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Transient commitments and dynamic business networking

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A B S T R A C T

A business network is a dynamic organizational form, ever shifting and changing. Capturing conceptually the dynamics of a network is difficult. We seek to explicate and understand how transient commitments focused on instrumental activities unfold and how they lead to network dynamics. We study this using the activity and actor dimensions of a dynamic network. Our empirical data is based on the defense supply industry where a number of firms act, interdependently and yet also somewhat independently, to change and adjust their surrounding network and so bring new solutions to their customers.

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1. Introduction

In this paper we seek to understand the role of commitment in the dynamics of business networks. We explore how development processes unfold in business networks and how change is linked to transient commitments made by actors. We define transient commitments as the activities undertaken by two or more social actors, according to changing provisional or implied agreements for carrying out future actions. The concept of transient commitments is a specific adaptation of Lenney and Easton’s (2009) idea of ‘commitments’, where our focus shifts from agreements to activities. We argue this subtle distinction opens network thinking to a new understanding of dynamics.

Understanding of business network change is often conceptually anchored in both stability and change (Håkansson & Ford, 2002; Håkansson & Johanson, 1993). Ford et al. (1998: 43) view the trajectory of long-lasting relationships as a critical factor in network stability: “Because [business] relationships are substantial, they are not easy to change quickly and changes are likely to incur significant costs, both in disruption and in developing new relationships.” In this literature, changing business relationships was considered difficult but possible, provided there was potential to coordinate changes in production and technology within and across firms. As a result, ongoing change is seen to occur by adaptations, often unnoticed, within business relationships (Håkansson & Ford, 2002). The result is a “reactive” approach to network change (Munksgaard & Medlin, 2014). In other words, stability of the network comes first, and change is overridden and hidden inside the actors and business relationships.

How change fits into the picture is difficult to see in this durable view of business networks. We offer an alternative perspective and attempt to think in terms of business networking and change occurring first, before stability arises from the pre-existing business network. In this forward view we meet the substantive (Håkansson, Ford, Gadde, Snehota, & Waluszewski, 2009) and also constructivist nature of business networks (Halinen, Törnroos, & Elo, 2013). In a strong change view, uncertainty and processes are confronted by the actors’ need to create, maintain and develop business relationships that support activity to achieve their own and mutual interests. Thus, we argue past commitments are downplayed as actors create, develop and adjust processes to handle change. We see a business network as an outcome of the instrumental and utilitarian activities being pursued in the interactions between actors. Thus, we focus more on the temporal and constantly moving ways by which actors seek value through opportunities and business relationships, so that a network is less reliable as a structure.

Instead the forward temporal focus we envisage re-conceptualizes the
network as a continuously changing structure for seeking and developing opportunities.

This means that there is a focus on activities and mutable processes rather than structures, and that unfolding rather than stability appears as a defining network characteristic. In this perspective, we explore conceptually the transient commitments made by actors in collaborating with other actors. We submit that existing conceptualizations of commitment in the Industrial Marketing literature are underdeveloped. Transient commitments are central to the way in which actors relate to imagined potential futures in business networks. We set out to understand in a more systematic manner how transient commitments unfold in business networks and how they impact on network dynamics.

The paper is presented in the following manner. First, we review existing contributions to understanding commitment, mutual commitment and ‘commitments’ and their roles in network change in order to warrant our claim. We then provide a process perspective on business networks, which emphasizes fluidity and constant change rather than stability in the way in which actors deploy resources and activities. We next provide an argument for how an actor’s energetic transient commitments towards opportunities can be seen as central to the processes of change. This section concludes with a framework for understanding commitments in a network. At the same time, we develop a case for empirically investigating the nature of transient commitments. The case study also provides us with an empirical grounding and the possibility to reflect and further develop our conceptualizations. Our empirical data is based on cases in the defense supply industry, where a number of firms act to seek and make changes in their surrounding network so as to bring new solutions to their main customer. Finally we discuss theoretical and managerial implications.

2. Commitments in a business network

There are a number of different operationalizations and aliases of commitment (Palmatier, Dant, Gremlal, & Evans, 2006), but all include a temporal component. This temporal component creates a confounding issue in conceptualizing commitments. A firm can make a commitment, but ‘commitments’ are extended in time as acts and activities, or noted by events at a specific time. Lenney and Easton (2009) make the distinction and apply the terms ‘commitments’ to the time extended meaning of a commitment. We consider that the temporal distinction noted here strongly impacts on the conceptualization of dynamics in the business network. We will return to elaborate ‘commitments’ after a short digression into the concept of commitment and mutual commitment in the Industrial Marketing approach and beyond.

The studies of commitment began with a focus on business relationships and their stability (Håkansson, 1982). Anderson and Weitz (1992: 19) defined commitment as a “desire to develop a stable relationship, a willingness to make short-term sacrifices to maintain the relationship, and a confidence in the stability of the relationship.” Similarly for Morgan and Hunt (1994: 23) commitment is so “worth working on that it [a relationship] endures indefinitely”. Commitment, conceptualized here as a psychological state (Lenney & Easton, 2009), is frozen in the present and lost is the active sense of making and meeting ‘commitments’. Instead of commitments to activities, there is substituted a commitment to a business relationship. Applying this conceptualization of commitment to a business relationship leads to stability and many such connections form a network.

