**Placing social capital in business networks: conceptualisation and research agenda**

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<th>Journal:</th>
<th>Journal of Business and Industrial Marketing</th>
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<td>Manuscript ID:</td>
<td>JBIM-12-2017-0324.R3</td>
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<td>Manuscript Type:</td>
<td>Original Article</td>
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<td>Keywords:</td>
<td>social capital, social exchange, economic sociology, ARA model, business relationships, business networks</td>
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Placing social capital in business networks: conceptualisation and research agenda

Abstract

Purpose – The paper aims to refine conceptual treatment of the social facet in business relationships and reinforce its significance in the IMP research tradition by integrating the concept of social capital in its original interpretation into the ARA model.

Design/methodology/approach – The paper begins by indicating some typical conceptual challenges associated with application of social capital in IMP. This is followed by a conceptual clarification that explores the origin and the essence of social capital in economic sociology. Finally, the paper proposes integrating social capital in its original interpretation into IMP’s ARA model and presents four propositions on how social capital is created in interaction between business actors.

Research limitations/implications – The paper is expected to aid IMP researchers in empirical contexts where the social component in business relationships is particularly prominent. As such, the novel approach presented could be used to further understand how social exchange processes are related to relationship governance, relationship initiation and development.

Findings – The paper shows how bridging Bourdieu’s theory of social capital with the IMP approach may solve the identified conceptual challenges. This paper’s main contribution is a cyclical model depicting how social capital is created in business networks. It is integrated into the ARA model and designed specifically for studying the social facet of business relationships.

Originality/value – The proposed model shows how social capital is generated through the dynamic interplay in the social facets of actor, activity and resource dimensions, emphasising its creation dynamics. The model integrates insights from the classic works in economic sociology to strengthen the social side of IMP’s socioeconomic interface and is intended to be used as a tool for empirical application.

Keywords social capital, social exchange, economic sociology, ARA model, business relationships, business networks

Paper type conceptual paper
Introduction

The idea that economic exchange is embedded in social interaction, or, as expressed in economic sociology by Granovetter (1985: 485) that economic action is embedded in specific “ongoing systems of social relations”, is now quite well established in the managerial literature. One distinct approach that has focused particularly on the content of business relationships in terms of the interaction processes they entail is the IMP research tradition (Industrial Marketing and Purchasing). Built on several decades of empirical research, this approach has been pivotal in challenging the idea of economic exchange as single transactions between atomistic sellers and buyers in the industrial market (Ford and Håkansson, 2006). Emphasising business relationships as the central element of network-like constellations of actors in the industrial market, IMP research is concerned with how different types of actors, embedded in social systems, create and use scarce resources in business networks (Easton and Araujo, 1994). As such, the IMP tradition can be seen as positioned at the interface of economics and sociology. However, given the intent to understand business relationships between industrial actors, the focus of IMP is placed on inter-organisational rather than inter-personal aspects. As Dubois and Håkansson (2002: 60) point out, industrial networks “are connected through relationships that are primarily characterised by material flow”. The augmented importance of economic interdependence between actors in industrial networks, as compared to pure social networks, is thus understandable. However, it remains a paradox that one of the key aspects of the interaction acknowledged in IMP – social exchange – has not received more attention within its conceptual apparatus. In recent years, several researchers have emphasised the potential of borrowing insights from the adjacent field of economic sociology. In particular, the work of Mandjak and Szántó (2010) that highlights this potential has been followed by Raskovic (2015) who has made an essential contribution by clarifying the origins and definitions of key concepts in economic sociology and proposing possible research directions for IMP scholars. However, no convincing attempt has yet been made at strengthening the social side of IMP’s socioeconomic interface by means of a conceptual merge that is palpable enough for empirical application. Motivated by the need to develop a conceptual tool to better grasp the social facet of business relationships, this paper follows the lead of these scholars in attempting to bridge ideas from economic sociology with IMP.

Social capital, as used by IMP researchers in several empirical studies, has evolved from this adjacent field as a particularly promising concept that may help better explain the social dynamics in business relationships. The purpose of this paper is therefore to explore how the original interpretation of social capital from economic sociology can be conceptualised within the IMP research tradition. Specifically, this paper’s main contribution is a model depicting how social capital is created through social connections and social practices in business networks. It is based on integration of social capital into the theoretical framework of the actor-resource-activity (ARA) model and designed to help advance an empirical understanding of the social facet of business relationships.

Currently, the conceptual treatment of social capital within IMP is rather fragmented and displays a number of conceptual challenges. A well-repeated definition of social capital by IMP researchers is that of Nahapiet and Ghoshal (1998: 243) who view social capital as “the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit”. On the face of it, this is almost identical to the original definition of Bourdieu (1986); however, their further theorisations round the concept itself reveal significant deviations from Bourdieu’s original discourse. By getting back to its source in economic sociology and delving particularly into Bourdieu’s founding conceptual work, this paper focuses on the dynamic creation of social capital, exposing its inherent state of continuously being created through social processes. Instead of treating social capital as a given, this view enables researchers to explore how social capital evolves in a business relationship. This is achieved by separating its essence from its origin and viewing social capital as social obligations that originate...
from relationship structure and contents. The proposed model depicts social capital in business relationships as continuously generated through a dynamic cyclical interplay with social connections and social practices integrated in the actor, activity and resource dimensions of the ARA model.

The remainder of the paper is structured in the following way. The first section provides a starting point by outlining previous conceptual treatment of the social facet of business relationships and indicating some typical conceptual challenges associated specifically with the application of social capital in IMP studies. The second section offers a conceptual clarification of social capital by exploring its sources in classic works in economic sociology, establishing probable causes for the challenges identified in IMP and highlighting the important conceptual distinction between its origin and its essence. The third section proposes specifically how social capital in its original form can be integrated into IMP's ARA model and presents four propositions on how the original interpretation of social capital translates into the ARA model. The concluding section highlights the paper's contributions and suggests a research agenda for how the proposed model can be used to advance an empirical understanding of social exchange in business relationships.

The social facet and social capital in IMP

The industrial network approach as a research tradition evolved with the pioneering introduction of IMP's interaction model designed to analyse interactions between sellers and buyers in industrial markets (Håkansson, 1982). The model depicts how repeated exchange episodes gradually interlock actors to form a dyadic relationship. The defining feature of this first generation of IMP research is its focus on the dyad. Further, stating that no business is an island, Håkansson and Snehota (1989) envisage business relationships as interrelated in network-like webs of industrial actors. This signifies the dawn of the second generation of IMP research with its focus on the network. The subsequent ARA (actor-resource-activity) model developed by Håkansson and Snehota (1995) provides a conceptual framework for the substance of business relationships within industrial networks. The model depicts an acting company in an industrial network in terms of an organisational structure, an activity structure and a resource collection. Further, it suggests that the substance of the interaction processes within a dyadic relationship may be described by the layers of actor bonds (mutual commitment of actors), activity links (mutual coordination of activities) and resource ties (mutual adaptation of resources) between the parties. The layers of buyer-seller relationships are not independent and there is an important interplay between them. The model also suggests that these layers are interconnected with, and affected by, resources, activities and actors in the wider network, conceptualised as an activity pattern, an actor web and a resource constellation. As such, the ARA model captures both the content and the structure (connectedness) of business relationships.

