



## Bridging the divides: A case study of collective action across Scottish university business schools to support small business

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### ABSTRACT

Support for small business is widely acknowledged as a complex issue of interrelated economic resilience and sustainability. Despite an established literature on the mechanisms through which university business schools support business, few studies have focused on relations between business schools in matters of such national importance. Our qualitative case study contributes to this limited stock of empirical knowledge by following a consortium of 16 university business schools and associated public bodies in Scotland, as they develop a national business support programme. A Networks of Practice (NoP) lens allows us to identify three processual components crucial in developing relations between entrepreneurial universities: acknowledging drivers, establishing relationships, and building a vision-based reference. These three components reveal tensions and challenges as a network of common interest forms. Fresh theoretical insights are offered on the nature of the entrepreneurial university and role of vision to bridge a fragmented higher education environment.

### 1. Introduction

The entrepreneurial university literature (Guerrero et al., 2016; Klofsten et al., 2019; Philpott et al., 2011) and, by association, research on academic entrepreneurship (Han & Niosi, 2016; Siegel & Wright, 2015), has explored the role of academic institutions as agents of change (Klofsten et al., 2019). It has revealed the significant economic, social, and regional impacts the university sector can engender (Klofsten & Jones-Evans, 2000; Lopes et al., 2020; Urbano & Guerrero, 2013). However, studies to date have been pre-disposed to focus primarily on unilateral commercial spinouts, consultancy, and technology transfer, at the expense of non-commercial, social, and relational activities (Riviezzo et al., 2019). This study answers calls to broaden the lens (Abreu & Grinevich, 2013), to understand how entrepreneurial universities can operate as a multilateral body of support, with potential to address complex national issues.

To investigate this, we consider a situation where university business schools across Scotland have worked together to support small business. Policy makers consider the scaling of small businesses crucial to unlocking productivity and economic prosperity (Mason, 2020).

However, what was previously supported as a linear growth outcome for individual businesses has now become a complex question of interrelated economic resilience and sustainability (Fares et al., 2022). Given the focus on small business growth as a national imperative, there is much to be gained in mobilising relationships between university business schools as a broad and complementary knowledge network. However, the relevance of universities is often debated (Paton et al., 2014), with noted perception gaps between stakeholder groups and competing approaches to 'growth' (Achtenhagen et al., 2010). Moon et al. (2019) suggest that our understanding of universities' relationships within a broader ecosystem of support is limited. Scantier still, is our understanding of how a nation's universities can, or cannot, work together.

We address this empirical gap by exploring the processes of collective endeavour among university business schools. Our case follows a consortium of 16 university business schools and associated public bodies in Scotland, tasked with developing a common support programme for scaling businesses. This purposeful attempt at collective endeavour provides a unique opportunity to observe the processes of business schools working together for national aims. Qualitative data is

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drawn from across the consortium, elucidating holistic insight on how cross-institutional collaboration unfolds (Theodorakopoulos et al., 2012). Our guiding research question asks: *How do separate university business schools align to build a knowledge base for small business support at the national level?*

We adopt a Networks of Practice (NoP) lens to explore the processes bringing universities together, a notion often overlooked in favour of studies which report on knowledge outcomes rather than relational processes (Macpherson & Clark, 2009). We follow Schaeffer et al. (2021) by looking to the linkages between institutions and identify challenges encountered in capacity building. Three processual components are presented: *acknowledging drivers, establishing relationships, and building a vision-based reference*. Each component has implications for the consortium's activities and the evolution of the NoP.

Our discussion makes two main theoretical contributions. First, the entrepreneurial university literature is expanded beyond unilateral mechanisms of consultancy and commercialisation of science (Han & Niosi, 2016). Our findings present multilateral interactive processes and encourage a broader perspective of entrepreneurial university activities. With this broader perspective we challenge dominant conceptualisations of commercialised entrepreneurial universities. Instead, a counter, more conjunctive framing is offered (Tsoukas, 2017), one of complementary institutions, interacting for a national agenda. Second, we further existing theory on disparate knowledge bases addressing a common problem (Niesz 2010). We empirically expose the constructive relational processes between institutions (Contu & Willmott, 2003), allowing us to highlight the role of vision in coalescing university business schools around a shared idea. We argue this vision acts as something of a 'boundary object' (Bechky 2003), emerging through the social interactions of the network. We find consortium members orient around a temporary project, while building a complementary network for the 'greater good'.

## 2. Conceptual background

### 2.1. Networks of practice

Brown and Duguid (1991) first introduced Networks of Practice (NoPs) to the field of management by conceptualising the modern organisation as a myriad of 'communities', within which individual areas of expertise are developed, and across which innovation can occur. The authors built on theories of Communities of Practice (CofPs), which look to knowledge unfolding through social interaction and investment in a common social context (Lave & Wenger, 1991). A NoP view, in contrast, implies that members may be unknown to each other at the point of initial interaction (Brown & Duguid, 2001). A more loosely based system of social relations, NoPs encourage the process of bringing together different views, which is both a challenge and an opportunity for knowledge development (Nooteboom, 2000). Van Baalen et al. (2005) suggest that NoPs will emerge when there is a sense of urgency and a fragmented awareness that collective practice is required.

Common ground must be established between various locales as a network of disparate actors interacts (Bechky, 2003), enabling knowledge flow across epistemic divides (Macpherson & Clark, 2009). Levina and Vaast (2005) suggest that there are two dominant components to consider in such 'boundary spanning'. One, individuals themselves should be designated as boundary spanners and be aware of the tendency to retreat into one's own field of practice instead of generating new shared understandings (Hill, 2020). Two, boundary objects should be created to both facilitate and consolidate knowledge construction (Carlile, 2002). Tangible definitions, mutually relatable imagery, and explanatory examples can ground the network in a common understanding (Nicolini et al., 2012).

Recent works have considered how geographically dispersed NoPs operate (Wang et al., 2020) – at times conceptualised as complex landscapes of practice (Pyrko et al., 2019). Swan et al. (2002) explain

that ideas and prioritised goals, such as mutual visions, can become objects around which multi-layered networks coalesce. Van Baalen et al. (2005) bring this further by arguing that shared belief systems, instead of being a prerequisite for a network to function, emerge from knowledge sharing across the network. Thus, values and visions evolve through network interaction (Tagliaventi & Mattarelli, 2006).

For our case context, we look to how a shared vision is enacted and managed, nurtured by often-fragile social relationships (Filstad, 2014), avoiding a variance-based view of outcomes over processes (Cloutier & Langley, 2020). By illuminating perceptual conflict in the developmental process (Contu & Willmott, 2003; Gray & Gabriel, 2018), we better understand how collective understandings are constructed and re-constructed among entrepreneurial universities.