The temporal issue is apparent in another way when researchers seek to capture an understanding of processes by using variable studies to “explain a causal relationship in a variance theory” (Van de Ven, 1992: 169). For example, Gundlach, Achrol, and Mentzer (1995) view commitment as composed of three elements: (1) an instrumental self-interest stake in a relationship, (2) an attitudinal enduring intention to maintain a long-term stable relationship, and (3) a temporal component where commitment means “something only over the long-term” (p. 79), and where stake and attitude reveal consistency over time. Thus, commitment for these authors is a driver of stability in business relationships and so in later studies we see a strong element of permanence in network connections.

Taking commitment a step further Håkansson and Snehota (1995) characterized networks in the form of ‘mutual commitments’, where firms commit reciprocally to a business relationship. A mutual commitment reflects that business actors are interdependent and interact to seek and develop business with each other. Making a mutual commitment with specific business actors means also adapting resources and creating specificities in terms of how resources and activities are connected (Hallén, Johanson, & Seyed-Mohamed, 1991). Also important is interpersonal trust towards specific others. As business relationships develop over time, these commitment processes mature and become increasingly implied (Dwyer, Schurr, & Oh, 1987; Ford, 1980). Thus the network is seen both as a consequence of adaptations made through past interactions and as a form of agreement made for future interaction (Hallén et al., 1991). In the literature, long-term commitment is often linked to shared business, and mutual commitment is seen as a resource in its own right (Holm, Eriksson, & Johanson, 1999). Research on the longevity of committed business relationships seems to back-up this viewpoint.

However, mutual commitment leading to network stability may be a bridge too far when longer periods of change are considered (Medlin & Ellegaard, 2015). Problematizing the mutual concept shows that commitment is not static, that commitment may be asymmetric with different actors at different times, as firm strategy and personnel change, and that network change can also influence the degree of commitment a firm is capable of enacting. Given that networks are comprised of heterogeneous actors, the commitment each makes is also equally shaped in subjective managerial theories of action or network pictures (Ford & Håkansson, 2006; Snehota, 2003). But in each of these conceptualizations there is recourse to how a manager might think about and apply the network to solve a problem, and so the stage is set for a static view of a network apparent only in a backwards view.

These thoughts imply a central dilemma and challenge for networks as an organizational form. On the one hand, mutual commitment is an important element of stabilizing a network and thereby creating and realizing value, and also a necessary means to factor in resource access. On the other hand, mutual commitment in a changing network may have a binding effect and forestall the allocation of resources to other actors, and thereby restrict business actors from pursuing alternative and more valuable opportunities. Missing is the forward and purposive movement of actors (Lenney & Easton, 2009).

Thus, there is an issue with ‘mutual commitment’ and the nature of the network. When the network is the lens for reality and analysis, the temporal element that complements the enduring nature of a commitment stabilizes or, in more dynamic enunciations, there is fairly stable path dependence with punctuated changes. Open is the question: what happens in a more emergent and changing network? And how are commitments to be understood against such a backdrop?

Taking a more dynamic view Lenney and Easton (2009: 555) define commitments as “agreements between two or more social actors to carry out future actions”. Here the focus is on the agreements and so it is on the mutual; but there is also a goal of ‘future actions’, which begins to move in the conceptual direction we seek. Lenney and Easton (2009) seek this future and purposeful direction for actors. This becomes clear when they discuss the nature of commitments (see Table 1).

According to Lenney and Easton (2009) commitments are very much a social act or an agreement to act together; and here an important distinction must be drawn. Commitment by a firm to a relationship is distinctly different in nature from ‘mutual commitments’ and also from ‘commitments’. ‘Commitments’ are agreed temporal projections, rather than attributes of a business relationship, which is one meaning of ‘mutual commitments’. Also, ‘commitments’ as temporal projections are not an attribute of a single actor. Thus the distinction between the three terms becomes clear: ‘commitments’ are agreements that connect
3. Understanding the role of transient commitments in dynamic business networks

Capturing the forward seeking and provisional form of transient commitments requires viewing the network as dynamic in time flow. Rather than observe the network artifact in a backwards view from the present, where there is a strong sense of the past interpolated with stability into the future, one can step aside from the timeline and look into the immediate and distant future (Medlin & Törnroos, 2015).

In this view, process occurs in the “moving present” (Luhmann, 1979), where time is in continuous flux (Halinen, Medlin, & Törnroos, 2012). In such a view the network is in continual flux, in which the underlying activities between firms shift and there are continual changes, reversals, and fluctuations of transient commitments.

