33rd EGOS Colloquium: The Good Organization Sub-theme 24: Organizing Business Collective Action

Orchestration of business collaboration by third-party brokers

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Abstract

Collaboration is an acknowledged source of competitive advantage for commercial organisations. Collaboration provides firms with access to new ideas, research and other resources that enables innovation and growth from which economic benefits are realised.

Only limited research attention has been dedicated to third-parties, such as trade associations, that facilitate collaborative relationship development. The lack of research on trade associations has been described as lamentable. The predominant focus on organisational actors in business collaboration studies also has deflected attention from the social processes through which relationships are formed and developed. Situational analysis method is used to study the complex contexts and social processes through which third-party organisations facilitate collaboration.

The study identifies a variety of third-party organisations that broker relationship formation. Their effectiveness is impacted by their independence, priorities and commitment; the skills and social capital of their leaders, and the achievement of a cohesive yet stretching social mix at events.

The research contributes to organisational literature by positioning trade associations not just as influential products of inter-firm collaboration, but also as effective orchestrators of a range of collaboration enabling activities. The best performing of these third-party orchestrators (3POs) illustrate the practical potential of 3POs for enhancing economic growth through proactive collaboration orchestration.

Keywords

Collaboration, orchestration, brokering, social capital, trade association

Introduction

Inter-organisational collaboration helps firms to establish sustainable competitive advantage through continuous processes of learning and innovation (Feller, Parhankangas, Smeds, & Jaatinen, 2013) and to improve bottom-line performance (Cao & Zhang, 2011). Where organisations bring complementary resources to the relationship then synergy can increase the distributable value available to partners (Adegbesan & Higgins, 2011; Dyer & Singh, 1998).

Collaboration and innovation, particularly among SMEs, also feature prominently in public policy for economic growth. Collaborative relationships expose firms to diverse knowledge sources, new ideas, and complementary resources through which innovations may be created and exploited. The importance, in turn, of innovation to economic growth is illustrated in Europe by the current round of European Union investment. The European Commission and the European Investment Bank are dedicating €33.5Bn of direct investment, as part of a €500Bn programme, designed to promote economic development, including help for an estimated 290,000 SMEs (European_Commission, 2017). Eight billion euros will flow directly to SMEs to grow, irrespective of their that have an ambition research orientation (European Commission, 2016).

A wide variety of intermediary organisations are involved in innovation and growth programmes, yet only limited attention has been paid to the role of third-parties that facilitate the development of collaborative relationships. Many collaboration studies have been conducted in a firm to university context (Al-Laham, Amburgey, & Baden-Fuller, 2010; Eisner, Rahman, & Korn, 2009; Howard, Steensma, Lyles, & Dhanaraj, 2015), and some in a so-called triple-helix, where government is also involved (Eklinder-Frick, Eriksson, & Hallén, 2012; Etzkowitz & Leydesdorff, 2000). Although many such collaborations involve other bodies, especially in funding and commercializing activities, relatively little attention has been paid to the role that third-parties play in brokering and developing collaborative relationships. Third-parties, such as trade associations, provide an environment in which firms acquire technical knowledge, learn of each other's capabilities and can discuss potential collaboration.

There has also only been limited study, at the level of individual actors, of the social processes through which collaborative interactions develop. Collaboration literature predominantly focuses on organisational actors such that the importance of social interaction, and the capabilities and motivations of individuals, largely, has been ignored (Schillebeeckx, Chaturvedi, George, & King, 2016, p. 1494). Not all interactions are equally successful and an

understanding of the human and social dynamics of collaboration processes seems to be overdue.

The importance of understanding social relationships is indicated by studies in which the interpersonal dimensional lies at the heart of differences in organisational performance. Where, for instance, firms seek to buy-in innovation, and collaborate through an expert intermediary, the lack of day-to-day interworking means that they fail adequately to absorb knowledge, or to develop their own innovation capabilities (Al-Laham et al., 2010).

The social actor, and third-party actors themes discussed above, point to a lack of detail about the intricacies of collaborative relationships (Martin & Eisenhardt, 2010), especially at a social level, such that current organisationally centred explanations must be considered to be inadequate (Emberson & Storey, 2006).

Situational analysis (Clarke, 2005) is utilised to expose the variety of actors involved in the arena of business collaboration, and to explore circumstances that are more conducive to the formation of relationships from which partners may prosper.

Through this inductive research design, the study identifies the importance of the catalytic role that third-party organisations play in fostering new collaborative relationships, especially for SMEs. These organisations perform a brokering function, either indirectly, by fostering networking opportunities, or directly, through introductions and even active consortium building. These third-parties, typically, also perform other functions that facilitate collaborative relationship formation. Collectively, those functions are referred to as *orchestration*.

The study contributes to the limited existing theory on orchestration of inter-organisational collaboration in commercial contexts (Dhanaraj & Parkhe, 2006; Hingley, Lindgreen, & Grant, 2015), by identifying a variety of third-party orchestrator (3PO) organisations that facilitate collaboration. 3POs differ in their drivers and priorities, and whist collaboration is not always their main priority, their independence from the collaborating principals enhances their effectiveness in this role. The wider variability in how these organisations view and pursue collaboration suggests that there is considerable unfulfilled potential, and that many more 3POs could take a more proactive approach to orchestrating collaboration, helping to stimulate the growth that public administrators envisage. This latent potential, particularly with respect to trade associations, should be of interest to policy makers and senior industry stakeholders alike.