### 2.2. Entrepreneurial universities and academic entrepreneurship

Entrepreneurial universities "are involved in partnerships, networks and other relationships to generate an umbrella for interaction, collaboration and cooperation... that could be transformed into social and economic entrepreneurial initiatives" (Guerrero et al., 2014: 415). By expansion, the practice of academic entrepreneurship encompasses "all commercialisation activities outside of the normal university duties of basic research and teaching" (Klofsten & Jones-Evans, 2000: 299). Since gaining momentum over recent decades with the advent of reforms and policy initiatives to promote engagement between academia and industry (Klofsten et al., 2019; Lopes et al., 2020), many universities have taken steps to become more entrepreneurial through strengthening their linkages to practice and society more widely (Kalar & Antoncic, 2015; Klofsten & Jones-Evans, 2000).

Prescriptions and insights into the cultivation of academic entrepreneurship have come in different guises, including those premised upon theories of entrepreneurship and intrapreneurship (Nelles & Vorley, 2011), process models (Wood, 2011), and frameworks built upon institutional economics (Kirby et al., 2011). Much of this is rooted in the resource-based view (Guerrero & Urbano, 2012), imbuing the role of star scientists in driving academic entrepreneurship (Han & Niosi, 2016), vehicles for connecting stakeholders (Simeone et al., 2018), and strategic considerations to drive diversification and multi-national strategies (Lombardi et al., 2019). However, a commercially strategic view of academic entrepreneurship is found to encourage a competitive isolationism, despite institutions sharing similar "historical backgrounds, economic conditions and cultural and social structures" (Guerrero et al., 2014: 415). This isolationism limits the potential for universities to build knowledge capacity at a national level.

As our understanding of academic entrepreneurship has become strategic (Riviezzo et al., 2019), associated research has fragmented across diverse institutional practices (Philpott et al., 2011). There have been strong contributions made on how institutions engage with the business environment (Rybnicek & Königgruber, 2019), seeing the university as a developmental space for entrepreneurs (Middleton et al., 2019) and stressing the importance of sustainable university-industry partnerships (Khlystova et al., 2022). However, Moon et al. (2019) suggest little is known of how relationships between institutions operate in an ecosystem of support. Consequently, there have been calls to rethink how we perceive entrepreneurial universities (Siegel & Wright, 2015; Urbano & Guerrero, 2013). Klofsten et al. (2019) argue that greater consideration of the social complexities associated with developing universities as change agents can help ensure economic and social impact (Guerrero et al., 2015; Guerrero et al., 2016). This becomes especially impactful at a regional level (Klofsten & Jones-Evans, 2000; Lopes et al., 2020).

By foregrounding the social ramifications of universities working together, this study answers calls to widen academic entrepreneurship beyond linear concepts of intellectual capital and technology transfer, towards more informal and non-commercial activities (Abreu & Grinevich, 2013; Riviezzo et al., 2019). Specifically, we examine capacity

building at a national level, between universities, rather than within. We do this by exploring the relational processes bringing together a consortium of Scottish universities, as they aim to support small businesses in their scale-up activities.

2.3. Case context: The Scottish Universities’ scale-up consortium

The OECD (2007: 61) define scale-ups as firms of 10 or more employees demonstrating “annualised growth greater than 20 % per annum, over a three-year period”, where growth can be measured in number of employees and/or financial turnover. The innovations, job creation, and productivity gains associated with scaling businesses are substantial (Fraser of Allander Institute, 2019; ERC, 2020). However, in Scotland relative to the rest of the UK, fewer businesses reach this stage (Scottish Enterprise 2018), with a lack of management skills often cited as the cause of this stunted development (Custódio et al., 2019).

There are 14 purposefully designed scale-up support programmes found in Scotland, most (12) are run through Scottish Enterprise (SE) / Highlands and Islands Enterprise (HIE), the public bodies responsible for national economic development, and Entrepreneurial Scotland, a charity focused on support for entrepreneurs. Additionally, there is one privately run programme, and one university programme. The Scale-Up Institute (2021) suggest that these programmes collectively offer around 270 places, when there are over 2100 scale-up organisations in Scotland, so there is a substantial gap in capacity, supporting claims of an institutional disconnect between universities and the growth needs of local businesses (Brown, 2016). An MIT REAP (2014: 5) report acknowledges this and identifies the need to ‘leverage the role of our universities’ in Scotland and ‘improve networking linkages’ between the various aspects of the entrepreneurial ecosystem, representing a call of some urgency for networked practice between business schools (Van Baalen et al., 2005).

In response, the Scottish Funding Council (SFC), SE and HIE worked together with all 16 Scottish business schools to develop an evidence-based support programme for Scottish scale-ups – known as the universities’ scale-up consortium (hereafter referred to as ‘the consortium’). The desire for a national approach implied the coalescence of various knowledge bases, dispersed both geographically and contextually (Tagliaventi & Mattarelli 2006). The aim of the consortium was purposeful and timely, to develop a collaborative support programme for scaling Scottish businesses. The consortium moved through many critical moments and, crucially, had to contend with the disruption of the Covid-19 pandemic (detailed in Table 1). This culminated in the delivery of the E<sup>2</sup> Programme, with a successful graduation event in July 2021.

This is not the first time that universities in Scotland have worked together with enterprise development agencies; for instance, the Scottish EDGE initiative (Smith & Paton 2011). However, such partnership arrangements are found to be volatile (Martin et al., 2018), with divergent perspectives often apparent. Issues relating to status (Raffe & Croxford 2015), differentiation in teaching and/or research focus (Boliver 2015), and embeddedness in local context (Lebeau & Cochrane 2015), all have the potential to silo thinking and limit collaboration. This brings into focus the relational practices involved in forming and maintaining such a large and diverse network (Harvey et al., 2013).

3. Methodology

To understand the relational processes of the consortium, the main data draw is qualitative, collected through 17 semi-structured interviews with consortium members with additional documentary material and observation providing the contextual setting (Table 2). These interview data are reflective in nature and isolate critical points in the initiative (Lauckner et al., 2012). From this, the analysis interprets closely observed interactions impacting on the processes of the consortium and the meanings attached to them (Champenois et al., 2020). As individuals come together around a multi-lateral process of collaboration, they encounter tensions and socialised assumptions. Adopting a

Table 1  
Timeline of key events for the Scottish University Scale-up consortium.