In this process-based approach, change has primacy over steady states. For example, social objects, such as a business relationship, are ongoing accomplishments, which continually fall apart and are rebuilt as they are interpreted and re-interpreted by involved actors. In this more fine-grained temporal perspective, the construction and continually changing creation of the business network is evident (Lenney & Easton, 2009) and contingent on the acts and interactions of changing actors in continual flux (see for instance Makkonen, Aarikka-Stenroos, & Ollikonen, 2012). In this view, what and who makes up the exchange relationship changes over time. In this strong change view, activity and processes dominate structure, and accordingly business relationship commitment assumes a feebler existence. Thus, business relationships are more inter-temporal and the acts and interacts of other actors may change, counter or dissolve the intent and commitment within a business relationship.

One way to capture this more fine-grained level of analysis is to apply the concept of strategic business nets (Möller & Rajala, 2007; Möller, Rajala, & Svahn, 2005). A strategic business net is distinguished from the open and macro-level business network by the intentionality of actors (Möller & Rajala, 2007). Focusing within a strategic net brings forth the possibility for firms to undertake activities intentionally and so change a set of value creating activities. The net concept also focuses on a forward view from the immediate present and the way in which actors’ intentions are connected to a future strategic opportunity. In addition the separation of the strategic net from the macro-level network opens the way for new opportunities.

However, like the proverbial eye of a needle, the constrained ‘flowing present’ allows an actor to follow through only on particular commitments. In the immediate present where action is dominant each actor has a particular conceptualization of reality, building on both expectations of their own activities and how they may align with those of other actors in the network to address an emerging opportunity. But some activities are unable to be undertaken in the present and so are slipped into a future time frame or transferred across to be undertaken by another actor. The second option means that the transient commitment is in three parts: the actor taking up the transient commitment has an agreement a) back to the actor whose activity they are taking on, and also b) back to the other actors working towards the opportunity, and finally c) to the customer.

In Fig. 1, we seek to graphically illustrate the notion of commitments and transient commitments as a tightening process in the flow of the on-going present, fuelled by the strategic initiative taken by a net of actors in preparing and implementing an opportunity. As we see it, recognition of an opportunity (see Periods D and E) creates and draws transient commitments from other network actors, who move into or out of the required activities as the need for action arises. However, equally, a multitude of other constraining commitments, activities and opportunities outside the focal network will constantly draw firms away into alternate paths. These other constraining commitments (see Period D) impose transience upon commitments within the path towards the emerging opportunity. Conversely, some actors may even hold back commitments, but also be ready to act as the opportunity emerges.
Next in Period F, as the opportunity is organized, the involved actors weave relationships to support their commitments towards activities. During this interweaving period transient commitments are tightly bound and there is little distance between the proposed activities and the commitments made by the actors. Separately and possibly unconnectedly, the transient commitments and focus on an opportunity may also attract attention from other potential actors and give rise to future opportunities (in Period x three such opportunities drawing the actors’ attention are shown inside the opportunity path and one is outside). In Period 1, different actors enact the activities needed to meet the opportunity. In this period, transient commitments may be transferred to new actors or between actors, so freeing an actor to complete higher priority activities, which may even be outside the opportunity path. The possibility to transfer activities to other actors indicates the presence of transient commitments. The greater the proportionate number of transient commitments in this task acting period of meeting and implementing an opportunity, the more fluid is the actor net. The flexibility provided by the transient commitments is shown by the increasing path width in Fig. 1.

If the opportunity fades prior to Period 1, the commitments evaporate, and all that is left is knowledge of how each firm performed in preparing for the opportunity and what transient commitments were made. These unfulfilled commitments may however, as with those actually fulfilled in implementing an opportunity, be available for reconfiguration into new opportunities. Thus, both fulfilled and unfulfilled transient commitments provide the basis for understanding the continually changing elements of the strategic net. The transient commitments are loaded as either capability performed and problem observed as solved at a specific technical level, or understood as promised; but in either case the transient commitments – the promises of activities – are also available for re-configuring the network. Thus a network in this forward interpretation is an “opportunity structure”.

The idea of linking networks with opportunities is not a new one (Achrol & Kotler, 1999). However, what is suggested is a new way of thinking about the network and commitments. Rather than seeing commitments as only becoming either weaker or stronger, we may see them as reflecting actors’ ongoing and transient commitment to activities directed at an opportunity. Thus, commitments are continually changing, both with respect to the unfolding of opportunities and with respect to the actor’s understanding of a possibility to participate in an unfolding opportunity. In the latter case the notion of a strong or weak commitment is feeble, and change is easier than the structural-stability notion of either “strong” or “weak” commitments would have us believe.

Based on these more nuanced understandings of commitment we approach our empirical study with the following research questions: (1) What do managers think about the commitment they make to other business actors – individuals, firms, business relationships and nets? (2) What do managers think about the provisional and implied agreements others make to them in business networks? (3) How do the interactions and activities based on these commitments create plasticity in a network?