Theoretical Background

This study explores third-party facilitation of inter-organisational collaborative activity. Two related, though limited, bodies of literature are reviewed. In the first, orchestration is discussed in relation to how a focal firm can influence peers around a common standard, to mutual advantage. The second body considers how firms may collaborate, through collective action, to influence the political and regulatory environment within which the firms operate. The bodies through which this influence is exerted, are the subject of further examination in this research. Firstly however, in recognition of the social perspective taken on collaboration, social capital theory is used as a theoretical grounding to explain why different types of social relationship are more, or less, appropriate in different collaborative situations.

Social capital in business collaboration

Through social capital, people derive opportunities to deploy financial and human capital (Burt, 1992). Although the "diverse and amorphous variety of definitions" (Korte & Lin, 2013, p. 410) have been criticised, this well-established concept describes the two competing tensions of close-tie bonding and weak-tie bridging that businesses need to balance when developing relationships (for a review of definitions see Adler and Kwon (2002)).

In the first of these perspectives, Granovetter (1973), challenged universal presumptions about the effectiveness of close relationships by proposing that the weak-ties of acquaintances provide superior information access advantages, where these links bridge previously disconnected groups. Whilst members of cohesive groups share much of the same information, bridges give connected groups access to new contacts and information (Granovetter, 1973, 1983). These weak-ties are a source of informational power to the bridging individuals. As weak-ties require much less time to establish and to maintain than strong ties, considerably more weak-ties may be maintained. Bridging is possible when diffuse social networks contain structural holes that weak-ties bridge (Burt, 2000). Individuals with many weak-ties are best placed to diffuse ideas quickly to the largest number of targets (Granovetter, 1973).

Strong-ties also confer advantages on group members who develop shared meanings and normalised values, and share information sources (Coleman, 1988). This bonding form of social capital leads to the development of trust among group members that facilitates commitment and responsive action.

Relative strength of ties

In reality, social ties are not simply weak or strong, and weak-ties may evolve into stronger ties over time (Antcliff, Saundry, & Stuart, 2007). The strength of ties may be characterised through a combination of the time, intimacy, emotional intensity and reciprocity extant in the relationship (Granovetter, 1973). Social closure refers to the strength of intra-group links and the establishment of trust, such that the members of the group can be relied on to observe group norms (Portes, 2000). Social closure leads to a greater willingness and greater capacity, through proximity, for the exchange of tacit knowledge. The trust established also leads to a greater willingness and ability of the group to deal with task uncertainty (Adler & Kwon, 2002).

Effectiveness of the bridging and bonding forms of social capital

Social closure (high bonding) therefore, is better suited to complex and uncertain problem solving. However, where tasks are more certain but information or resource access are concerns, then network bridges provide for a more cost-effective means of access to a wider range of resources (Adler & Kwon, 2002). Whilst weak-ties are sufficient for the transfer of highly codified knowledge, strong-ties are needed to enable the transfer of complex and non-codified knowledge (Hansen, 1999). Rich-ties, in which multiple links are established between collaborating groups, have also been linked with enhanced transfer of complex knowledge (Aalbers, Dolfsma, & Koppius, 2014).

Ultimately however, the effectiveness of social capital is contingent on factors beyond structural network conditions and tie-strength. The existence of a bridge across a structural hole is not in itself enough to generate social capital: "Brokerage opportunities do not by themselves turn into success, and people are not equally comfortable as brokers between groups" (Burt, 2000, p. 383). Actors must be willing to utilise their social capital; they must have the opportunity and capability (Adler & Kwon, 2002), and have an expectation of success (Nahapiet & Ghoshal, 1998). The establishment of social capital is therefore contingent on personal as well as network and task factors.

Personnel rotation

Social capital should not be regarded solely as a beneficial resource (Adler & Kwon, 2002; Nahapiet & Ghoshal, 1998), as forms useful for one purpose may be ineffective or detrimental to other purposes (Coleman, 1988). A preoccupation with contrasting the relative benefits of the bonding versus bridging perspectives has meant that negative facets of social capital are underplayed (Portes, 2000). Social closure, for instance, may lead to the exclusion of outsiders

and isolation from new ideas, whilst social norms can inhibit initiative (Portes, 2000). On the one hand, stability in personnel and well established social processes, lead to a convergence of ideas, beliefs and knowledge that are the basis of a collective identity (Hardy, Lawrence, & Grant, 2005), but on the other, overly stable relationships can lose effectiveness over time such that new personnel need to be introduced, periodically, to maintain a level of creative abrasion (Skilton & Dooley, 2010). Overly stable groups can also suffer from issues associated with groupthink and dysfunctional decision making where commitment to group cohesion becomes a higher priority to members than performance outcomes (Sundaramurthy & Lewis, 2003). This suggests therefore, that effective collaboration depends on a tension between the social cohesion of a collaborative group and creativity stimulated by personnel rotation.