Late 2017	Series of informal discussions and ‘brainstorming’ workshops to identify scale-up resources and capacity in the higher education sector. Instigated by SFC as the initiator of the initiative. - Informal proposals for how scale-up support can be offered are mooted by interested parties responding to open invitation. - An SFC representative suggested, ‘we created the environment, an invitation, we facilitated the conversation in a semi-formal regard. There was a desire from institutions to come and talk about this’ (Angus)
October 2018	SFC call for proposals to develop collaborative educational programmes among Scottish university business schools.
November 2018	Delegation of SFC and selected higher education representatives on ‘fact finding’ trip to MIT, Boston, to support submissions to SFC call for proposals.
Late 2018 – Early 2019	Consortium with representation from all universities and support bodies formed to facilitate organised submission to SFC call for proposals. - Agreement to shared governance model across each HEI in Scotland - Equal voting on consortium initiatives - Consistent chair of board agreed, purposefully removed from the academic centres of Glasgow and Edinburgh.
February 2019	Initial bid for online portal rejected by SFC, new proposal developed around a business case for structured programme of learning.
March 2019	Initial £100,000 invested by SFC to develop ‘business case’ for additional funding. Eventual ‘business case’ included: - Market analysis of demand - Gap analysis across the university sector, establishing lack of current capacity but willingness to contribute - Curriculum proposal for management training programme.
October 2019	Plan for management training programme approved by SFC, unlocking additional funds of £500,000
February 2020	‘Train the trainer’ event hosted as an orientation to interested university partners.
Early March 2020	Bids for pilot delivery by universities called for and received, with three ‘pathfinder’ institutions approved for the initiation of programme delivery.
Late March 2020	Covid-19 pandemic disrupts delivery plans. Decision taken to pause programme.
November 2020	Consortium consulted on proposed amendments to operational plan because of Covid-19 restrictions/disruption, to now include: - Development of Scottish scale-up case studies - Support for the curation of content for third party online scale-up programme - Virtual programme to develop successful entrepreneurs to become scale-up educators – the E <sup>2</sup> Programme.
February/March 2021	Expressions of interest received for case study writing and open recruitment of content providers and support for the E <sup>2</sup> Programme.
June 2021	First cohort of 37 scale-up entrepreneurs enrolled in E <sup>2</sup> Programme, exceeding target of 20.
July 2021	Virtual graduation event for the first successful cohort through the E <sup>2</sup> Programme – 33 graduates in total. Dissemination of a ‘case study repository’ to each of the 16 university business schools.

qualitative approach allows for these assumptions to be accessed and understood, facilitating a contextualised view of social dynamics as they are experienced, and the implications for individuals involved (Hjorth et al., 2015). This form of data collection also enabled us to follow up on how various scenarios, artefacts, and key moments affected motives and feelings (DeMarrais & Tisdale 2002).

Purposive sampling was employed to cover each of the key members of the consortium (Patton, 2002). The sample is made up of those individuals representing their university in the consortium governance board, the designated ‘boundary spanners’, along with key stakeholders such as project administrators and funders. This represents all but two of the institutions associated with the initiative. The scope of the primary data sample is important, as this allowed for a variety of perspectives

**Table 2**  
Main empirical data and contextual information.

	Data used in analysis and background
17 Semi-Structured Interviews*	Governance Board Member / University representative (14) - Professor in Entrepreneurship / Enterprise (6) ■ Callum, Christian, Becky, Layla, Finlay, Bruno ■ This group include the Programme’s Academic Director - Director of Innovation/Business Development Office (5) ■ Paul, David, Klara, Oliver, Brian - Senior Enterprise Academic (3) ■ Noah, Justin, Seónaid Administrative facilitator, aligned to Academic Director (1) - Monica Representatives from funding body (2) - Alasdair, Angus
3 Key Document Sources	Business Case for initial funding (2019) - Including: ■ Outcome of stakeholder consultations ■ Mapping exercise of current scale-up provision utilising open survey responses from across all Scottish Higher Education Institutions ■ Indicative job descriptions on various core team roles Minutes from Governance Board meetings (16) - Regular meetings 2019–2022 ■ Monthly, aside from Covid-19 interruptions - Progress reports associated with each meeting ■ Call for Expression of Interest on Programme Delivery
4 Main Areas of Direct Observation	- 2019–2022 Regular Governance Board meetings (16 * 2-hour meetings: 13 in-person, 3-virtual)- ‘train the trainer’ event (2 days)- Recruitment of content providers for E <sup>2</sup> programme (2 days)- 2021 Virtual graduation of the first E2 cohort (1 day) Plus, numerous informal interactions between smaller project groups and core team

\* All names presented as pseudonyms to protect anonymity.

and positions within the consortium to emerge. Such breadth of perspective enabled a reflexive evaluation on the part of the researchers, to move beyond simple description of the processual components and engage with the variety presented in the data to construct meaningful interpretations (Gaddefors & Cunningham, 2024). Two of the author team were involved in data collection, and the strict ethical protocols of their respective institutions were followed. This is particularly important given the proximity and familiarity of the Scottish higher education sector. Each Zoom-facilitated interview lasted on average 41 min and was fully recorded and transcribed.

Analytically, we present a constant comparative interpretation of the relational experiences of consortium members (Anderson & Jack, 2015). This involved coding and categorising the data, interpreting and integrating the thematic properties, constructing explanatory themes in relation to extant theory and contextual information, and subjecting this comparison to further theoretical interrogation (Braun & Clarke, 2019). Following Macpherson and Clark (2009), in analysing the data we looked for those relational processes which were influential in shaping the trajectory of the consortium. We considered how relationships between individuals and the consortium developed and are explained, in turn exploring how this informed the consortium’s activities. Throughout the coding process, the author team discussed the situations and artefacts mentioned by participants when reflecting on their experience. In making sense of these reflections, we clustered statements and excerpts, discussing appropriate reference labels for these clusters – the axial coding. We were then able to construct five explanatory themes by interpreting and re-interpreting the various codes in view of the informing literature. These explanatory themes are in turn used to

construct three plausible processual components encountered by the consortium. This inductive analytical approach ensures a credibility and dependability in the findings, where empirical data serves as the base of our constructed interpretations (Braun & Clarke, 2020). These interpretations are informed by the NofP literature, as we looked to which processes became important in the development of the network (Filstad, 2014).

#### 4. Findings and analysis

The final set of three processual components constructed are: *acknowledging drivers*, *establishing relationships*, and *building a vision-based reference*. These components, and the explanatory themes on which they are based, are represented as data structure diagrams (Figs. 1-3) and now discussed in turn, before a final processual map is presented (Fig. 4).