4. Methodology

We follow the commitments of business actors from a process perspective. A process study focuses on data which represents sequences of events and focuses on how and why things evolve in a certain way. Methodologically, it is equally possible to embark on process studies through formulating ex ante models of dynamics and testing these empirically or by following the process as it unfolds (Langley, 1999; Van de Ven & Poole, 2005). The first approach typically represents a view of change where existing trajectories or field forces are extrapolated into the future (Van de Ven and Poole, 2005). The second approach exhibits several weaknesses when compared to the first: the data is messy and is challenging to analyze, the researcher’s subjective interpretations and theoretical disposition come into play and have a decisive role in combining data and theory, and also in extrapolating from a data point to abstract formulation of a theory. Without doubt a strong change perspective requires a qualitative approach, but a greater focus on process and change also requires more care in constructing the concepts that hold and allow apprehension of the evolving nature of commitments in business nets over time.

Although the process study as a research method is relatively new, there are already several recognized ways to conduct studies, which differ in their data needs and ability to handle data complexity. A key way of approaching process studies is through building a narrative focusing on the sequences of events that have led to apprehension of the process studied. Constructing such a narrative builds on several types of data and several levels of abstraction. Often, the conceptualization for piecing together an understanding is an eclectic one, which varies in degrees of precision and is inconsistent in the way data is treated. Formal, semi-structured and unstructured interviews comprise a key element in the interpretation process, but they must be supplemented with other data, such as informal talks, observations, artifacts and documents to enrich the narrative.

We have carried out 11 interviews, with managers and industry experts, of 30 to 90 min duration. All interviews have been transcribed and line-by-line coded by both authors. We have used this for developing an evolving coding scheme (see Table 3), linking data and emerging theoretical constructs and checking for confirmability (Gioia, Corley, & Hamilton, 2013). Interview transcripts have been returned to the interviewees for further comment and discussion. Also, several follow-up meetings and telephone meetings, which have been recorded and also transcribed, have been conducted. Furthermore, as part of the agreement with a main actor, we have had access to several internal documents, artifacts and other materials. Moreover, we have visited the production facilities of the firms and added secondary data in the form of newspaper articles and other media sources.

The apprehension of a strong process perspective in this study means that the network context is not the main feature of analysis or reality; rather the processes of interaction and their cascading influences shape to a greater extent the realization of change. To explore this

![Fig. 1. Transient commitments as an opportunity is prepared and enacted Key: P — provisional agreements, A — activities.](image)
interaction strong net, where change is transmitted strongly and quickly around the globe and through the virtual internet, we focus on a case study about how firms are flexible with commitments inside their business relationships.

In our view, the case study methodology is valuable, because of the focus on actors’ behavior in a context. Understanding the patterns of actions and interactions between actors, and how the patterns reflect back upon social, economic and technological aspects, among others, is the central virtue of case studies, and this emic nature is also the central quality of a single case study (Dyer & Wilkins, 1991).

The context of this case study is the defense industry. From our perspective, this is a suitable context because sales and marketing activities revolve around contracts and tenders, where bidders form coalitions to participate in future activities, should they win a tender. There is great uncertainty surrounding such bids, which means that each business actor individually must align their transient commitments with their other activities in order to make certain that they can deliver as promised, while at the same time be open for the emergent exchange possibilities. Thus, transient commitments to future activities, as well as commitment to firm and mutual commitments with business relationships, are likely present in an evolving context.

4.1. The case

The Innovation Net (IN) is a working title for a constellation of five firms from South Australia (all firm and individual names are anonymous). These firms seek to establish themselves or to expand further into the defense industry, predominantly through the development of innovative concepts for Unmanned Autonomous Vehicles (UAVs). The IN was informally created prior to a government initiative to form a local defense industry cluster. Important to note is that the IN does not perform as a single or collective actor. Rather each firm is an actor because as contract opportunities emerge different firms within the IN and other connected firms make different forms of commitments.

The five firms have been or are presently members of the Defense Teaming Centre (DTC) in Adelaide Australia, which is a non-profit industry association with more than 200 member companies (http://www.dtc.org.au/). The DTC focuses on influencing stakeholders at the regional, national and international level, promoting the interests of the defense industry in South Australia, and as well supporting the development of capabilities in individual member companies. Funding for the DTC is partly by membership fees and partly by the state, where the DTC undertakes specific capability development contracts.

A manager at DTC describes the IN in the following way:

“They are driven by the fact that they want to take their research, commercialize it into products and services and get out onto the global market. Within the IN the firms have got some particular expertise in aerial mapping, they’ve got some stuff on UAVs, ... extremely high level stuff. We’re talking about companies who predominantly have had a strong research arm for years, albeit they are small companies.”

[(Deputy CEO, DTC)]

The IN was initially formed by DM who is a member of the DTC board and the CEO of Advanced Manufacturing. A founding member of the DTC and with more than 20 years of industry experience and a complementary career and family history in defense aviation, DM has created an extensive personal network of managers and stakeholders at all levels of the industry. DM actively championed an initial meeting of the managers of the four other firms.

It was around 2012 I put my foot down and said, look it’s time. We need to really start formalizing this. So we looked at the key capabilities that we needed to actually build the type of products we were interested in, we had to have an avionics company and a systems company, with sensors and autopilot systems and the like.”