Conceptualisation of the social facet in IMP

In the interaction model, social exchange has been identified as one of the key exchange modes in business interactions. Even preceding this acknowledgement, Turnbull (1979) highlighted the importance of personal contacts in industrial networks. However, the social, or personal, dimension appears as less pronounced in the ARA model. Since the theoretical work of Easton and Araujo (1994) stressing IMP’s anchorage in the social domain, conceptual efforts dedicated specifically to the social facet in IMP have been scarce. Furthermore, although there is a number of examples, there have been relatively few empirical studies focusing specifically on the social, or personal, relationships between business actors as the central phenomenon. Some of the most impactful early examples have been the publications by Hallén (1992) and Marschan et al. (1996), which have demonstrated the role of personal networks in intra- and interorganisational structures, while the oft-cited conference papers by Axelsson and Agndal (2000) and Halinen and Salmi (2001) have discussed roles and functions of personal contact networks. This strand has been since followed up by several empirical contributions, such as Mainela (2007) on the evolution of interpersonal relationships in organisations.
One context where social exchange interactions were given particular empirical attention early on is that of non-Western markets. For instance, in their study of Chinese business networks, Björkman and Kock (1995) contend that it is difficult to distinguish between social and business exchanges and acknowledge that commercial exchanges take place in social networks. Similarly, in the Russian context, Salmi and Bäckman (1999: 163) claim that the social sphere forms “the basis for all business activities” and point out that business and personal relationships are intertwined (overlapping public and private life) to the extent that it is pointless to separate them. Later, Mattsson and Salmi (2013) follow up the view on personal networks as an integral part of business networks in Russia and discuss the overlap between personal and business networks. These are important observations illustrating that relationships in these types of business networks are dominated by personal relationships between business actors, placing individuals and not organisations at the forefront. The phenomena of blat and, especially, guanxi as specific social network types characteristic of Russian and Chinese societies have been since studied by several researchers, such as Jansson et al. (2007), Lu and Reve (2011), Zolkiewski and Feng (2011), Khan et al. (2016).

Although the question of interplay between business and personal relationships has been raised in these studies, less attention has been paid to how social relations actually evolve alongside economic relations, and how they indeed may come to govern the material flows in business relationships. No coherent conceptual framework has yet been proposed to explain the dynamics of creation and development of the symbiotically co-existing social and economic relations in business networks. In this respect, theoretical insights from economic sociology may serve as a valuable contribution to help disentangle exchange processes that are deeply embedded in the social fabric of business relationships (Easton and Araujo, 1994).

There is an indication of the influence of economic sociology in IMP as empirical studies of personal or social relationships often employ the concept of embeddedness. References to Granovetter (1985) have become rather common especially after the re-conceptualisation of embeddedness for use in IMP proposed by Halinen and Törnroos (1998). Yet, with the exception of a recent study by Mandják et al. (2016) that employs the original framework from economic sociology to study emerging relationships, in most empirical studies embeddedness is either merely mentioned in passing, or applied by some researchers as a metaphor to phenomena other than social relationships (e.g., Lindfelt and Törnroos, 2006; Andersson et al., 2007; Lind and Dubois, 2008). Thus, this link between IMP and economic sociology remains fragile.

Application of social capital in IMP

In recent years, the social dimension of business relationships within IMP has been addressed through the concept of social capital. It was the main theme of the 2007 IMP Asia conference that, in turn, led to a special issue in Industrial Marketing Management (Batt, 2008). This special issue on the topic of social capital in business networks has laid the basis for how social capital can be understood and applied from an IMP perspective. A few researchers have answered the call of Batt (2008) who has encouraged and implored the scientific community to explore social capital in the context of business networks, resulting in several empirical contributions set in versatile research settings. This section reviews some of these contributions. Those IMP papers that specifically employ social capital as the central concept are also presented in Appendix A.

Social capital, originally transferred from economic sociology to a variety of other disciplines, is a notoriously fuzzy concept that has undergone modifications even before entering the IMP arena. Its popularity clearly outpaces clarity in its manifold applications. In the IMP community, Raskovic (2015) rightly claims that social capital, among other concepts, is used with a lack of understanding of its original meaning in economic sociology. This may be explained by the fact that the dominant influence on IMP researchers’ conception of social capital comes not directly from economic sociology but from the managerial field. Specifically, a recurring conceptualisation in the IMP literature seems to be that of Nahapiet and Ghoshal (1998: 243) who view social capital as
comprising “both the network and the assets that may be mobilised through that network”. They propose the three dimensions of structural (network ties, network configuration and appropriable organisation), relational (trust, norms, obligations and expectations, and identification) and cognitive (shared language and codes, and shared narratives) social capital and discuss how each of them facilitates development of intellectual capital in organisations. This framework is probably perceived as convenient for use in empirical studies that follow the same route and treat social capital as a means to an end, preoccupied with the function of social capital in business relationships, rather than its creation. Three challenges associated with this view of social capital have been identified when analysing a sample of IMP papers (presented in appendix A) that employ social capital as a central concept. These challenges, presented below, concern conceptualising social capital as a set of components, viewing relationships as a unit of social capital and treating social capital as part of actor bonds. The purpose of this discussion is not to give an exhaustive overview of how social capital is applied in IMP research, but rather to systematise at the conceptual level some of its typical interpretations.

Social capital as a set of components

Within IMP, there seems to be no commitment to one definition of social capital; instead, IMP researchers tend to decompose it into different elements and define it in terms of collections of notions. For instance, Ramström (2008) divides it into three aspects: social interaction, social bonds and trust. Pinheiro et al. (2015: 287) operationalise it as “trust, commitment and shared interests”, while Lew et al. (2013) equate trust and network ties to the relational and structural dimensions of social capital, referring to Nahapiet and Ghoshal (1998). Seevers et al. (2010) view access to marketplace information, referral as word-of-mouth information and influence on partner behaviour as network resources within social capital. Kohtamäki et al. (2013) use relational capital as a form of social capital operationalised as trust, open interaction and shared destiny. Batt (2008: 487-488) defines it simultaneously as “the mobilisation, use and benefits gained through accessing present and future resources”. In other words, there seems to be little consensus on the actual essence of social capital (as opposed to its origins and outcomes) from an IMP perspective. This challenge seems to have its roots in the case specific nature of the previous research where IMP scholars have tried to adapt social capital to the purposes of their empirical studies, while theoretical efforts to grasp the concept have remained scarce proliferating the drift in its meaning.