##### 4.1. Acknowledging drivers

The first component is the acknowledgment of drivers by consortium members. Here, participants point to an emerging realisation that timely collective practice is required, reflecting what Van Baalen et al. (2005) see as a fragmented awareness across consortium members. Two explanatory themes highlight how participants coalesce around an acknowledgement of the drivers. The first is a ‘reminiscent reference’ to the origins of the project. The “multiple factions” (Justin) and a “surprise at the level of competition” (Finlay) present a challenging beginning. It seems that regardless of genuine care, divergent standpoints are assumed. Klara highlights just how difficult these formation stages were, remembering some “fairly badly behaved, grumpy [meetings]... when it was like the Sharks on one side and the Jets, on the other”. The following excerpt sheds light on some of the origins of this challenge:

*There was quite a lot of contention at the outset, a lot of disagreement, in fact, there were a lot of challenging meetings... competing factions. There were at least two competing factions, significant disagreement on how things should operate, how things should run, and previous relationships certainly played into that.* (Callum)

The challenging beginning becomes a shared experience, subsequently re-shared. It combines with reminiscing on a focal origin event, a delegation trip to MIT, Boston. Both serve as a reference point, allowing participants to reflect on the need for constructive relationships, avoiding repeats of fractious early experiences. Drivers are often presented in relation to these early challenges. For instance, participants frequently refer to a desire to work together, looking to not “reinvent the wheel every single time if we have schools share expertise” (Becky). However, this intention is complicated by the potential of institutional financial gain, leading to some sensitive interpretations on the way relationships form, as explained:

*We found out, I think it was about two or three meetings in, that about four or five institutions had their own sort of meetings in the corner, the smoky rooms way in the distance. And I know from just sitting there, I could tell it ruffled feathers a little bit.* (Noah)

This makes consortium members explicitly wary of the potential for destructive power dynamics. Indeed, some point to instances where “silos began to form quite early” (David). Social dynamics play a role in this, with some self-critical participants suggesting “I gravitated towards the people that I knew” (David). The draw of legacy relationships undermines motivations to broaden inclusivity and cohesion. An exceptional meeting was held with all interested parties to address this directly, taking place at a ‘neutral’ territory:

*[There was] a main turning point, we went through to the [funder] offices in Edinburgh... [the agenda of that meeting] changed the tone of some of*

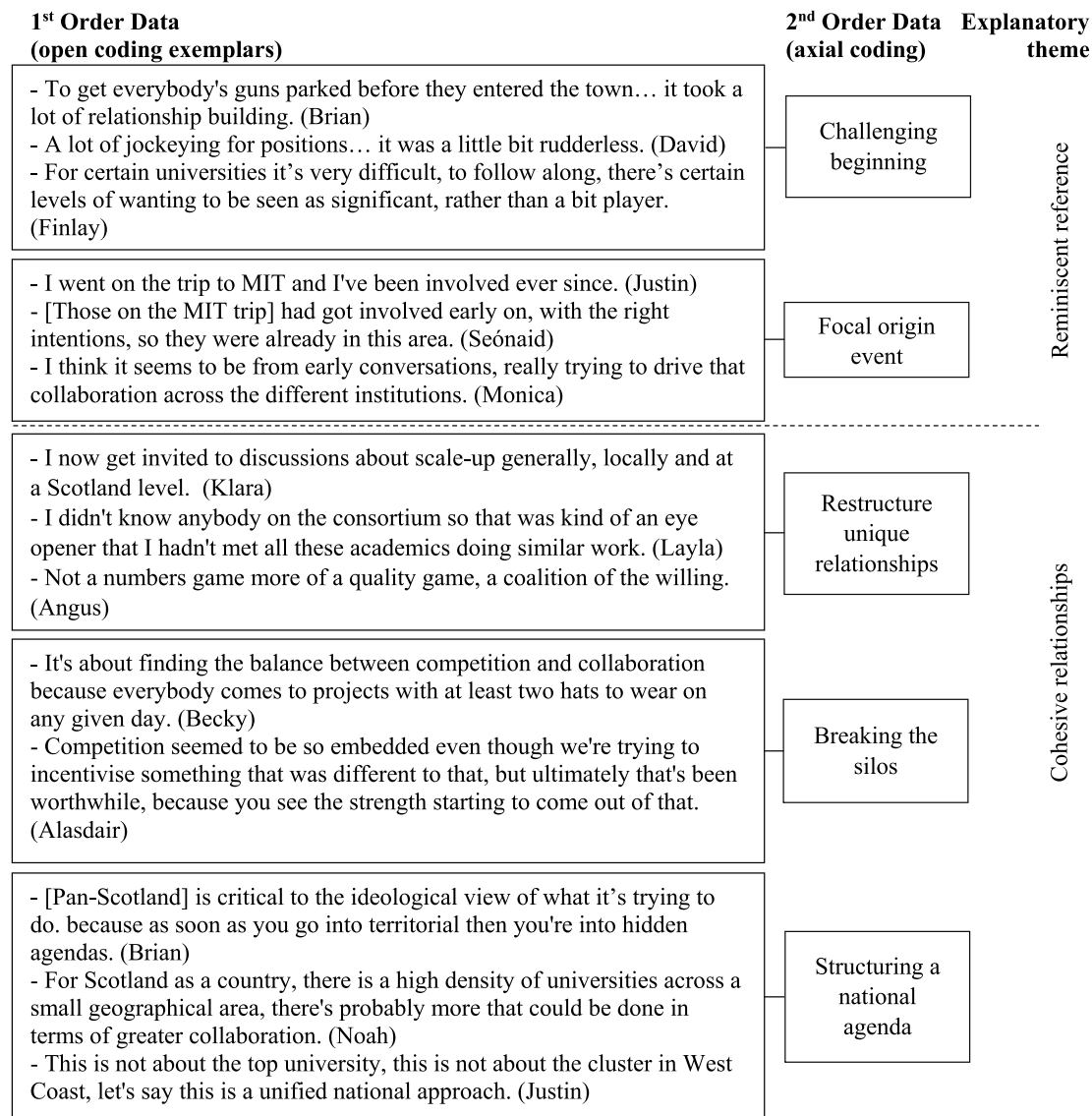


Fig. 1. Acknowledging drivers.