[(DM, AM)]

The five firms in the IN are relatively small, with no more than 15 employees each. The individual firms are displayed in Table 4, along with a brief profile, relating to their activities, skills and the business areas in which they are active. Also shown are past collaborations between the firms.

The first meeting among the leading managers from the five firms took place in 2013.

“It was about 2013, we started having our core IN meetings. … we identified that we needed to … start working smarter together. The model for that, we weren’t 100% sure, but we knew how we had all been working together in the past. So in the end we all signed our non-disclosure agreements.”

[(DM, AM)]

The members of the IN had several informal meetings after that, with the purpose of fleshing out ways to collaborate. These meetings also focused on emerging business opportunities that the members would like to pursue, as a group or as individual firms, using the relationships to other members in and outside the IN.

“So the way it works is that we may look at a big potential tender or opportunity coming up that we all want to work on, or who wants to work on it, or who doesn’t want to work. We don’t have to use each other at all. We can go out and use someone else as well. It’s extremely flexible in that respect. That helps us each sell our own wares to the other companies, and say well I’d rather use you because: (a) the relationship is good, (b) I understand that you do a very good product, and (c) you know we can work and as with dozens of stuff you change things slightly without too much of a headache for everybody.”

[(CEO, ADA)]

The members of the IN have worked together in different constellations, two successful private contracts and on six bids for military equipment, alas without success.

4.2. Actors’ commitments over time in the innovation net

The exploration of the nature of the managers’ commitment to maintaining an enduring relationship and commitments to activities and how they have changed over time was revealing in many ways. As expected, we saw differences in each CEO’s opinion of why they joined and to what they had committed their firm. We saw also that there were different commitments by project and intended projects, and we saw the commitments each firm had outside the IN. Furthermore, actors’ commitments have evolved, changing both in degree but also in nature. In addition, the actors’ commitments and involvements in activities outside the IN over time have changed as well. We will address these issues in turn.

4.2.1. The motivation for and nature of commitment to the innovation net

Here we consider, in the case, the nature of commitment as a desire for an enduring relationship. In order to explore the nature of commitment, it is important first to establish the basis for joining together. There was broad agreement across the managers of the significance of DM in convincing the business actors to spend time and resources on developing the IN. DM’s personal and professional qualities, especially his ability to coordinate, were recognized as critical characteristics enabling him to be a driving force in initiating the IN. Evident was a trust in DM by the other parties. But interestingly, there is diversity among the managers with respect to which qualities make DM a person worthy of relying on and joining. Whereas some would stress his personal qualities and drive, others have stressed his central role as a connector and linchpin:

“I was surprised to see what sort of a network DM had. Not so much what AM has under its roof, it’s the people that they are networked in
with. And then I realized, ok, well there's the model, the Hub and spokes and you get a multiplier effect without you having to put all the money up.

"You really need to harp on one thing, ethos. It's made very clear right up front that if there is any unethical behavior whatsoever, you could lose your membership to the group totally."

Considering the nature of commitment, as an enduring and partly mutual relationship, the following distinctions can be made. Apart from agreeing on DM's role as the combining force, the type of commitment espoused by the managers varies greatly. Some actors (i.e. AM, ADA, EI) are committed to the IN because of the capabilities and contacts represented in the group. These actors see the IN as a tool for spreading out activities and the risk of a project. A related, but slightly different commitment to the IN arises from the opportunity for external contacts with important industry stakeholders. The existence of the IN makes contacting stakeholders easier (i.e. AM, ADA, EI). There is also the example of one firm (AU) where there is mutual commitment with DM and then only secondarily to the IN. Finally, there is a commitment based on building a functioning collaborative net and the external recognition from future customers that this would bring (i.e. AM, ADA).

4.2.2. The co-evolution of transient commitments in the innovation net

The readiness to make commitments to activities was a response to DM's propagation and creation of images. He was rhetorically diligent not only in communicating ethics (friendliness and fairness in distribution of value and work), but also with respect to paths (the future generations of industry in South Australia and “giving new generations a better world” (DM)). The crucial importance of ongoing intermediation and fairness brokering in order to maintain commitments to activities, as well as sanctioning among actors who look differently at things, is addressed by DM.

"You really need to harp on one thing, ethos. It's made very clear right up front that if there is any unethical behavior whatsoever, you could lose your membership to the group totally."

However this management role of keeping different commitments to activities together becomes even clearer when the partners explain how IN meetings work.

"and we have had to keep that message as clear as possible the whole way through, that they will only ever achieve 80 percent solution within the net, ... you must be very clear, so 20 percent where you need to go outside the net and do what you have to do, outreach or whatever it may be to resolve it."