In practice collaborative relationships are often "exceedingly unstable" and experience changes to structure, personnel, management style and even relationship goals (Majchrzak, Jarvenpaa, & Bagherzadeh, 2015, p. 1339). Such disruption may be expected to have a negative impact as accumulated experience, knowledge and personal relationships are lost, but the benefits of creative abrasion may explain why, when appropriately managed, personnel change can also be a feature of successful relationships (Majchrzak et al., 2015).

The complex effects on relationships and innovation creativity arising from changes to personnel, coupled with individuals' differing accumulations of bridging or bonding social capital, and their differing capabilities in exploiting that capital, all serve to illustrate why organisations cannot be considered to be groups of homogeneous individuals (Schillebeeckx et al., 2016) and how a social perspective on collaboration may contribute to improved effectiveness. In the complex social topography of collaboration, where social groups exist at intra-organisational, inter-organisational and network levels (through collectives such as professional institutions), it is particularly important that research considers a widened set of actors for their effects on the formation and operation of relationships.

Organisation of collaboration

Social organisation is further complicated in inter-organisational contexts where the lack of clear hierarchies can result in leadership uncertainties (Huxham & Vangen, 2000). A lack of direction can be even more problematic in multi-organisational contexts unless a clear organisational leader is established. There is limited literature on the facilitation and organisation of collaboration, especially in multi-party groups, but roles have been proposed for collaboration *orchestrators* in innovation networks (Dhanaraj & Parkhe, 2006; Nambisan

& Sawhney, 2011), *convenors* of socio-political collaborations (Gray, 1985) and *honest brokers* of peer-to-peer collaboration (Hingley et al., 2015).

Leaders of collaborative activity in organisational networks need to assume the mantle of nondominant orchestrators (Dhanaraj & Parkhe, 2006). Focal, or hub, organisations can fulfil this role either as integrators, where they retain control of value creation and its appropriation, or as a leaders of innovation platforms through which partners co-market compatible products (Nambisan & Sawhney, 2011). As well as controlling value appropriation, orchestrators are responsible for facilitating knowledge sharing between collaborators and for reinforcing commitment upon which network stability is founded (Dhanaraj & Parkhe, 2006). In practice commercial networks are difficult to orchestrate (Desouza et al., 2009) and no single company is likely to have control, even if it believes otherwise (Håkansson & Ford, 2002). However, the more this rhetoric shifts away from leadership toward control, the less compatible it is with collaboration logic (Sundaramurthy & Lewis, 2003). Focal organisations in these relationships are commercial stakeholders and their orchestration efforts will be assessed by partners in that light.

In contrast to the orchestration of commercial collaborating groups, Gray (1985) studied collaboration as a preferred alternative to adversarial dispute resolution in complex, multi-organisational, high-dependency relationships. In these complex problem domains, the role of a *convenor* is recognised to ensure that suitable conditions for collaboration are established, and that stakeholders are committed to working cooperatively. The convenor role may be performed by a central umbrella organisation, if one exists, otherwise an organisation needs to be identified that all stakeholders agree has the legitimate authority to organise the domain (Gray, 1985). The primary role of the convenor is dispute resolution and removal of disablers, rather than exploitation of opportunity, but convenors, like orchestrators, must gain acceptance by all parties for them to be able to form a stable cooperating group.

Acceptance of a collaboration organiser may be more forthcoming where it is regarded as relatively power neutral. Hingley et al. (2015) suggest that third-party logistics companies have the potential to be regarded as "honest brokers" that would hold a neutral position between collaborating-peer, client organisations. This honest brokering contrasts with opportunist brokering that occurs when a broker maintains a position as go-between for its own commercial advantage (Stephens, Fulk, & Monge, 2009).

Although each of these scenarios are largely structural in nature, the importance of socialisation and relational capital, at least to knowledge mobility, is also recognised (e.g. Dhanaraj & Parkhe, 2006), but the processes through which collaborative relationships are formed and managed are considered predominantly in terms of organisational actors, despite collaboration being fundamentally undertaken by individuals (Gligor & Autry, 2012).

Business Collective Action

Collectives of collaborating firms enable their members to achieve more effective political lobbying (Jia, 2014; Walker & Rea, 2014), to gain better access to funding (Wincent, Örtqvist, Eriksson, & Autio, 2010), to address collective reputational issues (Winn, MacDonald, & Zietsma, 2008), and to affect industry standards and regulation (Delmas & Montes-Sancho, 2010; Lee, 2009).

Collective action may be undertaken through interfirm collaboration with politically influential firms, through formation of industry associations or through social protest movements (Gurses & Ozcan, 2014). Firms that collaborate in this way assume the power of the collective and are variously able to use their resources to engage lobbying consultants, create their own political lobbying vehicle (through a so-called peak organisation), or to fund election campaigns through political action committees (Barley, 2010). Such actions aim to change the industry regulatory environment directly, or indirectly. Collective political action can be less costly and more effective in achieving industry oriented change, from which all in the sector benefit, but is not necessarily a substitute strategy for firms that may also benefit from private corporate political action that achieves competitive benefits at the firm level (Jia, 2014).

Firms may also unite to address reputational issues that threaten an industry as a whole, especially where supported by large firms (Winn et al., 2008). Such shared problems are a powerful driver for the formation of peak organisations such as trade associations that can be effective vehicles for collective action (Barnett, 2013).