Relationships as a unit of social capital

There is a tendency among IMP researchers to equate social capital with business relationships implying that the presence of a relationship in itself presupposes the existence of social capital. Thus, Ramström (2008: 503) defines social capital as “the relationships between individuals and organisations that facilitate action and yield opportunities to the members of the social network or structure”. This reflects a predominantly structural take on social capital where the essence of social capital as a resource is conflated with its origin in network relationships. Again, this view is influenced by the conceptualisation of Nahapiet and Ghoshal (1998) who place the structural dimension alongside the cognitive and relational dimensions that together constitute social capital. Thus, researchers who build their studies on these three dimensions are bound to treat network relationships as a part of social capital. In particular, Butler and Purchase (2008), Partanen et al. (2008), Westerlund and Svahn (2008) and Hartmann and Herb (2015) rely heavily on this framework, dividing social capital in the three dimensions in their empirical analyses. In a different perspective, Seevers et al. (2010) view social capital as encompassing the structure of an individual’s relationships (termed network configuration and network contacts) and the resources held by and available to one’s contacts (termed network resources). The structural focus on social capital is also evident in the paper of Eklinder-Frick et al. (2011), further pursued in the works of Eklinder-Frick et al. (2014) and Eklinder-Frick and Åge (2017), who refer to its bridging and bonding components following the framework of Putnam (2000). Similarly, categories of bridging and bonding social capital are
Social capital as a part of actor bonds

The distinct role of individuals as connected actors in business networks is emphasised in studies that employ social capital. It is used by Partanen et al. (2008), Westerlund and Svahn (2008), Leek and Canning (2011) and Seevers et al. (2010) to study personal relationships in networks of entrepreneurs and peers in specific industries. Similarly, it is employed by Pinheiro et al. (2015) and Ramström (2008) to contrast interpersonal and interorganisational relationships. In a somewhat different perspective, Finch et al. (2012) employ the distinction between social and economic capital articulated by Bourdieu (1986) to investigate individuals’ identities as either distinct from or coincident with business units in contexts rich in either social or economic capital. Due to this focus on human actors, social capital is often either equated to trust, commitment and identity (as properties of actor bonds) or clearly ascribed to actor bonds as the dimension with the most distinct human undertones in the ARA model. For instance, Finch et al. (2010) consider the dimension of actor bonds as reminiscent of, though not reducible to, social capital, while Hartmann and Herb (2015) describe actor bonds in terms of social capital. Even more specifically, Pinheiro et al. (2015: 287) treat social capital as “the combination of relational resources embedded in actor bonds”.

While the concept of social capital evidently has taken root in the IMP research tradition, its treatment appears rather fragmented and displays little consistency in definitions that often neglect its original meaning. In the absence of a unified conceptual perspective, it becomes an all-encompassing construct that blends into any surrounding like a chameleon. Following the lead of Mandják and Szántó (2010) and Raskovic (2015), this paper will delve into the realm of economic sociology and investigate the classic works on social capital, paying special attention to Bourdieu’s theoretical foundations, to try to formulate a unified approach to the concept for practical use in IMP. This paper’s back-to-the-source approach aims to demonstrate that the canonical works on social capital may not only help disentangle the challenges identified in IMP’s conceptual treatment of social capital but, in the final instance, pave the way to a coherent theoretical framework by integrating the original view of social capital into the layers of the ARA model. The following section begins by conceptual clarification of social capital and subsequently highlights the important conceptual distinction between its essence and its origin.

Social capital: back to the source

According to Bourdieu (1986: 54), although economic capital lies “at the root of all the other forms of capital”, it is but one specific form of capital. In his pioneering work, Bourdieu (1986: 46) argues that it is “impossible to account for the structure and functioning of the social world unless one reintroduces capital in all its forms and not solely in the one form recognised by economic theory”. Bourdieu (1986: 51) proposes an instrumental treatment of social capital as “the aggregate of actual or potential resources” accruing to actors by virtue of “possession of a durable network” of relationships of “mutual acquaintance and recognition”. From its inception, the original meaning of social capital has undergone a substantial dilution on the way from economic sociology to its subsequent conceptualisations in the managerial field. Arguably, this has resulted in the conceptual challenges identified above. In the following, these challenges are traced back to their roots, contrasted to Bourdieu’s original interpretation and summarised in Table 1.

Table 1 somewhere here
Social capital as a solid entity

Although pioneered by Bourdieu (1986), the concept of social capital has surfaced in the English-speaking world through the seminal work of Coleman (1988). Coleman (1988: 98) defines social capital by its function as “a variety of different entities”, all of them consisting of “some aspect of social structures” and facilitating “certain actions of actors” within the structure. Specifically, he treats obligations, expectations, trust, information, norms and sanctions as forms of social capital (Coleman, 1988). This vague and broad definition opened the floodgate for a wide range of constituents that came to construct the conceptual umbrella of social capital in the following years. This is probably the reason for social capital becoming an elastic term that means different things to different researchers. The tendency to define the essence of social capital in terms of its constituents initiated by Coleman (1988), along with the constituents themselves, is easily recognisable in the work of Nahapiet and Ghoshal (1998) that followed. In turn, their conceptualisation has proven to be a key source of reference in the managerial field, at least as influential as the classic works in economic sociology. The resulting problem is that social capital is often used as a stacking toy, where its resultant meaning follows from the elements it is constructed of or deconstructed to in different research settings.

In contrast, Bourdieu (1986: 47) treats social capital as a form of a credential, “made up of social obligations”, that entitles each network member to credit. His definition of social capital as a pool of obligations clearly relates to capital in its conventional economic sense. Exactly as financial obligations entitle the holder to the issuer’s resources, social obligations enable the recipient to claim access to the donor’s resources. Accumulated social obligations thus form the essence of social capital signifying potentially mobilisable resources. In contrast to numerous multidimensional constructs, this original unidimensional definition of social capital serves as a conceptual clarification, eliminating the nebula of additional meanings it has acquired over the years.

Relationships as the origin of social capital

Defining social capital in terms of nets of relationships has signified another departure from Bourdieu’s original conceptualisation. This tendency was probably spurred on by the early work of Burt (1992: 61) who introduced the concept into the organisational field and defined it as “at once the structure of contacts in a network and resources they each hold”. Despite their definition being strikingly similar to that of Bourdieu (1986), Nahapiet and Ghoshal (1998: 243) also view social capital as comprising “both the network and the assets that may be mobilised through that network”. Arguably, this represents the core problem that has obfuscated many of the consequent definitions of social capital. It is accurately articulated by Portes (1998) who highlights the importance of distinguishing between the mechanisms that generate social capital and the consequences of its possession by virtue of membership in social networks: a distinction conveyed by Bourdieu (1986) but obscured by Coleman (1988).

Bourdieu’s original definition of social capital draws attention to its sources and its dynamic genesis, as the creation of social capital essentially accounts for the gradual accumulation of social obligations from existing social relationships. This means that relationships are the origin of resources but not resources in themselves. In the managerial field, this view is supported by the prominent contribution of Adler and Kwon (2002). They develop their definition of social capital building on distinctions between its substance, sources and effects. Importantly, Adler and Kwon (2002: 23) state that “its source lies in the structure and content of the actor’s social relations”, clearly demarcating social capital from its origin in social relations.