*the discussion. No longer about who gets the money or who gets the glory, [but more] how do we work together as a consortium.* (Callum)

The second explanatory theme on the drivers of the consortium relates to 'cohesive relationships', guarding against "siloes" agendas and developing inter-personal "trust" (Seónaid). To this point, participants acknowledge that some form of intervention is required to untether participants from traditionally competitive mind-sets, restructuring unique relationships around a new agenda. Epistemic boundaries were set to ensure voice and inclusion, moving relationships beyond existing silos. Admittedly, this "was hard won, [it] was not easy" (Finlay). Desires to lead remained, as many felt the need to represent the best interests of their employer.

Multiple structuring options were mooted, for instance, both a hub and spoke approach, with a named lead institution and equitable distribution of representation and voting rights. Early experiences of silos and fragmentation meant a lead institution would be viewed sceptically. To that end, an open approach based on relational cohesion was needed to deliver on a national level:

*We needed to get in place a governance model that was equitable that was fair, and everyone has an equal say and an equal voice in the consortium... If we could get that, as early as possible, then we had a fighting*

*chance to do something useful... Universities are not used to cooperating on these terms, they are used to competing. We had a real challenge getting past these mental models.* (Callum)

*It morphed into the whole of Scotland... and that's what we were tasked with trying to create and we did, but then, if you notice, [we] took a backseat for a few months to allow the others to get a voice, because we were controlling the dialogue and the narrative.* (Brian)

#### 4.2. Establishing relationships

The second processual component portrays how individual relationships took shape. This is represented by a single explanatory theme, individuals' 'scale of engagement with the core group'. To an extent, the core group was partly assigned in relation to specified project activities – an Academic Director with responsibilities for guiding and ensuring delivery on agreed objectives. Other relationships with the consortium remained informal, with some contributions stronger than others: "some people are really big supporters of the consortium, and some stand on the side-lines" (Finlay).

These relationships are characterised in three identifiable ways – representing the roles open to individuals: integral, developmental

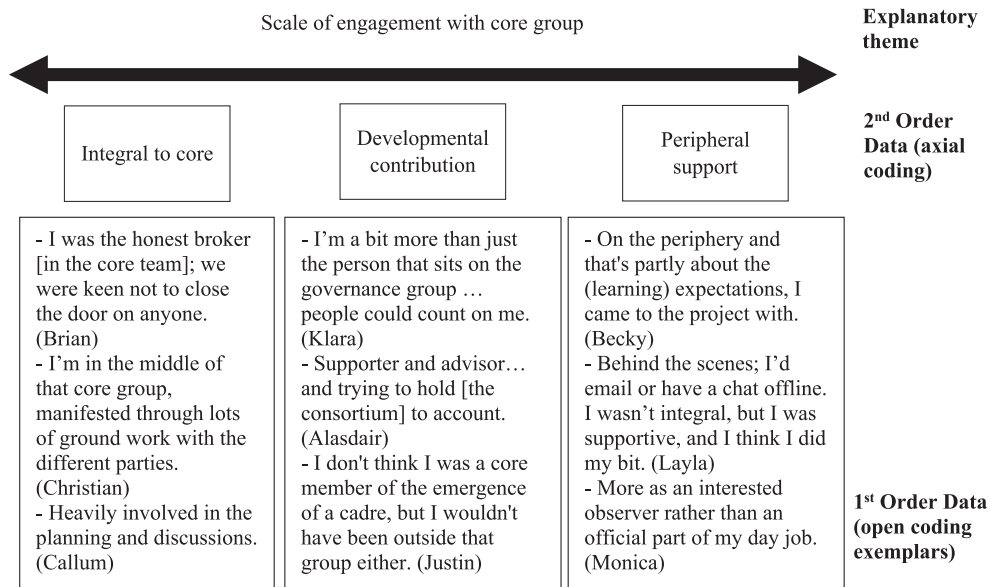


Fig. 2. Establishing relationships.

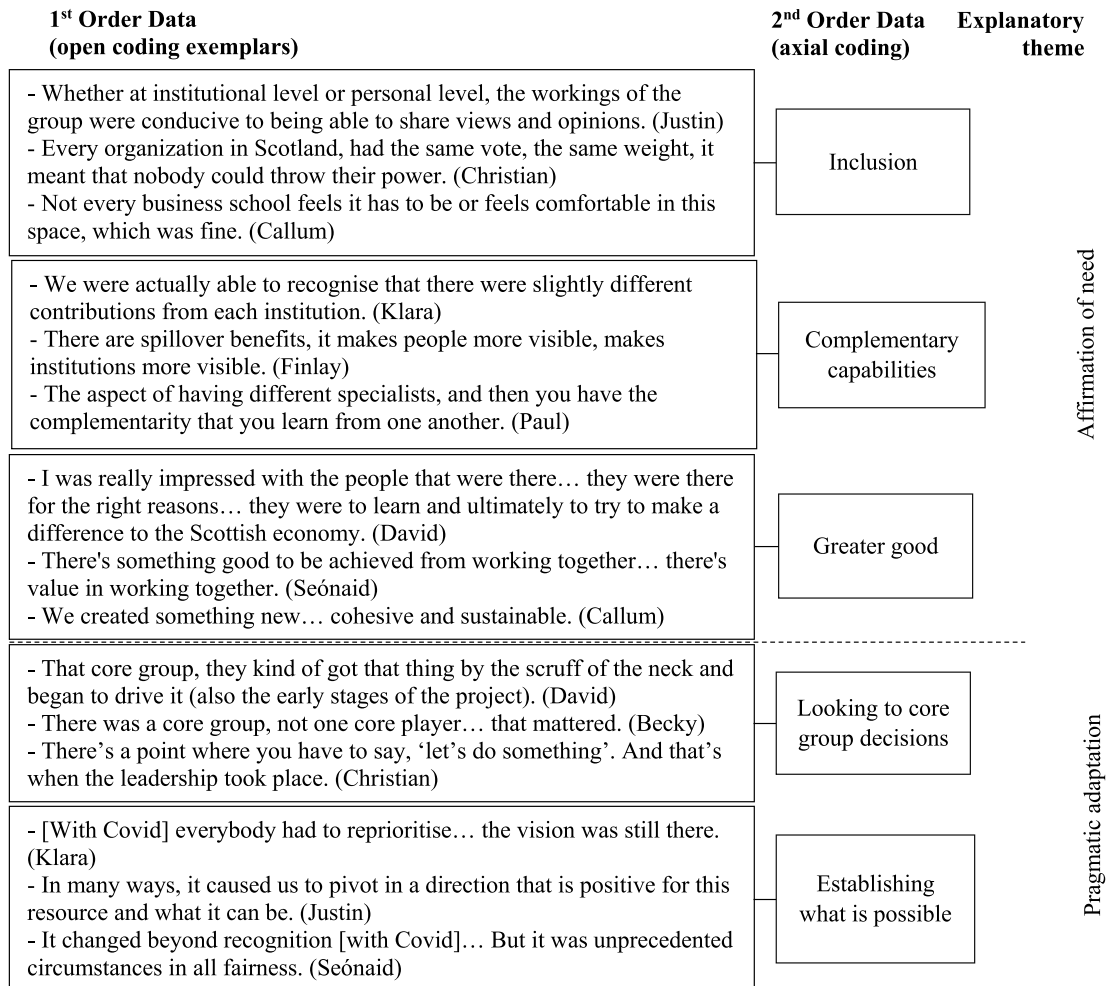


Fig. 3. Building a vision-based reference.