The type and nature of actors' commitments to activities also change over time. For each of the actors a specific path enmeshes their level of transient commitments to the IN as compared to other activities. In each of the member cases, individual stories unfolded with respect to their activity commitments to the IN (see Fig. 2). Two bidding options by the IN led by DM influenced the paths of three firms to make transient commitments, as they undertake activities either for or outside of the IN, given the call for action and the preparation of two contract bids and other events. In Fig. 2, ADA initially undertakes transient commitments for IN but moves to other activities, while firms AM and RSC are involved in a second bid. Yet at the same time ADA is ready to come back and fulfill activities for the IN when the timing is correct.

Table 4
An overview of business actors involved in the Innovation Net.

<table>
<thead>
<tr>
<th>Activities</th>
<th>Skills</th>
<th>Dominant business areas</th>
<th>Collaborations with partners from the IN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Manufacturing (AM)</td>
<td>Machining and design of alloy material frames</td>
<td>Production and project coordination, marketing</td>
<td>Predominantly aviation and military</td>
</tr>
<tr>
<td>Armament Upgrading (AU)</td>
<td>Armament and weapon platform design</td>
<td>Focused scientific research</td>
<td>Military</td>
</tr>
<tr>
<td>Air Drone Applications (ADA)</td>
<td>Development and manufacturing of surveillance and mapping drones</td>
<td>Arial mapping, photogrammetry</td>
<td>Infrastructure and surveillance</td>
</tr>
<tr>
<td>Electronic Innovations (EI)</td>
<td>Developing control and maintenance systems</td>
<td>Engineering and circuit board design</td>
<td>Broad range of industries, including military and health</td>
</tr>
<tr>
<td>Research Systems and Control (RSC)</td>
<td>Mission system and data processing for detecting and tracking objects</td>
<td>Data management, algorithms and statistics</td>
<td>Defense (predominantly marine)</td>
</tr>
</tbody>
</table>

"We have agreements where we can actually bring a party in when we need to get something made, we can't do it on our machine but we can take it down to one of our partners and they'll normally stop what they're doing on their machines, half way through, stop it and everything else and put this on. That's a very unique agreement. But with that comes a commitment, and effort of commitment to send them an element of work."

"How does our system work, ... you're juggling ten balls in the air, you are prioritizing down as small as you can and you're delegating where you can ... if you give someone a job and you can look at them and see they are uncomfortable … then the answer is - Can I help you, can I help you to alleviate any pressure?"

But also transient commitments gave a degree of fluidity to the net, as the willingness to call on a firm outside the IN in a time of need allowed successful contract completion.

"Halfway through the process, we just had a machine go down on us, what do we do about it. Okay, straight away we look at our capability and capacity in house, what are we doing right now? What are the priorities, do you want to come down and use our machines? They come down and use our machines free of charge. Swings and roundabouts. We get our product in time. Okay they're getting free use of a machine for 10, 20 hours, we've got to restructure things. But we win more work because we can serve our customers."

"Every opportunity has to be looked at in its own merits. Every opportunity may have a different business model. ... I mean you've got to be flexible. If you're going to be one of those sorts of companies that go nah, I've done 45 and you've done 55 and split it that way, you're probably going to struggle with the relationship side of things. "

"We have agreements where we can actually bring a party in when we need to get something made, we can't do it on our machine but we can take it down to one of our partners and they'll normally stop what they're doing on their machines, half way through, stop it and everything else and put this on. That's a very unique agreement. But with that comes a commitment, and effort of commitment to send them an element of work."

"How does our system work, ... you're juggling ten balls in the air, you are prioritizing down as small as you can and you're delegating where you can ... if you give someone a job and you can look at them and see they are uncomfortable … then the answer is - Can I help you, can I help you to alleviate any pressure?"

"Halfway through the process, we just had a machine go down on us, what do we do about it. Okay, straight away we look at our capability and capacity in house, what are we doing right now? What are the priorities, do you want to come down and use our machines? They come down and use our machines free of charge. Swings and roundabouts. We get our product in time. Okay they're getting free use of a machine for 10, 20 hours, we've got to restructure things. But we win more work because we can serve our customers."

"Every opportunity has to be looked at in its own merits. Every opportunity may have a different business model. ... I mean you've got to be flexible. If you're going to be one of those sorts of companies that go nah, I've done 45 and you've done 55 and split it that way, you're probably going to struggle with the relationship side of things. "

"We have agreements where we can actually bring a party in when we need to get something made, we can't do it on our machine but we can take it down to one of our partners and they'll normally stop what they're doing on their machines, half way through, stop it and everything else and put this on. That's a very unique agreement. But with that comes a commitment, and effort of commitment to send them an element of work."

"How does our system work, ... you're juggling ten balls in the air, you are prioritizing down as small as you can and you're delegating where you can ... if you give someone a job and you can look at them and see they are uncomfortable … then the answer is - Can I help you, can I help you to alleviate any pressure?"
The variability displayed in Fig. 2 was evident in many quotes that point to the flexibility of transient commitments, both about activities and within activities. It seems that the transient commitments actors make and their resources are never joined well together, but always work with incompleteness. It is also the case that keeping them together demands active work. The flexibility of these commitments to activities, rather than to or with another actor, point to a transient nature. Yet that transience can also extend over quite long periods.