Resource nature of social capital

There seems to be unanimity among economic sociologists and managerial scholars concerning the resource nature of social capital. It was originally conceptualised by Bourdieu (1986) as a resource in the form of obligations that give access to other network actors’ resources. Coleman (1988: 98) follows this insight by stating that “social capital constitutes a particular kind of resource available to
an actor”. However, while Nahapiet and Ghoshal (1998) also adopt Bourdieu’s definition of social capital as a sum of actual and potential resources, they proceed by conceptualising it in terms of three dimensions with a plethora of elements, such as ties, configurations, trust, norms, expectations, identification and so on. The side effect of this conceptualisation of social capital in terms of tie structures and contents is that it effectively conceals its inherent resource nature behind a myriad of possible constituents that in fact relate to its origin in network ties rather than its essence as a resource.

In contrast, Adler and Kwon (2002) in another strand of the managerial literature put an emphasis on treating social capital as an asset, juxtaposing it with other forms of capital and exploring their similarities. They stress that, as the metaphor of capital in itself implies, other resources may be invested into social capital with expectations of a flow of future benefits (Adler and Kwon, 2002). This view dates back to Bourdieu (1986) who states that social networks are not given but deliberately constructed by an endless effort, or investment strategies, for the purpose of creating and maintaining social capital as a reliable source of benefits. While the investments imply expenditure of economic capital directly or indirectly through time and energy, the acquired benefits imply conversion back to economic capital. It is precisely the conceptualisation of social capital as convertible to economic capital that displays its inherent resource nature and conveys its dynamic character in such conversions to and from economic capital.

Creation of social capital: from the origin to the essence

The underlying problem that arises when structures and contents of relationships are considered as integral parts of social capital is that it becomes impossible to give any coherent account of where social capital originates and how it is created. Avoiding such conflation enables the exploration of its origins and allows the dynamic picture of its creation to come forward.

Since social capital is derived from network ties, their quality and configuration play an important conditioning role. Focus on network structures as sources of social capital represents the formalist strand in economic sociology spurred on by the early work of Granovetter (1983) who addresses the quality of ties by defining them as weak or strong depending on the actors’ likelihood of being socially involved with each other. Configurations of strong and weak ties form the basis for creating social capital. To Burt (2000), a key source of social capital is a sparse network configuration rich in structural holes that can create an advantage for an actor whose relationships span the holes, or link groups not otherwise connected. On the other hand, Coleman (1988) emphasises actors’ interconnectedness in a network closure that facilitates effective sanctions that can monitor and guide behaviour, thereby strengthening social capital in dense networks.

However, configurations of the ties in themselves are not sufficient: the magnitude of social capital depends on the resources made available to the actor at the nodes of the network. It is intuitively clear that no resources can be derived from social connections to actors who lack resources. This view is in tune with Bourdieu (1986) who states that the volume of social capital possessed by an actor depends not only on the size of the network that can be effectively mobilised, but also on the amount of the capital possessed in its own right by the actor’s contacts.

Nevertheless, neither structures of ties nor resources in nodes create obligations that form the essence of social capital. Indeed, the amount of resources that a donor makes accessible for the recipient is not necessarily equal to the total amount of resources possessed. Rather, it is contingent on the donor’s willingness to issue social obligations to the recipient and fulfil them. Portes (1998) notes that actors’ motives to make resources available in the absence of immediate return are non-uniform and reflect their embeddedness in social contexts of relationships, networks, communities and societies (conceptualised respectively as exchange reciprocity, enforceable trust, value introjection and bounded solidarity). In other words, donors may be compelled to give recipients access to resources for different reasons dictated not only by rational economic considerations but
also by seemingly irrational social motivations (explained by their conscious or unconscious responses to specific social contexts). The donors’ motives thus express the human agency that constitutes contents of relationships and generates social capital from underlying relationship structures.

In sum, this discussion logically arrives at the following two statements.

1. The network of social relationships (the structure consisting of ties and nodes) and the content of social relationships (the agency consisting of human motives) together constitute the origin of social capital.

2. The essence of social capital results from this embeddedness in the fabric of social relationships and amounts to a set of obligations appropriable by actors and convertible into economic benefits.

This demarcation line between the origin and the essence of social capital forms the fundament for the dynamics of its creation that has important implications for the integration and treatment of social capital within the ARA model proposed in the following.

Integration of social capital into ARA

Undoubtedly, the IMP tradition, and specifically the ARA model, presents a suitable framework for treating social capital as co-existing with a multitude of other resources in a combined socio-economic domain. However, hitherto in IMP, there has been a tendency to associate social capital with the actor dimension, thus disregarding its intrinsic resource nature as expressed in the canonical works in economic sociology. Indeed, in the ARA framework, the social human aspect by and large is placed in the actor layer alone, whereas the activity and resource layers mainly handle the economic material flow. Building on the distinction between the origin and the essence of social capital, the following discussion is aimed at highlighting the inherent social dynamics of its creation enacted in all three layers of the ARA model. The summary and comparison of the social component in the original ARA model and the proposed model that integrates social capital are provided in Table 2.

Table 2 somewhere here

Social connections in actor bonds

Since the launch of the interaction model, actors (or parties) have been viewed as a “variable entity” (Håkansson et al., 2009: 140), meaning that they can be both individuals and organisations (companies or business units). This gives the actor dimension its human flavour, in contrast to activities and resources as inanimate entities. Thus, in ARA, the actor bonds have come to embody the human dimension of a business relationship, different from activity links and resource ties as the dimension that entails the intentional behaviour of individual and collective actors. The tendency within IMP to place concepts from economic sociology (with its focus on studies of social actors’ economic behaviour) solely within this dimension is therefore not surprising. Conspicuously, the contents of actor bonds are described in terms borrowed from organisational psychology: trust, identity and commitment. These properties, inherent in the layer of actor bonds, are seen by Håkansson and Snehota (1995: 33) as “processes that constrain and at the same time enable the behaviour of the actors in relation to each other”. Indeed, in the social perspective, these properties are close to the motivational forces conceptualised by Portes (1998) as exchange reciprocity, enforceable trust, bounded solidarity and value introjection.

On the other hand, from the inception of the IMP tradition, the actor dimension has had structural undertones. The interaction model depicts actors (or parties) as nodes and the interaction process as...
a tie between them. In a model that seems to be a precursor to ARA, Håkansson and Johanson (1993)
do not juxtapose actors with activities and resources but depict actors as connected by exchange
relations while each of them controls interdependent activities and resources. This seems intuitively
reasonable, as activities and resources cannot connect, or indeed exist, in the absence of connected
actors who control them. Thus, the structural connection has remained more pronounced in actor
bonds than in activity links and resource ties. Håkansson and Snehota (1995: 10) state that “the
individuals involved in a business relationship tend to weave a web of personal relationships, and this
appears to be a condition for the development of interorganisational ties”. In other words, it is the
network of institutionalised social connections (or relationships) that form interorganisational actor
bonds, and it is the actors who make up the principal structural elements in an industrial network.
This seems to be another reason for social capital being placed solely within actor bonds by
researchers who, in line with Nahapiet and Ghoshal (1998), view social capital as comprising the
network of relationships rather than merely flowing from it.