Collaborative action to pursue external funding streams is particularly important to SMEs in an innovation context, where joint action can help firms to counter rival bids, and finance innovation initiatives, for which member firms alone would have insufficient resources (Wincent et al., 2010).

Firms may also collaborate to establish, or to influence, industry-wide standards that could lower a sector's production and maintenance costs, or collaborate through voluntary agreements

with industry regulators as a lower-cost alternative to formal external regulation (Delmas & Montes-Sancho, 2010)

Large firms are important in providing additional scale and influence to trade associations, but that extra influence may also have a negative effect on an association such that their activities become governed by the issues of their largest members, rather than the industry as a whole (Barnett, 2013). Association effectiveness may also be affected by the number of member firms as well as their size. Whilst increased numbers may be expected to improve lobbying effectiveness, it can hinder more targeted actions such as funding applications. In this instance, smaller groups are noted to be more cohesive and cost-effective in achieving their aims (Wincent et al., 2010).

Of the firms that may benefit from collective action, not all participate, leading to a freeloading problem and a potential tragedy of the commons, where none are motivated to pursue the action. In practice, the situation is typically averted (Barnett, 2013), but variable commitment may still be evident, with early joiners to collective action likely to be more committed than late joiners, some of whom may even act contrary to the movement's objectives (Delmas & Montes-Sancho, 2010; Lee, 2009).

The collective action perspective is inevitably action oriented and therefore typically considers trade associations and other peak organisations in relation to specific categories of action. Examination of associations from an organisational perspective would provide greater insight into a wider set of functions undertaken by these organisations and their potential value to their members and their sector. Despite their prevalence, there has been a "lamentable" lack of research on trade associations (Barnett, 2013, p. 214), bodies that "deserve sustained attention" from researchers (Rajwani, Lawton, & Phillips, 2015).

Method

This study explores the social processes that lead to the formation and development of commercial collaborative relationships and focuses on the role that third-party organisations play in facilitating these processes.

The context of the study is a complex macro-economic environment in which public policy and funding places SME collaboration and innovation at the heart of economic growth strategy. A wide variety of public, private and third-sector organisations are involved in programme management and funding access assistance.

In recognition of the complex research context, situational analysis method (Clarke, 2005), was used because it offers a "considerably more elaborate" toolset for establishing the situational complexities that affect social processes (Clarke, 2003, p. 555). In contrast to traditional grounded theory where basic social processes are the primary focus of attention, with situational analysis, a contemporary, complementary extension to grounded theory, the situation itself becomes a unit of analysis.

The research was undertaken in three main phases: an initial contextual immersion phase in which the researcher interacted directly with organisations in the field; a situational analysis phase in which the research context was refined and the situational elements established, and thirdly, a phase of theoretically sampled data collection and analysis in which social processes were investigated in detail.

In the initial phase, field notes were compiled on issues observed during over 1200 hours of direct engagement with twelve SMEs, as part of a business development programme funded by the European Commission. This phase helped to establish the range of actors involved, during which the role of third-party actors first emerged.

In the second phase, the main situational analysis was undertaken. Situational analysis method utilizes three cartographic techniques, the two most important of which are discussed here. Through social worlds/arenas maps, the context of engagement is established (arena), and the involvement of collective actors is explored. Through this process the variety of organisational actors involved was established, and the extent of their commitment, compared to other priorities, was assessed. Situational maps then enable a deeper analysis in which a wide range of human and non-human actors, issues, ideas, discursive constructions, and spatial and temporal factors are revealed (Clarke, 2005). These elements are first included on a randomly ordered 'messy map'. Multiple copies of this unordered situational map were then used to explore relationships between actors, with each copy focusing on a core actor. A structured (ordered) situational map was developed progressively, in parallel with this analysis (Table 1). These models were refined further as additional detail was revealed during phase three.

Table 1 – Ordered	situational map
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Individual human elements /actors	Non-human elements, actors / actants
Influential heads; lone wolf entrepreneurs; individuals as individuals; individuals as	Event/meeting infrastructure; organisations' websites; business directories; advertising
organisational representatives	media
Collective human elements / actors	Implicated silent actors/actants

SMEs; big customers; big suppliers; national/regional trade organisations; individual member institutes; universities; training organisations; EU; UK-Gov, UKTI, BI&S (now BEIS); local government and LEPs; chambers of commerce; investment programmes

Discursive constructions of human actors

The entrepreneurial dream; individualism; networking event; perceived value of collaboration; the growth imperative; hightech prominence; collaborating group

Political / economic elements

Regional funding priorities/allocations; cities vs rural economy;

Temporal elements

Transient funding; perishability of innovative ideas; shifting economic sands; individuals wasted time

Major issues / debates

Risk of IP leakage especially from SMEs into larger organisations What happens after funded initiatives end Company colleagues; missing gender/racial representatives; the dependent regional economy; missing companies especially blue-collar owned

Discursive constructions of non-human actants

Law on patents/IP/copyright; Concepts of networking & collaboration; Measures of economic improvement

Socio-cultural / symbolic elements

Educational divide; social identities; sociability; memberships; accreditations; organisation symbols

Spatial elements

Local and regional tendency;