contribution, and peripheral support. For those considered integral, this involved “groundwork” (Christian) to get the group to a point where work could begin. There is an element of agenda setting, where these

individuals were “clear about what [the consortium] needed to do” (Callum) in terms of planning and “brokering” (Brian). This contrasts with developmental contributors, not necessarily setting the agenda but

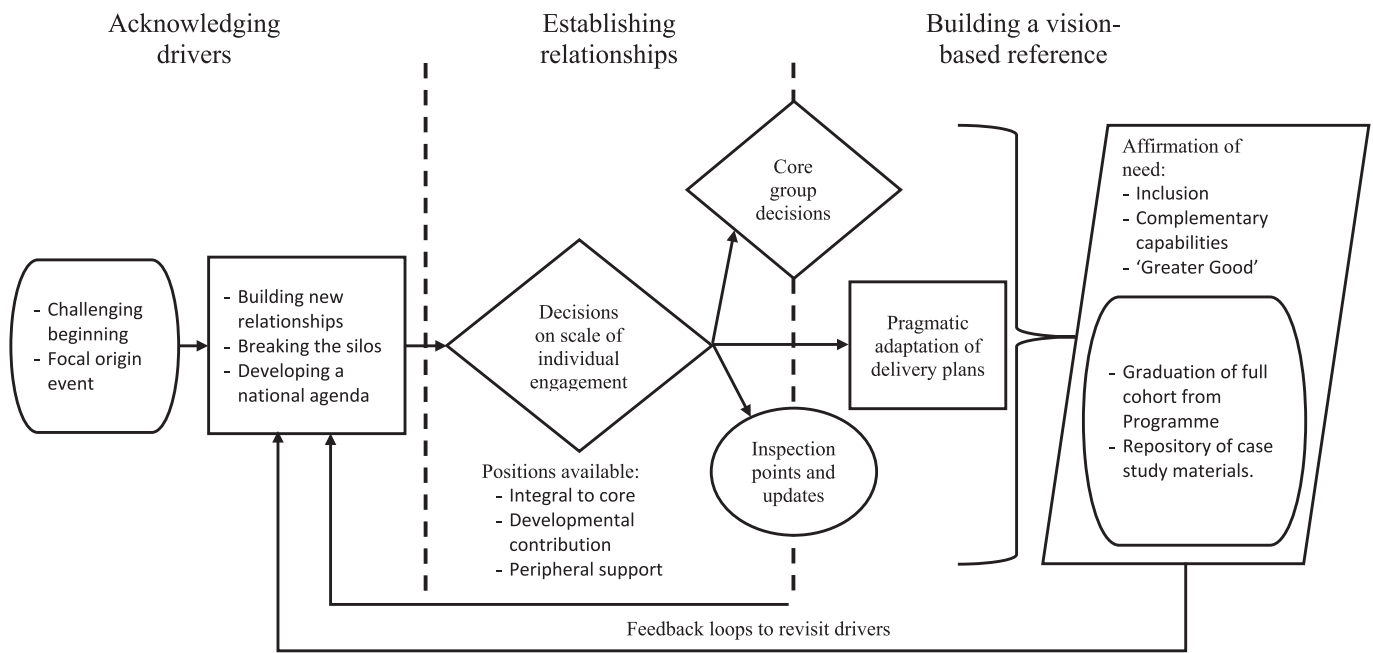


Fig. 4. Social processes of consortium development.

contributing to activities and providing input when required. Ensuring that “people can count on [them]” (Klara) and being thought of “more than most” (David) is important in this developmental role. While not going as far as being integral, the content of their expertise allows them to be integral at times, without the responsibility of direction. The final position is that of peripheral support. While this is least engaged with the core group, there remains an important and constructive role in furthering common interest. More task-oriented in nature, individuals build their contribution to the group as part of their professional ethos, providing a critical perspective, and “interest” (Monica) in the outcomes. One participant reflects on this position as follows:

*I am an interested partner in the periphery... trying to challenge the thinking. (Paul)*

#### 4.3. Building a vision-based reference

The final component constructed is the building of a vision-based reference, a more macro-level guiding factor made up of two explanatory themes, the ‘affirmation of need’ and the ability of ‘pragmatic adaptation’. Important in maintaining relationships, the vision-based reference is often reflected upon when more micro-level decisions and actions are contended. For instance, participants point to the diverse make-up of the network being, in and of itself, an affirmation of need. Inclusion of diverse approaches is seen as a key to the processes, introducing something to national capacity which was not previously obvious. Often, this focuses on institutional background, with a perception that some schools are rooted in practical skills and others more traditionally theoretical. As such, inclusion becomes the dominant vision of the consortium. Specifically, inclusion of difference:

*I think recognising differences is really important and learning from each other... I think you have to build those working relationships to then understand those different perspectives and then you’ve got to figure out, well, how does that different perspective help the collective piece. (Monica)*

Though some universities may be “competitively better or more academic, or less academic, or had a connection to the Highlands” (Christian), “trading chips” of being “humble” or “posh” were irrelevant, ensuring

“everyone had a significant contribution” (Christian) through complementary capabilities. However, there is also caution in having such variety of approach: “we all came from such different areas in our universities, it meant that different agendas or objectives took priority” (David).

While there is a strong nod to divergent backgrounds, the difficulty of this is reflected in: “the co-design and co-delivery... we maybe could have spent longer at brokering connections” (Brian). The timely nature of the project, and the need to avoid conflictual silos limited space for dissenting voice. This led some to consider their latent contribution unfulfilled. As such, “working together” (Seónaid) and “true collaboration” (Brian) are better considered an aspirational guiding vision, ideals which underline a need for “something new and something that was cohesive and sustainable” (Callum). Such ambiguous goals allow for a sense of ownership across all areas of the consortium, willing the network to emerge, despite the more pragmatic constraints of the task. Phrases such as, “I think we could still make a difference” (Layla) and that the collective goal is “the betterment of Scotland” (Brian), provide little detail but show a direction of feeling that the network coming together is more impactful than project outcomes alone.