However, in the original perspective on social capital that demarcates its origin from its essence,
actor bonds should not be viewed as the dimension where social capital resides, but the dimension
where social capital originates. Indeed, the social structure (nodes and ties) and the social content
(motives) within the actor dimension form social connections in business relationships that condition
the creation of social obligations but are not social obligations in themselves. This leads to the
following proposition.

P1. Social connections residing in actor bonds designate institutionalised social relationships of
mutual recognition and commitment between business actors.

Social practices in activity links
Håkansson (1982: 17) points out that in the interaction model “social exchange episodes are ...
critical in the build-up” of relationships where “successive social exchange episodes gradually
interlock the two firms with each other”. Social exchange is but one category of exchanges, the
others bearing an economic character, that in sum eventually form relationships within the
interaction process through adaptations and institutionalisation. Although activities in themselves
are not clearly visible in the interaction model, they appear as important aspects of exchange
episodes (Håkansson et al., 2009). In effect, this flow of institutionalised continuous exchanges within
relationships is what forms the essence of the activity links in the ARA model. This implies that the
institutionalised flow of social exchanges is what builds the social aspect within the activity links.
However, the social aspect in activity links seems to be taken for granted and lacks conceptual
formalisation. Yet, it is assumed that social activity patterns within organisations serve an important
function in maintaining their social cohesion. Similarly, continuous social activity links between the
companies in a dyad is what maintains cohesive social bonds between them.

Building on this logic, social capital does not merely reside within actor bonds in existing network
relationships. According to Bourdieu (1986), the network of relationships is not a social given but the
product of continuous efforts and investment strategies. In terms of outcomes of such social
practices, Bourdieu (1986: 52) further explains that “exchange transforms the things exchanged into
signs of recognition”. Hence, as economic activities result in the growth of economic resources,
similarly, social activities result in the growth of social resources. As with any other activities, social
activities too entail costs, implying, according to Bourdieu (1986: 54), “transformation of economic
capital into social capital” directly or indirectly through “a specific labour”, such as “an apparently
gratuitous expenditure” of time and attention. The costs associated with social activities are
expected to give returns. Bourdieu (1986: 54) states that “from a narrowly economic standpoint, this
effort is bound to be seen as pure wastage, but in the terms of the logic of social exchanges, it is a
solid investment” resulting in benefits that “will appear, in the long run, in monetary or other form”.
Thus, to Bourdieu (1986: 52), creation of social capital is a dynamic cycle that “presupposes an
unceasing effort of sociability, a continuous series of exchanges” where “recognition is endlessly
affirmed and reaffirmed”. This continuous sociability implies a flow of common social practices that form the activity link on the social level between the actors in a relationship. It is social interactions in activity links that condition relationship build-up resulting in social bonds that are eventually formed within the actor dimension. Thus, social practices in activity links reinforce social connections in actor bonds, which in turn act as a fundament for accumulation of social obligations through further social practices. In line with Bourdieu (1990), social practices can be seen as connecting social relationship structures (networks) and contents (motives) in a dynamic cycle of creating social capital. This leads to the following proposition.

P2. Social practices residing in activity links designate a series of ongoing social exchanges between business actors where recognition and commitment are continuously reaffirmed.

Social capital in resource ties
In the ARA model, the social aspect as such is almost absent from the resource dimension. The tendency to place social capital in actor bonds instead of resource ties is probably explained by conceptualisation of relationships as resources within IMP: “as relationships are valuable bridges to access resources, they can also be regarded in themselves as resources; a relationship is a resource which ties together various resource elements” (Håkansson and Snehota, 1995: 31). This conceptualisation resembles the view of Nahapiet and Ghoshal (1998) who treat the network of relationships as an asset in its own right.

At the same time, Håkansson and Snehota (1995: 26) claim that “as a relationship makes various resource elements accessible for the parties, it also constitutes a resource that can be used and exploited”. Curiously, this explanation echoes the argument around the origin and essence of social capital. However, projected on to the concept of social capital in the definition of Bourdieu (1986), relationships do indeed give access to resources, however, relationships are not resources in themselves. An existing relationship in itself does not ensure necessarily that access to resources is forthcoming. In other words, social capital cannot exist without a relationship but a relationship can exist without social capital.

Interestingly, even though a business relationship is described in terms of being a resource in itself, several of the defining features of social capital are echoed in IMP: “the process required to develop a business relationship has some characteristics that make it similar to an investment process; it usually is costly, and the costs precede the future benefits; when a relationship is developed it becomes an asset that must be taken care of and utilised in an efficient way” (Håkansson and Snehota, 1995: 31). This description is indeed strikingly similar to the creation of social capital with the investment metaphor employed by Bourdieu (1986). What differs is how the outcome of such investment is conceptualised. While Håkansson and Snehota (1995) contend that the investment results in a developed relationship that in itself becomes a resource, Bourdieu (1986) goes one step further and conceptualises the outcome of the investment as social capital: the resource that is derived from the relationship, without the relationship in itself becoming a resource. Indeed, investments and costs that precede returns clearly relate to the concept of capital in its economic sense, stressing the resource nature of social capital and suggesting that its legitimate place is in the resource domain in ARA.

In Bourdieu’s discourse, social and economic capital are interconnected and mutually convertible, which highlights the socially embedded nature of business relationships. According to Bourdieu (1986: 54), economic capital can give immediate access to some goods and services “without secondary costs; others can be obtained only by virtue of a social capital of relationships (or social obligations)” that “cannot act instantaneously, at the appropriate moment, unless they have been established and maintained for a long time” and “at the cost of an investment in sociability”. Such conversions from social to economic capital resonate with the core ideas within IMP regarding the nature of established business relationships as a source of future material benefits.
the capital concept, Håkansson and Snehota (1995: 31) indeed convey the very logic of creation and utilisation of social capital stating that “the relationships that a company develops to others are important for the collection of resources available ...; they make it possible to mobilise and access the resources of others for a company’s own purposes and advantage”. Mobilisation of and access to other actors’ resources is the very essence of social capital as a set of social obligations – a resource that is acquired by virtue of established and maintained social bonds. As long as social capital is viewed not as a network of relationships but as a resource that the network engenders, the resource dimension is the only natural abode for social capital in ARA. This leads to the following proposition.

P3. Social capital residing in resource ties designates a credential made up of social obligations that entitles business actors to each other’s resources.

Creation of social capital in business networks: the model

In sum, the social aspect explicitly transpires in the three layers of the ARA model as social practices in the activity layer, social connections in the actor layer and social capital in the resource layer. This illuminates the implicit presence of the social component in activity and resource dimensions, challenging its traditional association solely with the actor dimension. Figure 1 illustrates the placement of social connections, social practices and social capital on their respective layers in the relationship substance in ARA.

![Figure 1 somewhere here](http://mc.manuscriptcentral.com/jbim)

In ARA, separating the origin from the essence of social capital has an important implication: social capital, placed in resource ties, originates from social connections, placed in actor bonds. Further emphasising social practices in activity links underscores the dynamic nature of social relationships between actors. The flow of continuous efforts at sociability between actors form social practices in activity links and act as an investment, transforming them into mutual recognition and commitment and strengthening social connections in actor bonds. These institutionalised relationships generate social obligations, or social capital as a resource tie. Social capital is then continuously reinforced by sustained social connections through continued social practices, implying the dynamic interdependence between the layers of the relationship substance, exactly as described by Håkansson and Snehota (1995). The resulting cyclical model of creating social capital within ARA is depicted in Figure 2 and leads to the following proposition.