In the third phase, data was gathered from theoretically sampled interviewees and analysed. Twenty-eight open-ended, semi-structured interviews were undertaken with twenty-nine senior managers/executives. Interviewees all held senior positions in their organisations and had direct involvement in inter-organisational collaboration. An active interview (Holstein & Gubrium, 1995) approach was adopted and open-ended questions were used to "encourage unanticipated statements and stories to emerge" (Charmaz, 2014, p. 65). Interviews typically lasted 1-1.5 hours, were digitally recorded, and fully transcribed to ensure that the respondent voice was accurately represented. Analysis of interview transcripts followed three overlapping phases of initial, focused and theoretical coding (Charmaz, 2014). The interview protocol was revised as the study proceeded, in accordance with the method principles, to focus on emerging topics of interest and to explore categories in progressively greater depth as the analysis progressed through focused coding into theoretical coding (Saldanha, Mello, Knemeyer, & Vijayaraghavan, 2015). The second and third research phases overlapped, reflecting the iterating nature of grounded theory development (Birks & Mills, 2015).

Findings

This study explores social processes through which people identify and execute collaborative business relationships and considers situational influences on those processes. Through an inductive research design, the study highlights the importance of the catalytic role that third party organisations play in fostering new collaborative relationships, especially for SMEs.

Third-party organisations can facilitate new relationship creation either indirectly, by fostering networking opportunities, or more directly, through personal introductions and even consortium building. These connecting activities are referred to here as collaboration *brokering*. These same third-party organisations typically also perform a number of functions that can positively impact collaborative relationship formation. Collectively, those functions are referred to as *orchestration*, and the enactors referred to as third-party orchestrators (3POs).

Collaboration brokers vary in the functions that they undertake and in their effectiveness as brokers. Effectiveness is moderated by organisational factors including collaboration commitment and the organisation's perceived independence; personal factors relating to the skills and social capital of leaders, and thirdly, by complex social factors that determine the effectiveness of events.

Brokering and third-party orchestrators

Brokers help to establish the connections and build the relationships, through which, knowledge is exchanged, social relationships are developed, and solutions to many types of problem are identified. Brokers are third-party organisations that facilitate collaboration between principals, but do not share in the value created (the exceptions, BR5 & BR12 only benefit indirectly). Commercial independence makes these third-party organisations readily trustable.

All of the brokers studied undertook activities in addition to brokering that, directly or indirectly, contributed to the formation or development of collaborative relationships (**Error! Reference source not found.**). It is in the context of this wider activity range that organisations are referred to as orchestrators (3POs). Several different types of 3PO were studied, including trade associations, publicly funded business development programmes, a government and a private sector supply chain head, a social enterprise, an industry arbitration body, and an international business networking organisation.

3POs each had their own ways of working, varying styles of leadership and different approaches to engaging a diverse set of stakeholders. Each put a different emphasis on the importance of a function, with some focusing only on a subset, whilst others fulfil a much broader remit.

		Primary Functions						
Identifier: Sector	Description	Interviewed	Lobbying	Networking	Knowledge Exchange	Active Brokering	Standards	Referrals
BR1:Aerospace	Regional trade association	Members	Х	Х	Х		Х	
BR2:Automotive	Regional trade association	CEO	Х	Х	Х	Х	Х	
BR3:Construction	National trade association	Founder	Х	Х	Х		Х	
BR4:Specialist automotive	Niche national trade association	CEO	Х	Х	Х		Х	
BR5:Health	Large supply chain head	Manager			Х	Х	Х	
BR6:Health	Regional funded programme	CEO	Х	Х	Х	Х		
BR7:Facilities	National association	Member	Х	Х	Х			
BR8:Engineering	Triple-helix, regional funded programme	Prog. Manager			X	Х		
BR9:Commodities	International regulation	CEO	Х	Х	Х		Х	
BR10:General business	Social interest charity	CEO	X	X	X	Х		
BR11:General	International networking organisation	Members		Х				Х
BR12: Aerospace	International supply chain head	СРО		X	Х		Х	

Table 2 – Functions performed by third-party orchestrators

Brokering function

The 3POs facilitate the creation of inter-firm links, both passively, by hosting the events and situations through which connections are established, or in some cases also through active brokering.

Active brokers (BR2, BR5, BR6, BR8, and BR10) devoted considerable time to understanding members' backgrounds and interests and then effected personal introductions, or even covertly arranged seating at events to group potential collaborators. Two brokers (BR2, BR8) went as far as building consortia to exploit emerging opportunities. Typical of 3POs, these organisations had no commercial stake in the venture and were therefore readily accepted as brokers because of their independence. The extensive connections of their leaders also enabled them to identify additional relevant partners that otherwise may not have been engaged.

Case: BR2 is a relatively young regional trade association that takes a particularly proactive approach to encouraging collaboration, both between association members, and with external organisations. The CEO described the association's capability: "because of our contacts, and because we have a good understanding of what each of our member companies are doing, we have the ability to build consortia for whatever type of opportunity ... engaging internationally or nationally ... we needed to bring others in to the consortia ... through some of the contacts we had [the consortium was extended]". The contacts of the CEO herself seemed to be particularly important in bringing in additional partners to a consortium at the right stage. The CEO went on to describe three complex collaborative consortia that the association had helped to establish and then continued to support.