“We had two companies that invested jointly in a product that we were bringing to market and originally our marketing approach was that we were going to jointly market it. And then the other party in this case had been approached by another major defense firm, and they came back to us and said, hey listen, this company has approached us, they have far more horse power, capabilities, than us. And so we sat down and renegotiated. Straight away the ethics come into it. Our agreements binding, however, it comes back to the old idea, would you rather have 10 percent and we sat down and we’ve now since adjusted the agreement.”

[(DM, AM)]

5. Analysis and discussion

Even though the context for the Innovation Net is a particular one, it provides an excellent backdrop for understanding transient commitments, commitment and mutual commitments. The case demonstrates how an opportunity is created by forming a strategic net within a set of actors with already existing activities and commitments. As the actors in the net interact, they add to the opportunities, intensifying the activity sequences and their mutual commitments. But this process is also influenced by the parallel development in other activities outside the net. As the activity sequences intensify, the opportunity path becomes more rigid and less forgiving, with respect to alignments with outside activities. This means that provisional agreements solidify into actual activities, which bind the actor’s activities at least in a short time frame. Thus, the path towards an opportunity may lead to both strengthened and weakened commitments in a short time period. Present are transient commitments, commitments to specific actors and mutual commitments.

We do not claim that the findings from our study are representative or generalizable in any positivist sense. The IN operates in a context of project sales, where suppliers must provide bids, and where tenders provide externally generated opportunities towards which actors must orient themselves. This is different from other business network contexts, where enterprise opportunities arise on a more continual basis. Also, the military complex is in many ways an idiosyncratic type of customer and the political context of buying and selling to the defense industry naturally influences our study. However, we do not think that this makes our findings less useful for understanding the dynamics of business networks. Rather than look for general laws of business networks our interest is in understanding their versatility and to draw insights that may sensitize other researchers to look for similarities and differences in how commitments are formed.

Linking the observations made in the case study with our previous discussion, we seek to make three points with respect to the nature of commitments in emergent business nets. Thus, these comments are specific to the view of a business net as an opportunity structure, in which the temporal perspective is forward and the period is short.

First, the case study reflects and further expands our notion that commitments are always incomplete and open to change as the opportunity structure moves forward. In the net, the business actors work with a sense of incompleteness, both with respect to their own involvement in commitments and also with their expectations towards the commitments of others. In the instances of commitment to an actor we refer to the desire to have the relationship endure (Gundlach et al., 1995; Morgan & Hunt, 1994). In each instance there is instrumental self-interest (Gundlach et al., 1995) and each actor is in the net to gain business. But the reason for the commitment to the IN is different according to how each actor understands the net concept. For example, AM, ADA and EI are committed to the IN because they understand the ‘tool characteristic’ of connected actors. On the other hand, AU is personally committed to DM and then to the IN, while RSC is committed firstly to AM and then to the IN. For the CEO of AU the professional and ethical stance of DM is critical, while for the CEO of RSC the connecting role of AM to customers and other stakeholders is critical. Thus the commitment is either to an individual or the firm or to the concept of the IN, but in all instances the commitment flows through to the net on different bases, according to individual understanding of the benefits. Thus, commitment is not a meaningfully object or a measurable item across a range of business actors within a network, unless at the same time there is high specificity. Nor are these commitments to actors significant or necessary for causing network stability. Instead, we may see commitment as an orientation towards a possibility, but also one which is prone to change as interaction unfolds and the opportunity structure moves forward.

Second, we observe an interesting linkage between commitment and the capability of actors. As capabilities change so does each actors’ understanding of their commitment and their ability to recognize opportunities and their own capabilities as well as those of others in the strategic net. This linkage between commitment and capability development impacts on the role of transient commitments as well. Every firm, no matter what is their understanding of the strategic net purpose and nature, is involved in undertaking activities at the edge of technical feasibility. But equally each CEO understands that every particular project of the IN may not be of mutual interest. Yet on the other hand, each CEO is willing to provide resources and advice to a net project if a need is
concerns the provide value. The third and final note concerning a net as an opportunity structure concerns the flexibility of transient commitments and the interrelated role of mutual commitments. As a new opportunity is identified and scoped, each firm discerns their part, the required tasks and the timing, the needed resources, the issues with commitments to other projects and the need for second and third level contingencies at critical times; thus each firm solidifies a future set of transient commitments ready for success (see Fig. 1). For some actors the transient commitments are not communicated or objectified inside the strategic net. Rather, there is a non-involvement and yet a readiness to act, which is partially noted and yet not brought fully to an agreed understanding. Thus, there is from a distance a self-organizing character to how the firms discern and communicate, or not communicate, their willingness to commit to activities in the opportunity structure.

If the bid is successful, the opportunity is implemented and each firm knows and understands that their transient commitments are tied to a positive completion. If problems arise either one party steps up more, or an independent party is sub-contracted to take a part task, or new solutions are found based on shorter term transient commitments within the total opportunity (e.g. EI completely re-wired an electronic test bed in 3 days). In a strategic net opportunity structure view, there is flexibility with even the option of involving outside firms and completely renegotiating transient commitments, so long as the resulting activities lead to a high quality product for the customer.