P4. Social capital is continuously created through the dynamic cyclical interplay involving social practices and social connections.

![Figure 2 somewhere here](http://mc.manuscriptcentral.com/jbim)

It should be noted that creation of social capital should not be viewed as an isolated self-sufficient cycle. It is not merely that the social practices of social agents result in social capital and the economic practices of economic agents result in economic capital. Instead, the agents juggle the two roles, the two kinds of practices are intertwined and the two forms of capital are mutually convertible. This conveys the innate social nature of economic action throughout the substance of business relationships where social capital is an essential immaterial asset – a set of accumulated social obligations – that in the final instance generates economic gains for actors in the dyad. The cyclical model of creating social capital thus helps to merge the economic and the social aspects within IMP’s socioeconomic domain.
Implications

This final section provides a research agenda that could be part of advancing the understanding of the role of social exchange processes in business relationships. First, the paper’s theoretical contributions are addressed in terms of how the conceptual exercise of returning to the original interpretation of social capital possibly resolves the three challenges identified in earlier uses of social capital in IMP studies, from both a theoretical and empirical viewpoint. Second, the four propositions presented that are connected to creation of social capital are revisited to discuss potential methodological approaches for addressing them in particular empirical contexts. Finally, implications for practitioners are provided, suggesting how this conceptual exercise can be useful for social interaction within important business relationships.

Theoretical contributions and investigative opportunities

This paper set out to demonstrate how social capital in Bourdieu’s original interpretation could conceptually reinforce IMP’s treatment of social exchange in business relationships. The main purpose of such a conceptual exercise is to present a more precise analytical tool for the empirical investigation of social exchange processes in business relationships. In turn, through empirical investigation, this could enable a greater understanding of the role of social interrelations in such relationships and the elusive conversions between social and economic capital.

Spanning the boundary between IMP and economic sociology, the proposed cyclical model depicts how social capital is created and re-created through social connections and practices within any specific business relationship. Its development was incited by addressing three main challenges common for applications of social capital in IMP studies. By integrating the original interpretation of social capital into the ARA model, as that of a pool of social obligations (resource ties) continuously being created through and re-enforcing social connections (actor bonds) and social practices (activity links) within business relationships, these challenges are addressed in the following way.

Defining social capital as a product of different components is the first challenge that has turned social capital into a conceptual umbrella that encompasses a wide variety of meanings. Returning to Bourdieu’s original conceptualisation and defining social capital as a pool of accumulated obligations may help to capture the essence of social capital, disentangling it from its origins and outcomes. In the study of any particular business relationship, this could assist in identifying what those particular obligations are (the essence of social capital) and how they are related to earlier, present or expected social practices and connections (its origin or outcome) of the relationship. This answers the call voiced by Raskovic (2015) to answer how social capital is built by interaction and how interaction is determined by existing social capital. This would thus be a matter of identifying subjectively perceived obligations on both sides of the relationship, and how they are related to the everyday social interactions as well as the perceived social sentiments of the two parties.

The second challenge is connected to embracing networks of relationships as a part of social capital or equating them with social capital. Instead, relationship structures and contents may be better defined as the origin of social capital rather than its essence. This demarcation is a critical premise that exposes the dynamic nature of the creation of social capital in Bourdieu’s discourse: from relationships of mutual commitment, through continuous efforts of sociability, to a credential that gives access to other resources. This view may help to put the emphasis not only on the dynamics of creating social capital, but also on its inherent resource nature. Being more conceptually precise on the difference between the sources of social capital (networks and relationships) and social capital in itself has empirical implications. To further better understanding of the actions and re-actions of business actors in an increasingly interdependent and transnational business landscape, it is of even greater importance to be able to chisel out how and why particular social obligations arise in some relationships and may govern them, while not in others. This view provides a novel conceptual alternative to the approach of Westerlund and Svahn (2008) who treat social capital as a foundation of relationship value to study how it differs among types of relationships. Indeed, distinguishing the
existence of a relationship from the processes of creating and using social capital as such, may
provide further insight into which type of relationships are governed (or not) by what type of social
obligations; that is, the interplay between social capital and relationship governance.

The third challenge is the tendency to place social capital within the dimension of actor bonds in the
ARA model. Instead, placing it within the dimension of resource ties not only makes its resource
nature visible but also supports the dynamic view of its creation that involves actor bonds and
activity links. In other words, although this paper emphasises the social aspect of all three layers of
the ARA model, social capital as such is placed in the resource layer. For the purpose of empirical
study, this distinction and the relationship among different social aspects related to the three layers
of the ARA model may make social capital easier to operationalise from a theoretical concept to an
empirical object of study. For instance, the study of Hartmann and Herb (2015) that explores
interconnectedness of actor bonds, on the assumption of social capital residing there, may be
enriched by considering the interconnectedness of the social aspect in all three layers of ARA.

Demarcating the essence of social capital as a credential from its origin in network structures and
contents brings forward the intrinsic social dynamics in its creation through the three layers of the
ARA model: social capital originating from social connections and realised through social practices.
The creation is however not linear and finite but cyclical and infinite: the layers are interrelated and
interdependent, where the accumulated social capital is in a state of continuous becoming,
reinforced by existing social connections through unceasing social practices. Currently, most of the
IMP studies that employ the concept of social capital (e.g., Partanen et al., 2008; Leek and Canning,
2011; Kohtamäki et al., 2013; Lew et al., 2013; Eklinder-Frick et al., 2014) have investigated its role
for value creation or other business objectives. Treatment of social capital as a given deflects
attention from how it emerges and evolves. The cyclic model proposed in this paper provides new
empirical avenues by placing a lesser researched perspective on social capital in the spotlight: its
dynamic (re-)creation within business relationships.

Methodological directions and empirical contexts
In the following, by discussing the four propositions related to the ARA model, this section addresses
how the theoretical contributions of the model outlined above provide further opportunities for
investigating the role and the process of social exchange in business relationships.

Propositions 1, 2 and 3, which address the social aspect of actor bonds, activity links and resource
ties as social connections, social practices and social capital respectively, may be best applied to
variance studies examining the impact of the social component on the economic exchange, or the
material flow, within each of the ARA layers. This may be done either in the actual relationship or, in
extension, in other connected relationships within a greater business network. For instance, one can
investigate how social practices may facilitate, or impede, the flow of other activities in a relationship
and whether this may have repercussions for a wider network. Furthermore, conceptualisation of
social capital as a social resource that gives access to a multitude of economic or material resources
presents a conceptually sound foundation for empirical investigation of its capacity to mobilise
resources in a business relationship or network. In this respect, employing Bourdieu’s lucid
conceptualisation of social capital as convertible to and from economic capital may also help IMP
researchers tackle the empirical difficulty of studying the symbiotic knot of social and economic
exchange in business networks.