Lobbying function

Membership organisations, such as trade-associations, assume the power of the collective and through this are often able to achieve changes to funding policy or the statutory and regulatory environment, that even their largest members would be unable to a achieve alone. Two associations (BR3, BR4) were primarily created as *lobbying* organisations. BR3 has progressively merged with several peer organisations and in the process considerably increased its influence as membership rose from 75 to approximately 400. This enlarged group has increased its influence but through a widened group in which the voice of the original niche may be weakened. In contrast, BR4 has avoided mergers to maintain its niche focus.

Case: BR4 is a niche trade association in the automotive sector that considers influencing regulation of its sub-sector to be its primary purpose. It therefore, remains independent of other groups to ensure that lobbying efforts are highly targeted. As most of the sub-sector's regulation originates at a European level it has expanded geographically rather than through merger with related bodies:

"...we are negotiating more and more with Brussels, at a European level ... we needed a European identity, so I was tasked, within the association, of setting up a European association" [TA head]. The association shares emerging political and regulatory information within the group but the competitive nature of the sub-sector is such that there is little close collaboration or sharing of proprietary knowledge.

Lobbying is a function most closely associated with membership bodies, for whom it is often a primary reason for existence, but is not a priority for other types of collaboration broker.

Standards function

In addition to attempting to influence macro-economic change, trade associations are also uniquely well positioned to promote and manage industry standards for collective benefit. This function may encompass the development standards, training, accreditation and regulating activities. The importance of the function varied considerably between associations.

Case: BR9 exists primarily as an international standards organisation, setting and enforcing compliance and arbitrating on disputes. Its international standing is such that it is also an effective *lobbying* organisation, and a respected training institution. Its activities are undertaken in a multi-jurisdictional context. Lobbying efforts become particularly complex however when they operate across multiple jurisdictions. As a global commodities association, it is often forced to react after governments have already effected policy changes that negatively impact free-trade, though increasingly it is attempting to be more proactive by improving its knowledge of impending change, and protecting standards through aggregated lobbying.

"it's called the Committee for the Cooperation between <commodity> Associations and there are 18 <commodity> associations from around the world. Imagine it as the United Nations of <commodity> associations ... our role is to lobby governments when things go wrong" [Association CEO].

Knowledge exchange function

Most 3POs regard knowledge dissemination as a high priority function. Organised events are typically arranged around presentations or site visits at which delegates have the opportunity to acquire knowledge of new products, tools, processes, and techniques. In the cases of trade associations knowledge dissemination may also include forthcoming legislative or regulatory changes, or developments in the political arena that may be expected to impact the sector.

"you never know what you're going to pick up from when you walk around a company ... So you get best practice sharing ... you're ... seeing things that may spark off ideas for you". [Broker CEO]

Networking function

The social composition of collaborating groups was observed to be more important than physical settings. 3POs create conditions in the form of: networking events, presentations, site visits, industry shows and awards dinners, through which attendees are afforded the chance to make new personal contacts, develop social relationships, and learn about other businesses. The relevance and interest

Well received events were noted where *brokering* organisations paid careful attention to group composition, but many experiences were negative and included phraseology such as "*the wrong people*" used in the example below.

Case: The marketing director of a medium sized IT company attended many networking events in the maritime sector but lamented: "nobody was interested … we never got a single sale out of it". Whilst the IT services were relevant to any business, the maritime company directors had little interest in IT and little understanding of the issues. The director was unable to establish common ground.

"We used to just go to the [maritime association] meetings. That was everybody from [named] container line, down to the guys that repair pallets on the dock road ... we actually got like our technical director to go in front of the podium ... but I would be sitting next to [an] operations managers from [container line]. He wasn't interested in IT. The guy who ran [the] marina he wasn't interested. He'd always say, oh, I'll mention it to our guys. It was the wrong people. I mean we talk now to [two container lines] separately".

Interviewees seemed to accept collaboration as a beneficial practice, including those who had negative experiences. However, SME leaders, sensitised by aggressive sales practices, sought the company of those with whom they shared a sense of identity and generally seemed unaware of the innovation potential that may existing in more diverse contacts.

Establishing a cohesive group, whilst also exposing its members to new ideas and methods, is a complex and challenging task, not always appreciated by SME owners. One trade association

CEO observed: "It's a very complicated dynamic which SME's don't always realise ..." whilst another inferred that the "wrong people" was a consequence of poor event management:

"sometimes you can be invited along to business networking, and it's just shabby ... put together with the wrong people and there isn't enough thoughtfulness[sic] behind it" [Broker CEO].

A suitable mix of compatible attendees is needed that have a shared identity, or common need, with the prospect of mutually beneficial outcomes. The SME owner below identifies himself as an "engineer" and courts "…like-minded engineers" to collaborate with.

"... found [networking events] of fairly limited value because the groups I joined seemed to be completely full of professional service providers rather than like-minded engineers and manufacturing people" [SME MD].

These examples illustrate the social factors, of which 3POs need to have a strong awareness. Those that invested time in understanding their members' interests, experience and knowledge, were rewarded with strong endorsements from stakeholders.

Generic Types

From the analysis of functions, third-party organisations were characterised into generic types (Table 3) that reflect their reasons for existence, main priorities, independence and typical funding arrangements.