The “greater good” (Christian) implied in such visionary ambition acts as a glue, holding individuals to the group, even at times when decisions on discrete activities are questioned. However, this remains precarious and relies on the “personalities involved and the attitude of the lead” (Becky). Many are quick to note that “the wider partnership has my support, not necessarily just the project” (Seónaid). As a result, the previously discussed “democratic model of governance” (Callum), and the role of a core group is fundamental in ensuring contentment:

*I think before that core group was constituted, there were some of these questions earlier about who knew what and who was speaking to who. But once that core group was constituted, then there was at least a focus of what information can be considered to be getting to everyone... it was very important that there was a core or the core group that was able to make decisions. (Paul)*

In combination, the strength of a guiding vision, though ambiguous, and the acknowledgement of a core team afforded the group some latitude in the second explanatory theme of this processual component, pragmatic adaptation. A fundamental shift from a face-to-face programme to online delivery and the development of support materials

and case studies, as the project adapted to the Covid-19 situation (Table 1), had the potential to reignite the division at the origins of the consortium. However, this did not occur, as the guiding vision of the network had evolved beyond the individual objectives of the original project. Again, it appears the breadth and ambiguity of vision allowed for this adaptive stage as the environment changed. While the “*core objective has always remained constant*” (David), there was a strong understanding the practice of the network would change. There is some suggestion that “*apathy [to the project] set in*” (David) as the impact of the pandemic and subsequent adaptations “*may have dampened things*” (Layla), prompting a more pragmatic approach. Klara explains:

*I think it was probably a bit of a victim of circumstance... just like a perfect storm. There's not the fun chat there used to be. But that might pick up, I mean it's all quick and transactional in nature [now].* (Klara)

## 5. Discussion

With this article, we expose how a collective network of entrepreneurial universities from varied and dispersed backgrounds coalesces around a common problem. While the network is formed around a specific project, we see the development of vision-based references, through which relationships between institutions are viewed. Theoretically, a NoP view takes us beyond an outcome-based approach of process variance, to instead consider the social processes of the consortium coming to fruition (Cloutier & Langley, 2020). Three processual components appear crucial in the consortium's development: acknowledging drivers, establishing relationships, and building a vision-based reference. These are visually represented in Fig. 4.

In acknowledging drivers, a need to build unique national relationships pulls the network into being. Important origin events and challenging beginnings foreground a shared understanding of these drivers before any further activities can take place. Multiple agendas initially appear in the siloed and competitive landscape of university business schools. In this network of dispersed knowledge (the most accurate description of this early stage), common interest is not yet established. The challenge of coalescing around a national imperative gave impetus to establish new priorities and goals around what the consortium was to achieve.

We find that values of inclusion and relationship building only emerge after initial processes of knowledge sharing, supporting Van Ballen et al.'s (2005) view that shared understandings are the result of interactions rather than a pre-condition. The siloed thinking and unilateral agendas plaguing academic entrepreneurship (Guerrero et al., 2014) led to fractious beginnings and isolationary assumptions. Interestingly, these tensions provide a preparatory platform from which a more cohesive network emerges (Pyrko et al., 2019), building a shared understanding of the need for mutual engagement (Iverson & McPhee, 2008). Following Macpherson and Clark (2009), we see the conflict, or at least acknowledgement of potential conflict, as a constructive and stabilising part of the process. This conflict is openly referred to, highlighting what the new network would bring and the value gained by consortium members operating as boundary spanners, rather than dwelling in pre-existing fields of practice (Levina & Vaast, 2005).

With a common understanding on the drivers of the consortium openly acknowledged, the second processual element establishes the nature of relationships across the consortium. Such relationships provide expectations and are in turn formative in delineating modes of participation. Positions are made available, partly through discourse, and partly as deference to a designated core leadership (Probst & Borzillo, 2008). As expected, these roles have implications for the strength of ties formed and the content of the interaction (Comunian, 2017). In a challenge to broader theories on situational learning (Lave & Wenger, 1991), consortium members do not look to develop towards more integral functions. Instead, this is one of the first decision stages of the process, decisions on levels of engagement by individuals as they choose

positions to occupy. Post the acknowledgement of drivers, these decisions should be seen as separate from an identification with the broader values of the consortium. Macpherson et al. (2020) provide some explanation for this, differentiating between engagement and identification, suggesting that limited engagement with the specific activities of the scale-up programme does not implicate identification with the broader aims of the collective. There is nothing to suggest that participants will not renegotiate their engagement as new practices develop and the activities of the network change with time. Indeed, as those integral to the core group go on to make decisions on the project itself, all members of the consortium continue to inspect the updates provided through regular governance board meetings. These inspection points provide opportunity to revisit the drivers of the network, and in turn allow all members to re-calibrate their own levels of engagement.

This brings us to the third and final processual component, considering identification with a vision-based reference. The decision-making stages and iterative reinforcement of drivers forges a pragmatic adaptation in the network, along with the common affirmation of the need for collective effort. The way in which participants view this guiding vision is akin to that of a boundary object (Bechky, 2003; Carlile, 2002). There are reference points of ‘inclusion’ and ‘complementary capabilities’ which show progression from the origins of unilateral isolationism. While there may be scepticism and even disagreement on the delivery of the scale-up project, the vision of a ‘greater good’ binds the consortium to a common idea – a linguistic and symbolic artefact which transcends the institutional origins of the consortium members. Each participant recognises the importance of this admittedly ambiguous vision, considered the ultimate outcome of the consortium, over the specifics of the scale-up project.

Amin and Roberts (2008) discuss ambiguity as related to bringing dispersed and varied knowledge bases together. They suggest that it is through reconciliations of this ambiguity that the strengths of the network are harnessed. Kaethler (2019) takes this further, to suggest that ambiguity can act as a mechanism to build ownership, allowing buy-in from the group, and seeding a more meaningful agenda to that of the initial impetus for interaction. As such, the building of this vision-based reference again provides an opportunity to revisit the original drivers of the network. In a recursive manner, the values and beliefs of the consortium shape the behaviours and interactions and vice versa, what Smith and Lewis (2011: 381) would describe as “*dynamic equilibrium*”. The vision is as socially dynamic as the network itself. As new issues and potential projects emerge, the drivers will once again be revisited, and identities reclaimed or granted through renewed interaction (Dionysiou & Tsoukas, 2013).