Proposition 4, on the other hand, provides an opportunity to apply the cyclical model of (re-)creating
social capital in a holistic way: an approach the authors of this paper deem to be especially
rewarding. Employing the concept of social capital in this perspective may challenge the dominant
focus on the function of social exchange for economic exchange and encourage IMP researchers to
take a process view on the social dimension. As such, the model allows studying the nuts and bolts of
the machinery of social interactions: it helps explore how social connections between business actors
are reinforced, what social practices facilitate accumulation of social capital and how actors’ social obligations eventually are converted into economic benefits. Indeed, creation of social capital unfolds as a part of the interaction process within business network relationships and as such it entails not only the spatial but also the temporal dimension. Such process research may be conducted both as real-time studies and retrospective studies, as well as combinations of both (see Halinen et al. (2012) for methodological templates of flow, point and sequential mapping).

It is the authors’ belief that these suggestions are indeed relevant for studying any business context where the role and the process of social exchange may be of interest. Where there is business interaction, or repeated economic exchange, there is also social exchange. However, the authors suggest that the empirical contexts where such insight may serve its most immediate purpose is within networks characterised by international business (such as internationalisation and outsourcing) and non-Western business practices.

When addressing non-Western societies (such as the post-Soviet space), it has repeatedly been demonstrated that social relations play a greater role in business networks there than the one they have been commonly assigned in mainstream managerial literature focusing on Western markets (e.g., Michailova and Worm, 2003; Batjargal, 2003; Gao et al., 2012). These networks will most likely entail business relationships that are partly or fully governed by business practices where social capital plays a greater role in business exchange processes than in all-Western communities, or even where it plays “a critical role in the enforcement and development of industry” (Batt, 2008: 489). Several IMP studies, both focusing on personal relationships in general (e.g., Björkman and Kock, 1995; Salmi and Bäckman, 1999; Mattsson and Salmi, 2013) and on social capital in particular (e.g., Butler and Purchase, 2008; Ramström, 2008), have already demonstrated some vivid empirical evidence suggesting that industrial markets in non-Western countries present an especially rewarding context for exploring the dynamics of the social aspect in business relationships. For instance, in relation to studies of internationalisation, such as Chetty and Agndal (2007), the model proposed in this paper can be useful for an in-depth understanding of how particular social obligations develop in the interface between different business cultures in the initiation and development process of cross-cultural business relationships. It may also be an interesting contribution to the literature on new business venturing in terms of becoming a node within existing international business networks (Aaboen et al., 2017).

Not least, the shadowy side of social relationships (both private-private and private-public) in business networks is worth intensified attention in order to gain a better understanding of the seamy side of many developing economies: the black market and corruption where officials act as quasi-business actors with access to public resources. In their recent publication on foreign multinationals’ relationships with public officials in Russia, Salmi and Heikkilä (2015) call specifically for in-depth studies of informal interactions within private-public networks in the post-Soviet space. Given the pervasive informality of the business landscape in many non-Western markets, the proposed framework may help to answer questions about specific underlying social structures and mechanisms that (re-)create social capital and make business partners provide valuable resources to each other virtually in the absence of formal contracts.

Practical implications for management
It is the authors’ hope that this conceptual exercise will encourage more empirical research that can strengthen the understanding of social interaction in business relationships and networks. By extension, such intensified research can serve to make business practitioners aware of how social capital may be accumulated and employed to gain access to resources residing in their business networks.

The model presented in this paper could be used as a sensitising device for managers operating in complex business networks, especially those dominated or affected by international non-Western
business relationships. The value generation potential of a business network consists of the individual partners’ resources as well as the business network’s overall resources. Creation of social capital is an important aspect in building the strategic capacity of network relationships, incentivising managers to engage in establishing and maintaining such efforts and thinking systematically about how they build interdependencies. The argument that social capital should not only be of interest at times but also needs everyday attention is essentially practical in itself.

Empirical studies applying the proposed framework in contexts of the little researched non-Western markets in particular have great potential to help Western business practitioners who have entered or intend to enter business networks in such markets. Such research may assist them in building or strengthening business relationships with their foreign partners through deliberate and systematic creation of social capital, as well as in finding a conscious approach to handling possible dubious sides of business networks in such markets.
Bibliography


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Appendix A

Social Capital in IMP Literature

To have an overview of the current uses of the concept of social capital in the IMP literature, an online literature search was conducted in all Emerald and Elsevier journals, as well as the IMP Journal, up to the most current volume available in May 2018. Only papers that have “social capital” in their title, abstract or key words were searched for, to limit the selection to those papers where the concept is central. As an additional control, the frequency of the concept of social capital in the paper texts was counted. As another criterion, “IMP” or “industrial network” were searched for anywhere in the texts. Then a manual check was conducted to find out whether the bibliography lists in the papers retrieved contained references to the central IMP works to ensure that the authors belong to (or are associated with) the IMP community. The resulting sample consists of 17 papers. Table A1 summarises the cursory exploration of applications of social capital in the sample.

Table A1: Use of social capital in the sampled IMP papers.