Organisation Type	Examples	Description	Independence
Trade Associations	BR 1,2,7	Typical trade associations, supported by a fee-paying membership. Run by a small salaried core team. Demonstration of value-for-money is a key concern in membership retention which provides the power base for political influence	Independent structure but policy influenced by largest members through the fee- structure
Nascent alliances	BR 3,4	Differentiated from full trade associations by their member- resourced management. BR 3, 4 originated as nascent alliances run by	These arrangements provide additional advantage to firms resourcing the alliance and therefore constraining

Table 3 – Generic types of third-party orchestrator (3PO) organisations

		volunteers. BR3 has now evolved into a full trade association with its own staff.	perceptions of the organisation's independence
Head of large SC (acting as a broker)	BR5,12	Organisations seeking to promote collaboration by supply chain members with other SMEs to promote innovation. Indirect benefits envisaged.	Independent to the extent that they have no direct commercial involvement in relationships created. Results of collaboration may be incorporated into the supply- chain
Publicly funded investment programmes	BR6,8	Often run by universities (triple- helix), targeted at firms in one or more sectors, promoting growth through collaborative innovation. (Distinguished from triple-helix collaborations with a single firm).	Government funding keeps the programme board independent of commercial stakeholders.
Independent Industry regulator	BR9	BR9 is an unusual example of a membership body that sets and regulates international standards for an industry.	Independence is high and essential to its acceptance as an arbitrator of international disputes.
Social interest organisation	BR10	Collaboration is facilitated to support the primary social objectives. Membership funded independent organisation. Lobbying is a high priority function.	Membership of peers so organisation is highly independent.
Referrals organisation	BR11	Membership organisation to promoting networking and business referrals between members	Independent of individual member influence but works as a passive broker.

Leadership of brokering organisations

In this final section, the personal attributes and social capital of 3PO leaders is reported. Charismatic, well-connected leaders were a feature of eight of the twelve 3POs, including all of the active brokers. The capabilities and social capital of these leaders is of paramount importance in their effectiveness. In the example below (BR2), the performance of the organisation is closely associated with the "quite exceptional" performance of the CEO.

Case: BR2 is a regional engineering trade association in a sector worth £9Bn annually to the UK economy. Members range from global manufacturers to micro-firms. The association holds regular networking, social and knowledge exchange events, including site visits and provides industry specific accredited training. BR2 links members into

international trade visits, and largely through its CEO, enables members to access a wide network of research, funding, marketing and business development contacts.

One of it SME members highlighted the importance of the CEO: "I came across <BR2> ... it's a good networking club, but goes far beyond that ... I have found it to be one of the most useful organisations I've come across to be honest ... I've never heard anyone say a bad word about the organisation ... <CEO> is quite exceptional. She is an exceptional person and built a good team. That's why it works so well."

Discussion

Through a situational analysis of the actors engaged within the arena of commercial interorganisational collaboration, the role of third-party orchestrators (3POs) of collaboration, is highlighted. Facilitation of collaboration is not the main priority for many of these organisations but, directly or indirectly, their activities help to increase inter-organisational collaboration. The effectiveness with which these organisations contribute to the development of collaborative relationships varies considerably, suggesting that there is considerable scope for improvement in practice.

The social mix of attendees at industry events, the perceived independence of 3POs and the skills and social capital of their leaders were all noted to have an impact on collaboration. An improved understanding of the contribution that third-parties, such as trade associations, can make to economic growth, by fostering collaboration and innovation, could increase its priority and lead to more consistent and effective practice.

Social forces and tensions

The sector alignment of trade associations and a natural human tendency toward homophily may suppress innovation arising from collaborative interaction, unless the issues are recognised and managed. Most 3POs host events that encourage social interaction through which attendees learn about new technology and techniques as well as each other's capabilities and resources, but trade associations and other membership organisations may also be creating closed communities that may compromise innovation potential.

People are naturally inclined to socialise with others with whom they share something in common. Homophily (McPherson, Smith-Lovin, & Cook, 2001) describes the phenomenon through which people with common interests and traits are inclined to aggregate, form cohesive social groups (Coleman, 1988), and develop a collective social identity (Ashforth & Mael,

1989), such as the "engineer" quoted in the findings. This social bonding helps to improve communication and cognition amongst group members and therefore, is conducive to problem solving. This may be particularly important in technical collaborations, for instance, where complex knowledge transfer is known to be facilitated by rich-ties (Aalbers et al., 2014) and cognitive proximity (Enkel & Heil, 2014).

However, where association membership becomes relatively static, individuals are no longer exposed to new thinking and different experiences, and the potential for collaborative innovation decreases (Corsaro, Carla Ramos, Henneberg, & Naudé, 2012). The gradual increase in tie-strength leads to mutually supportive communities but also leads to group closure (Antcliff et al., 2007) where the group lacks the weak-tie networks that provide access to new ideas and resources.

The challenge for trade associations therefore is to ensure that fresh, socially compatible contacts are introduced from new domains. These contacts may need to share a common identity to be socially compatible. Cross-sectoral networking and knowledge exchange between peer 'engineers', who share an identity and a common language, is more likely to result in a productive exchange than a mix of identities even from within the same sector. Interaction between related trade associations, at a member level, could considerably improve idea-churn and innovation.

