to join the UBI could be affected by the perceived complexity of certain administrative tasks that they could get entangled in, such as the UK start-up visa applications or the set-up costs of incorporating a new company. This then leads us to wonder what makes interested participants stay and become part of the ecosystem? We thus look at the resources available to the entrepreneur. In this regard, there were two

business advisors afforded to the entrepreneurs. There is little mention in the literature on the role business advisors play within UBIs. However, we understand that relationship management is pivotal in facilitating the growth of the start-up within the UBI.

Further, the research on mentors and mentorship for entrepreneurs agree with our findings that relationships facilitate the growth of start-ups (see Deakins et al., 1998; Cull, 2006; Ting et al., 2017; Xiao and North, 2017). St-Jean and Audet (2012) explain this is because mentoring relationships support the development of entrepreneur goal orientations and self-efficacy skills, thereby facilitating the success of the venture. The archival records from the case study allow for assessing the role of business mentorship within the UBI. From these records, we unearth that a mentor plays an important role in the decision-making of an entrepreneur.

The data also reveals a typology of entrepreneurs within the UBI context. There are those who require encouragement from mentors to act on their ideas. These entrepreneurs are characterized by lower levels of self-awareness. In contrast, there are also entrepreneurs who demonstrate a clear understanding of their business concept and exhibit self-motivation. The former group often entered the incubation space with vague or underdeveloped ideas and showed signs of hesitation or reliance on the mentor to initiate progress. These individuals benefited most from structured guidance but were slower to act independently. In contrast, the latter group displayed a stronger internal drive and a clearer vision for their venture, proactively seeking support and taking initiative in decision-making. This distinction aligns with Bögenhold et al. (2025), who found that potential entrepreneurs lacking clarity about their business ideas often exhibit more limited ambition and lower growth intentions. Our findings suggest that this divergence in self-awareness and motivation influences how entrepreneurs engage with the incubator and respond to mentorship, ultimately shaping their developmental trajectory within the UBI. Understanding this typology may help UBIs tailor their support strategies to meet the varying needs and readiness levels of entrepreneurs.

In outlining decision-making by entrepreneurs in UBIs, we observe that providing external support is a pivotal role of a UBI. Therefore, the perceived support, or lack of it, might play a role in the decision of people to join the UBI or not (Laine and Galkina, 2017; Xia et al., 2020; Xiao and North, 2017). In UBIs, mentors often assist entrepreneurs in navigating complex administrative tasks, like visa applications or compliance requirements, which can significantly influence strategic decisions (Patrício and Ferreira, 2022). Mentors also provide access to specialized knowledge and experiences, helping entrepreneurs to better understand complex business environments and make informed choices (Cull, 2006). It can be deduced that the intricacies of being involved in the ecosystem, i.e., engaging with business mentors, administrative tasks, etc., could be a determinant of whether entrepreneurs want to be part of the UBI.

Mentorship enables entrepreneurs to explore their beliefs and can support their decision making (St-Jean and Audet, 2013) as well as develop self-efficacy and critical thinking skills (St-Jean and Audet, 2012). Thus, the value of UBIs goes beyond financial support. The first meeting records, however, display that financial support is one of the most important reasons for entrepreneurs to seek UBIs. In fact, C.23 chose not to engage further with the UBI or pursue a mentor-entrepreneur relationship after learning that the UBI provided support in identifying and applying for grants, but did not offer direct financial support. Mentors can also temper behaviour; for example, C.7 was willing to invest in a social media campaign without a fully formed business idea which, the meeting records show, the mentor persuaded the entrepreneur to wait until the business developed before spending money on marketing. The meeting records show a plan of action to help set the foundations of the venture, suggesting that UBI mentors do support the gaps in entrepreneurs' experience or knowledge.

Mentorship boosts entrepreneurs' belief in their capabilities, which is directly linked to their willingness to make bold decisions and persist in the face of challenges (St-Jean and Audet, 2012). Mentors could offer tailored business advice to entrepreneurs and introduce entrepreneurs to a network that could support their set-up needs. It is difficult to move to the scale-up stage without the needs and plans established in the set-up stage, explaining why there is no hybrid phase between these two stages in our meeting records. Meeting records indicate that mentor meetings at the scale-up stage have played a role in steering the entrepreneurs in their decision making, rather than the consultative role played in the previous stages. Thereby leading to more decisive actions and a proactive approach to opportunity exploitation.

Mentors help entrepreneurs identify and overcome cognitive biases and heuristics that may negatively impact decision-making, such as overconfidence or confirmation bias (Deakins et al., 1998). This external perspective promotes more objective and rational decision processes. This helped entrepreneurs in avoiding any biases or incomplete and incorrect heuristics they may have. For example, meeting records show that entrepreneurs rarely ask for marketing support or needs, but the business advisors have steered them towards marketing activities, such as examining the target audience (C.16) or building a brand image (C.22), to achieve the goals discussed in the meetings. These may be instances where the entrepreneurs do not appreciate the value of marketing within this context but are also indicative of a wider issue of the heuristics and biases entrepreneurs use during decision making.

This discussion has highlighted how early-stage start-ups in UBIs navigate entrepreneurial decision-making, with UBIs serving as vital knowledge hubs offering business advice and technical support. While some entrepreneurs focus on practical services like grant writing, others engage in exploratory learning to build resilience. The findings emphasize the importance of UBIs in shaping

entrepreneurial self-awareness and adaptability, contributing to the broader entrepreneurial ecosystem.

6. Implications and Conclusion

This study offers a unique lens into entrepreneurial decision-making within a UBI. The primary theoretical contribution lies in demonstrating how UBIs shape entrepreneurial cognition and behaviour over time, which culminates in a theoretical framework. The research also provides several practical implications emerging from the findings.

First, the study identifies a typology of entrepreneurs based on levels of self-awareness and initiative. Some entrepreneurs in UBIs are clear on their business ideas and demonstrate a proactive approach to decision-making, while others required repeated prompting from mentors and lacked clarity or confidence in their venture direction. Recognising these differences is critical for UBIs aiming to provide tailored support. Developing early-stage interventions to assess entrepreneurial readiness could help UBIs allocate resources more effectively and design differentiated support pathways that match varying needs and developmental stages.

Second, the findings reveal that many entrepreneurs engaged with the UBI in a transactional manner, where they seek help with specific tasks like grant writing or business planning, but showing limited interest in acquiring the specific skills themselves. This challenges the traditional notion of UBIs as developmental spaces focused on capability building. Instead, it points to an emerging view of the UBI as a service provider, raising questions about the sustainability and long-term impact of such engagements. UBIs may need to revisit their value proposition and clarify whether their model emphasises support delivery, entrepreneurial learning, or both.

Finally, the study highlights the importance of managing expectations and aligning the goals of entrepreneurs with those of the UBI. Entrepreneurs who dropped out or disengaged after securing full-time employment further illustrate the fluidity of entrepreneurial intent within the university incubator setting. This reinforces the need for UBIs to monitor not only business progress but also evolving founder motivations over time. Taken together, these practical insights suggest that a more nuanced, person-centred approach to incubation is required, i.e., one that accounts for the heterogeneity of entrepreneurial intent and behaviour. In doing so, this might enhance both the effectiveness and the perceived value from UBIs.

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