<table>
<thead>
<tr>
<th>Article/case</th>
<th>Source</th>
<th>Social capital use</th>
<th>Main contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Social Capital in Networks</td>
<td>Batt (2008)</td>
<td>Defined as mobilisation, use and benefits gained through accessing present and future resources</td>
<td>Researchers are encouraged to explore social capital in the context of business networks.</td>
</tr>
<tr>
<td>Use of Social Capital among Russian Managers of a New Generation</td>
<td>Butler and Purchase (2008)</td>
<td>Divided into structural, cognitive and relational dimensions</td>
<td>Social capital is a complex construct where the dimensions are interdependent and built on each other in managers’ business relationships.</td>
</tr>
<tr>
<td>Social Capital in the Growth of Science-and-Technology-Based SMEs</td>
<td>Partanen et al. (2008)</td>
<td>Divided into structural, cognitive and relational dimensions</td>
<td>Four growth phases are identified: innovation assessment, offering development, commercialisation, achieving rapid growth. The role of social capital differs between them, along distinctions between structural, cognitive and relational social capital.</td>
</tr>
<tr>
<td>Inter-Organisational Meets Inter-Personal: an Exploratory Study of Social Capital Processes in Relationships between Northern European and Ethnic Chinese firms</td>
<td>Ramström (2008)</td>
<td>Divided into social interaction, social bonds and trust</td>
<td>The distinction between inter-organisational and inter-personal approaches of firms is highlighted.</td>
</tr>
<tr>
<td>A Relationship Value Perspective of Social Capital in Networks of Software SMEs</td>
<td>Westerlund and Svahn (2008)</td>
<td>Divided into structural, cognitive and relational dimensions</td>
<td>Social capital serves as a basis for relational value in business relationships. Dimensions of social capital vary by the type of relationship.</td>
</tr>
<tr>
<td>Trust and Forms of Capital in Business-to-Business Activities and Relationships</td>
<td>Finch et al. (2010)</td>
<td>Juxtaposed to economic capital</td>
<td>To trust others, managers are advised to act in the distinct realms of social and economic capital, though it is tempting to interpret and measure the costs of actions economically.</td>
</tr>
<tr>
<td>Article/case</td>
<td>Source</td>
<td>Social capital use</td>
<td>Main contribution</td>
</tr>
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<td>------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Performance Implications of a Retail Purchasing Network: the Role of Social Capital</td>
<td>Seevers et al. (2010)</td>
<td>Operationalised as network configuration, network contacts and network resources</td>
<td>The idea of networks as valued resources is tested and found to boost performance outcomes.</td>
</tr>
<tr>
<td>Bridging and Bonding Forms of Social Capital in a Regional Strategic Network</td>
<td>Eklinder-Frick et al. (2011)</td>
<td>Divided into bridging and bonding forms</td>
<td>Discusses the paradox of using a regional strategic network to counteract over-embeddedness and freeing the involved actors from existing network lock-ins instead of further strengthening such social institutions.</td>
</tr>
<tr>
<td>Entering and Developing a Service Network</td>
<td>Leek and Canning (2011)</td>
<td>Divided into bonding and bridging forms, associated with identity-based and calculative networks</td>
<td>The networking enacted by entrepreneurs is much more important than any existing social capital. The role of bridging is emphasised above bonding.</td>
</tr>
<tr>
<td>Resources Prospectively: How Actors Mobilize Resources in Business Settings</td>
<td>Finch et al. (2012)</td>
<td>Juxtaposed to economic capital</td>
<td>Individuals are found to become actors with different identities in different contexts rich in either social or economic capital.</td>
</tr>
<tr>
<td>Making a Profit with R&amp;D Services – the Critical Role of Relational Capital</td>
<td>Kohtamäki et al. (2013)</td>
<td>Substituted by relational capital, operationalised as trust, open interaction and shared destiny</td>
<td>Relational capital is found to have a positive impact on a supplier’s profit performance and a positive moderating impact on the link between suppliers’ R&amp;D services and profit performance.</td>
</tr>
<tr>
<td>Multidimensional Social Capital as a Boost or a Bar to Innovativeness</td>
<td>Eklinder-Frick et al. (2014)</td>
<td>Divided into actor-oriented, structural and socio-economic dimensions</td>
<td>Social capital is seen as a resource appearing at several levels in society: individuals, networks and regions.</td>
</tr>
<tr>
<td>Interconnectedness of Actor Bonds in Service Triads – a Social Capital Perspective</td>
<td>Hartmann and Herb (2015)</td>
<td>Divided into structural, cognitive and relational dimensions</td>
<td>Drawing on the notion of interconnectedness, social capital inherent to one relationship is found to be influenced by other relationships maintained by the involved actors.</td>
</tr>
<tr>
<td>The Outset of U-I R&amp;D Relationships: the Specific Case of Biological Sciences</td>
<td>Pinheiro et al. (2015)</td>
<td>Represented through shared interests and trust and commitment</td>
<td>Interpersonal ties with external partners, as opposed to the inter-organisational level, are found to constitute an important network resource and an important form of social capital.</td>
</tr>
<tr>
<td>Perspectives on Regional Innovation Policy - from New Economic Geography towards the IMP Approach</td>
<td>Eklinder-Frick and Åge (2017)</td>
<td>Viewed in a communitarian perspective</td>
<td>New economic geography is enriched with the IMP perspective, highlighting its focus on the content of interactions.</td>
</tr>
<tr>
<td>Economic Sociology and the ARA Interaction Model</td>
<td>Raskovic (2015)</td>
<td>Positioned as one of the central concepts in economic sociology</td>
<td>The concepts from economic sociology are claimed to be used in IMP literature with a gap in...</td>
</tr>
<tr>
<td>Article/case</td>
<td>Source</td>
<td>Social capital use</td>
<td>Main contribution</td>
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<td></td>
<td></td>
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<td>understanding of their original meanings. Their definitions are clarified, and further research directions are discussed.</td>
</tr>
</tbody>
</table>
Figure 1. Social connections, social practices and social capital placed within ARA.

Figure 2. Cyclical creation of social capital through social practices and social connections.
Table 1. Bourdieu’s conceptualisation of social capital and treatment of social capital in IMP.

<table>
<thead>
<tr>
<th>Social capital by Bourdieu (1986)</th>
<th>Social capital in IMP</th>
</tr>
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<tbody>
<tr>
<td>Social capital as a solid entity</td>
<td>Social capital as a set of components</td>
</tr>
<tr>
<td>e.g. Batt, 2008; Ramström, 2008; Seevers et al., 2010; Kohtamäki et al., 2013; Lew et al., 2013; Pinheiro et al., 2015</td>
<td></td>
</tr>
<tr>
<td>Relationships as the origin of social capital</td>
<td>Relationships as a unit of social capital</td>
</tr>
<tr>
<td>e.g. Butler and Purchase, 2008; Partanen et al., 2008; Ramström, 2008; Westerlund and Svahn, 2008; Eklinder-Frick et al., 2011; Leek and Canning, 2011; Eklinder-Frick et al., 2014; Hartmann and Herb, 2015</td>
<td></td>
</tr>
<tr>
<td>Resource nature of social capital</td>
<td>Social capital as a part of actor bonds</td>
</tr>
<tr>
<td>e.g. Ramström, 2008; Finch et al., 2010; Finch et al., 2012; Lew et al., 2013; Hartmann and Herb, 2015; Pinheiro et al., 2015</td>
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</table>

Table 2. The social component in the original ARA model and the proposed model integrating social capital.

<table>
<thead>
<tr>
<th>Social component in the original ARA</th>
<th>Social capital integrated into ARA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actor bonds</td>
<td>Actor bonds</td>
</tr>
<tr>
<td>social capital often is associated with this “human” dimension that comprises:</td>
<td>- the social structure (nodes and ties of actors’ relationships)</td>
</tr>
<tr>
<td>- the social structure: bonds of actors’ personal relationships that weave a network web</td>
<td>- the social content (actors’ motives) together form social connections that are:</td>
</tr>
<tr>
<td>- the social content: actors’ trust, identity and commitment</td>
<td>- a prerequisite for creation of social capital</td>
</tr>
<tr>
<td>- not a part of social capital in themselves</td>
<td></td>
</tr>
<tr>
<td>Activity links</td>
<td>Activity links</td>
</tr>
<tr>
<td>- social activities between actors are implicitly present</td>
<td>- social activities between actors are conceptualised as social practices that are:</td>
</tr>
<tr>
<td>- “social exchange episodes” from the interaction model are not explicitly conceptualised in ARA</td>
<td>- a continuous series of social exchanges, and</td>
</tr>
<tr>
<td>- a prerequisite for build-up of social connections</td>
<td></td>
</tr>
<tr>
<td>Resource ties</td>
<td>Resource ties</td>
</tr>
<tr>
<td>- relationships both contain the resource dimension and are conceptualised as resources in themselves</td>
<td>- relationships are not resources in themselves</td>
</tr>
<tr>
<td>- the social is absent in this dimension: no social resources as such are conceptualised</td>
<td>- the social structure and content of relationships are a prerequisite for the creation of social capital as a social resource</td>
</tr>
</tbody>
</table>