Independence

The third-party organisations included in this study were trusted as collaboration brokers because of their perceived commercial independence. Perceptions of relative independence have been proposed as a property of effective collaboration brokers (Hingley et al., 2015). 3POs included in the study did not have a direct commercial stake in products or services created by the collaborating principals, and therefore, are more commercially independent than the logistics providers that Hingley et al. champion as brokers. This greater independence suggests they are more likely to be accepted as facilitators, problem resolvers or even decision makers by members of a collaborating group.

Trusted, third-party brokers facilitate collaboration without direct gain and therefore sit at the opposite end of a dependence continuum from opportunistic mediating brokers that bridge erstwhile collaborators for their own commercial gain (Stephens et al., 2009).

The least independent cases, were the two supply-chain heads that expected to benefit indirectly in the longer term, through the availability of more innovative products and services. These organisations are similar to the concept of network-hub orchestrators (Dhanaraj & Parkhe, 2006). They also fulfil a much broader remit than convenors (Gray, 1985), whose main purpose is a problem solving role, namely resolving collaboration inhibitors.

Social capital of leaders

Well-connected leaders of orchestrator organisations are a source of weak-tie social capital bridges with other networks. The more extensive these leaders' social capital, the more likely they are to be able to broker new connections that would otherwise be unavailable to their members. New contacts may be useful sources of ideas, knowledge and technical resources. This social capital is an asset to the orchestrating organisation; a source of power, and a reason for continued membership. Orchestrator weak-tie networks represent a more efficient use of resources for the sector compared with members establishing their own overlapping networks.

Active orchestration

The wide variation in how actively (or passively) 3POs undertake many collaboration processes suggests that their full potential as instigators and guardians of collaborative interaction is substantially untapped. This may be especially true in the case of those trade associations that exist primarily as influencing and learning organisations. Incentivising more trade associations to take a more active lead in collaboration brokering is an option for policy makers seeking to engineer economic development, through greater business collaboration.

Lobbying

Trade associations are particularly well positioned to act as collaboration orchestrators because of the breadth of processes they cover. As well as putting on networking and learning events, these third-party bodies draw on social networks to broker new relationships, resolve resourcing issues and enable the commercial development of new ideas. Associations aggregate the power of their members and are also well positioned for undertaking influencing roles such as lobbying for favourable changes in policy and funding. The ability of trade associations both to influence trading conditions and to facilitate collaborative interaction suggests they have the potential to be highly effective orchestrators. The independence of trade associations, and the other thirdparty orchestrators reviewed, from the benefits derived by the collaborating principals, enables them to be readily accepted in their orchestrating role.

Theoretical contributions

There is only limited, fragmented literature currently on third-party facilitation of collaboration. This study contributes to research streams on network orchestration, collective action and the role of trade associations.

Existing literature on collaboration orchestration considers either how hub firms in networks organise less influential peers (Dhanaraj & Parkhe, 2006; Nambisan & Sawhney, 2011), or how intermediaries stimulate collaboration, either as a value-appropriating go-between (Stephens et al., 2009) or as an honest broker (Hingley et al., 2015). This study complements earlier work by recognising a wider variety of orchestrator organisations, identifying the different activities they undertake and by recognising the additional benefits associated with a group of more independent orchestrators.

The research also helps to address recent calls for management researchers to "pay more attention to trade associations" (Rajwani et al., 2015), whilst findings relating to active brokering help to address criticisms that there is a "dearth of empirical research about consortia" (Eisner et al., 2009, p. 852).

Much of the existing literature that discusses trade associations is focused on political action and bodies through which power can be aggregated to achieve statutory, regulatory or policy change. Through an examination of collaboration, this study has identified a much broader set of functions performed by associations that helps to explain their persistence beyond the realisation of initial political objectives.

Management implications

Trade associations have considerable potential to play a greater role in stimulating growth through collaboration where they accept the mantle of collaboration orchestrators, and actively pursue a brokering role. In the current round of European Union investment, €33.5Bn of direct investment is being dedicated to promote economic development, including help for an estimated 290,000 SMEs (European_Commission, 2017). Trade associations are well placed to lead investment distribution programmes and to orchestrate collaborative initiatives.

For third-party collaboration orchestrators, the individual characteristics of their leaders is particularly important. The social capital accumulated by leaders is essential to their effectiveness across the collaboration processes. Well-connected leaders act as bridges between different communities of practice as well as with wider research, political and business support communities.

The advantages of weak-tie social capital in accessing new ideas and resources that can stimulate innovation, compared with the close collaboration advantages associated with strongties, poses a challenge for collaboration orchestrators. On the one hand members value meeting others with whom they share a sense of identity and a common language. On the other, more innovative and commercially valuable outputs are likely where social boundaries are extended. For sector-specific bodies, such as trade associations, this suggests that more inter-sector knowledge exchange and interaction, at a member level, through joint events could achieve both aims.

Limitations and further research

Several different types of third-party collaboration broker were sampled in the study but a more systematic review of broker types was outside the project's scope. Further research on these organisations, including trade associations, would be able to establish the full diversity of collaboration functions undertaken. The priority of brokering, compared with other collaboration processes, could be investigated through quantitative study, for its effect on productive collaboration formation.

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