However transient commitments alone cannot hold together a net as an opportunity structure. Mutual commitments are necessary for network development and for change from within business relationships (Håkansson & Ford, 2002). However, mutual and transient commitments complement and enhance each other, with the latter allowing actors to experiment and be flexible within the bounded net and according to different iterations. In Fig. 3 we present a conceptualization of how transient commitments evolve alongside mutual commitments and aid in enacting network change, as a strategic net of actors develops within the broader network. In this figure different time periods for analysis capture commitment of various forms. Our temporal perspective and empirical evidence supports the idea that transient and mutual commitments work with each other, the first providing the means for fluidity and the second the support of longer term joint accountabilities and responsibilities. The flexibility of transient commitments ensures completion of the longer term opportunity, but equally observing a promise or completion of a transient commitment offers new network configurations as newer opportunities emerge. The dynamics of the network are thus framed by the chosen time periods, timing and pace.

6. Future research

The notion of managers’ transient commitments represents a step forward in understanding network change. This idea leads to a number of avenues for interesting research. First, transient commitments can open up new opportunities within the network, and they also offer a means to allow difficult undertakings to be enacted in new ways, or they may bring new resources to undertakings which might otherwise founder. Each of the distinctions implied here deserves further research, so that the dynamics of collaboration in a network are more clearly understood.

We consider the notion of strategic nets, as forward focused opportunity structures, to be underdeveloped. We concur with Snehota (1990) who pointed out that opportunities rest more in the capability set of multiple enterprises, rather than as a function of the network context, and that capabilities arise in the ways firms interact within a situation. He described market exchange opportunities as invented by business actors, based on their knowledge about “resource utilization reflected in differences in values attributed to different resources and activity elements... A market exchange opportunity corresponds thus to a possibility of devising a pattern that will become effective to some actors” (Snehota, 1990, 180). Here, we would add that the pattern of transient commitments and corresponding activities is another key. Thus, we see that further research is needed on how transient and mutual commitments complement each other and open the way to network change.

Our understanding of network dynamics is in its formative stages. Until now we have been caught in a view of stability-change without the conceptual tools to look into different futures and consider how to re-configure a net to grasp new opportunities. The consideration of dynamic and transient commitments opens the door to a continuously re-configuring business network, where disequilibrium rather than stability comes to the fore. Seeing commitments as envisaged and promised and then as enacted between actors in a pliable manner demonstrates more strongly the constructivist basis for network re-configuring. In this dynamic network view actor bonds (Havila & Wilkinson, 2002) followed by provisional and/or implied agreements and enacted activities are a main constituent. This perspective views the network, not as substantive, but as the possibility for substantive interaction. Thus, we see the network as a dynamic organization for understanding and enacting possibilities. The task now is to re-appraise our understanding of published research and decide new research projects that open the network as a changing phenomenon: an opportunity structure.
7. Managerial implications

Even though theoretical discussions often are discarded as esoteric and impractical by hard-nosed business managers, conceptual and theoretical discussions do hold value for deepening a manager’s ability to grasp and see facets of a reality often taken for granted. New conceptualizations help managers see everyday reality in a new light and discover and grasp untapped opportunities or adjust behaviors so as to foresee and possibly avoid potential challenges. The present discussion and view of commitments in a business network is important, since it brings about a more nuanced vocabulary for addressing the evolutionary nature and complexity of partnerships and relationships formed with other business actors.

By addressing contextual phenomena such as commitments in business networks from a process rather than a variance view, new insights are achieved with respect to the co-evolving nature of the commitments that firms make and receive. In turn, these more adequate framings of the commitments phenomena aid managers in freeing themselves from less effective theoretical frameworks, so enabling the devising of better strategies and practices. Thus, more nuanced frameworks allow new understandings of the reality of other actors and the nature of their commitments.

Commitments are not frozen in time, and understanding or treating commitments with business partners categorically demonstrates a lack of insightfulness into the unpredictable nature of unfolding events. On the other hand, being ever open to change still bounded by an ethical and honorable outcome for the actors involved, presents to managers a reality that they know well. In this sense, business actors form a community of actors/spectators and they carry with them a reputation for a reality that they know well. In this sense, business actors form a community of actors/spectators and they carry with them a reputation for their ability to live up to their commitments or their ability to avoid these commitments without harming the business activities of others.

In the case presented here these concepts were at the heart of the Innovation Network, as was the thought that re-configuring the net to create new opportunities was the normal approach to resolving complex and difficult technical issues. Collaboration, where there are forward looking cooperative and competitive activities to do better (Medlin & Ellegaard, 2015), is the way in which humans adjust their social milieu. Learning to risk and taking risks so as to undertake learning are essential elements of considering a substantive and constructivist reality. Finally, we note that in a socially constructed world collaborating is the only way forward.

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References