However, there is a danger that dynamism in an ambiguous vision allows for apathy around the practical activities of the project. While consortium members identify strongly with a national network of university business schools, the final stages of the scale-up programme are considered the realm of the core group alone. The graduation of a cohort of small businesses through the programme and the creation of a repository of materials indicate success of the scale-up programme, but without a follow-on project for the consortium to coalesce around, identification with a binding vision dissipates.

### 5.1. Theoretical implications

The findings of this case contribute to two main areas of literature. First, viewing the role of university business schools in small business support as a national imperative, encourages a reframing of how we view entrepreneurial universities. In the processual mechanics of the scale-up project, we see the consortium emerge not through a linear process, akin to individual commercialisation and consultancy, but rather through interactive social processes which encourage constructive inclusion and ultimately a more contextually appropriate support offering. These relational processes are complex arrangements, with individuals and institutions interacting at different levels of engagement



and different proximities to the core group (Cloutier & Langley, 2020). As such, we support Abreu and Grinevich (2013) in widening conceptualisations of the entrepreneurial university beyond an overly simplified view of unilateral commercial work. While much of the entrepreneurial university literature focuses on the characteristics of individual universities (Siegel & Wright, 2015), we see great potential in a more socialised view. We argue that a networked approach, socially dynamic in nature, enables the articulation of collective vision in university business school activity. This constructed vision is better placed to capture the complementary capabilities of the university sector, and thus better able to address issues of national or regional importance.

Second, the outcomes of the scale-up consortium, to some extent, transcend the outcomes of the project itself and reinforce the vision of a multi-lateral approach to entrepreneurial university activity. Here, we argue that the development of a vision-based reference acts as a boundary object holding the NofP together, overcoming siloed and unilateral approaches to academic entrepreneurship (Guerrero et al., 2014). This may be a more broadly defined boundary object than is currently seen in the NofP literature (Bechky, 2003). The articulated vision emerges from the interaction processes of the network, and in turn feeds back to reinforce the divers for multilateral collaboration – and ongoing construction and re-construction of shared understanding rather than a static state (Thompson, 2011). As the higher education sector is characterised by diversity of status and approach, such an inclusive guiding vision is necessary to establish the shared meaning behind the consortium's continued existence. This provides a demonstration of how vision evolves in the interactions of a new knowledge field (Tagliaventi & Mattarelli 2006), just as other boundary objects evolve to ensure a shared understanding (Levina & Vaast 2005). Further, the findings provide an empirical case of separate institutions coalescing around a temporary project to build higher-level outcomes (Comunian, 2017). Initial tensions and hesitancy are overcome as engagement settles (Macpherson & Clark, 2009). The conflictual processes driving NofPs into being are often overlooked in the literature (Gray & Gabriel, 2018), but are found to be important preparatory stages before more constructive relationships can be established. As expected, we find evidence of politicisation in the university sector, but also, the power of a common problem to illuminate universities' national role (Klofsten & Jones-Evans, 2000; Lopes et al., 2020; Urbano & Guerrero, 2013).

### 5.2. Practical implications

Current 'best practice' for entrepreneurial universities focuses on unilateral use of intellectual capital (Lombardi et al., 2019; Riviezzo et al., 2019). However, our findings suggest there is much to be gained from university business schools working together to support a national agenda. This presents several practical problems. Mindsets which normally compete (Martin et al., 2018), issues of status and university identity (Raffe & Croxford, 2015), and a localised focus (Lebeau & Cochrane, 2015) tend to pull business schools into defined areas of practice. This is particularly the case in Scotland where universities in the urban centres work alongside those serving rural and community-based regions. However, as this consortium coalesced around a common vision of business support, the complementary skills and reach of each network member became apparent and identity within the consortium stabilised.

Our findings show a will for business schools to form multilateral networks as a mechanism of national support, but policy initiatives are needed to structure the coming together of entrepreneurial universities in an economically competitive environment (Urbano & Guerrero, 2013). Importantly, identification with a broader vision transcends project specifics, reflecting the possibilities of working together, but this identification dissipates when the temporary project completes and any continued relationships are less structured. As such, this work answers calls to broaden the scope of entrepreneurial university activity in both policy and practice, to include more structure to informal and non-

commercial activities as platforms of collaboration (Abreu & Grinevich, 2013; Riviezzo et al., 2019).

## 6. Conclusion

We have looked to how a diverse and complex higher education sector coalesces around a common problem of national importance. Adopting a NofP view to the case of the scale-up consortium allows us to understand, in close detail, the processes of collective endeavour across institutions. We highlight the importance of a dynamic vision-based reference to bring knowledge bases together. This vision is informed by conflict resolution, establishing relationships and roles, and a common understanding of need. As we look to a broader view of entrepreneurial universities, theorising on the interactions of various institutions becomes an important consideration (Corley & Gioia, 2011). Under the dominance of economic and commercial framing, independent institutions assume an isolationist, even competitive mindset, meaning the benefits of complementary knowledge are missed. We argue for a more socialised process perspective to gain greater understanding on how disparate university stakeholders can work together, building cohesive business support at a regional, and even national level.

There are acknowledged limitations in a study such as this. Foremost, this study is geographically bound. The Scottish higher education sector is contextually informed. Some of these contextual idiosyncrasies have informed the findings, such as the rurality and peripherality of some institutions, legacy issues of status between historical and 'new' universities, and varying specialism among the consortium members. However, there is nothing in the processual mechanisms of the scale-up consortium that are contextually bound. Entrepreneurial universities of all geographies have followed similar paths of knowledge-based differentiation (Schaeffer et al., 2021). It would be interesting to explore how the degree of such differentiation shapes the dynamics of process interactions. (Im)balances of power, degrees of specialisation, and even the personalities involved, may inform how the NofP develops. Further, though a strength of this work is the use of reflective data on network development over time, this was collected in a cross-sectional manner. Longitudinal approaches to establish the sustainability of networks among entrepreneurial universities would be beneficial. Future studies may also find it insightful to explore reasons for leaving such networks. Finally, there are methodological challenges when investigating collaborative dynamics with sole respondent techniques, which are heightened in a professional sphere with sensitivities of organisational status. This study echoes Gray and Gabriel (2018) in supporting observational methods to explore social interaction.

### CRediT authorship contribution statement

**James Cunningham:** Writing – original draft, Formal analysis, Data curation, Conceptualization. **Jeffrey Hughes:** Writing – review & editing, Formal analysis, Conceptualization. **Allane Hay:** Writing – review & editing, Data curation. **Francis J. Greene:** Writing – review & editing, Conceptualization. **Claire Seaman:** Writing – review & editing, Conceptualization.

### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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