# The Buying Network In International Project Business: A Review and Conceptual Model

#### Richard A. Owusu

Assistant Professor, Swedish School of Economics and Business Administration
Department of Marketing,
Arkadiankatu 22, PB 479, 00101, Helsinki, Finland
richard.owusu@hanken.fi

#### **Catherine Welch**

University of New South Wales

#### **Abstract**

The objective of this paper is to develop a framework for analyzing the project buying network. We believe that such analysis will provide insightful research and managerial implications to deepen understanding of the structure and processes of project buying networks and their implications for project sellers. We review the relevant buying center and project business literature and develop an integrated framework. Our results show that while the buying center literature provides insightful and analytical constructs, it has not delved into the dynamics of multiorganizational buying networks and has left project buying and its international context relatively untouched. For its part, while project business research has conceptualized the buying and selling networks, there has been very little systematic research of the inter-organizational project buying process. Our framework takes into account the type of purchase and purchase situation; the structure, processes, and capabilities of the buying network; financing issues; as well as the national and international environmental factors impinging on the multi-organizational buying network.

**Keywords:** international project marketing and purchasing, buying center, inter-organizational networks, project buying

#### Introduction

Project business is an area of growing interest in international marketing, and one in which Industrial Marketing and Purchasing (IMP) theories and concepts have played a major role. We define project business as the interactive development and delivery of technical-economic solutions to meet a buyer's needs. We distinguish between the marketing or selling functions and the purchasing or buying functions. We define project marketing as the selling and implementation of project expertise, and project purchasing as the buying of integrated project expertise (see Ahmed 1993; Owusu 2003). Project buyers and sellers become connected in a mutual business endeavour in which the project buyer has a need that may not yet be clearly defined, or that may be defined but which the buyer wishes to be supplied by a marketer. The selling company has a combination of technical, financial and management expertise that it wishes to provide to meet the buyer's need. The project business process goes through several phases from delineating the parameters of the project, negotiating terms, arranging financing, implementing or constructing the project, and entering the post-project phase where follow-up projects or continuing cooperation may eventuate. Other parties like consultants, sub-contractors, suppliers and regulators may play active and critical roles in achieving the business. These actors may belong to existing networks of either the buyer or seller, or may be totally new to both of them. All of them are linked in a temporary network to achieve the project goals (Ahmed 1993; Owusu 2003).

In recent years, IMP scholars have contributed an understanding of the critical success factors for project sellers. Project marketing has been conceptualized as a process that may commence well before a project opportunity is officially announced by a buyer, and which does not cease once a contract is awarded (Cova and Holstius, 1993; Hadjikhani 1996; Skaates, Tikkanen and Lindblom 2002). Moreover, relationships have been identified as critical to each stage of the process, including 'extrabusiness' relationships (Cova and Salle 2000) and socio-political connections within a project 'milieu' (Cova, Mazet and Salle 1996). Given the complexity of many projects, sellers often form networks among themselves, bidding in consortia, as subcontractors to main contractors, or in joint venture arrangements (Lampel, Miller and Floricel 1996; Welch et al. 1996).

While the focus of existing research has been on project sellers, our argument in this paper is that our understanding of international project business is incomplete without further analysis of project buyers. Just as the marketing of projects is regarded as distinct from the marketing of other goods or services, there has also been some recognition that project buying has differentiating characteristics (Cova and Holstius 1993). In particular, existing research has pinpointed the extreme 'fragmentation' (Cova, Ghauri and Salle 2002) or 'dispersal' (Bansard, Cova and Salle 1993) of buying centers, with the functions of a buying center potentially distributed across multiple organizations. In other words, the buying function is performed by a 'cluster' or 'net' that forms part of the wider project network (Sharma 1989; Jansson 1994). However, little empirical research on buying networks has been conducted to date (for studies that have provided insight into aspects of the organization of the buying network see Jansson 1989, 1994).

The objective of this paper is to develop a framework for analyzing the project buying network. We use the term 'project buying network' to denote the organizations that are involved at various stages of the buying process, not just the decision about supplier selection. 'Network' is used in a generic sense to incorporate relationship connections that endure across multiple projects, as well as the temporary buying 'net' for a specific project. We believe that the review and analysis in this paper can form the basis for insightful research and managerial implications to deepen understanding of the structure and processes of project buying networks and their implications for project sellers. The paper is structured as follows. First, we review the relevant buying centre literature and comment on its implications for studying a multi-organizational buying network. We

then review the characterization of the buyer in project business literature and the implications provided in extant literature for project sellers. Consequently we develop a framework for analyzing the buying network and, lastly, provide implications for research and management.

## From Buying Center to Buying Network

Organizational buying behavior is an established area of marketing research. There has long been recognition that purchasing decisions by organizations can involve multiple individuals from a range of departments. The term 'buying center' was coined by Robinson, Faris and Wind (1967) and is used to refer to 'all those members of an organization who become involved in the buying process for a particular product or service' (Johnston and Bonoma 1981, p. 143). Numerous conceptual models of buying center behavior have been proposed (e.g. Johnston and Lewin 1996; Sheth 1973; Webster and Wind 1972) and there has been extensive empirical testing of different aspects of buying center behavior: one review identified 165 articles that had been published in major business-to-business marketing journals over a 25-year period (Johnston and Lewin 1996). Most empirical research on the buying center has involved large-scale mail surveys or structured interviews, with a smaller number of experimental and qualitative research having been conducted. The result has been an emphasis on static, cross-sectional research designs, despite calls for more longitudinal and case study research being regularly made (e.g. Bunn 1993; Ronchetto 1989; Spekman and Gronhaug 1986). In addition, empirical research has mainly been conducted on the private, for-profit sector, with little known about differences across organizational type and the particular circumstances of government procurement (for an exception, see Spekman 1981).

Buying center behavior has been found to be determined by environmental influences (comprising the purchase situation, organizational characteristics and the macro-environment), group structure and decision-making processes, and attributes of individual participants (for a similar categorization, see Kauffman 1996). Turning to environmental factors first, the purchase situation includes variables such as product type, purchase importance, time pressure, perceived risk and uncertainty, buy-class, and degree of novelty and complexity (e.g. Garrido-Samaniego and Gutierrez 2004; Lau et al. 1999; Sheth 1973). Some researchers have explicitly adopted a contingency approach, although the precise effects of situational factors on organizational buying behavior have been the subject of some debate (e.g. Kohli 1989; McCabe 1987; Spekman and Stern 1979; Wilson et al. 1991). Organizational variables that influence buying behaviour include the firm's size, degree of formalization and centralization, and organizational memory and experience (e.g. Johnston and Bonoma 1981; Johnston and Lewin 1996; Lau et al. 1999; Park and Bunn 2003; Sheth 1973; Webster and Wind 1972; Weiss and Heide 1993); while macroenvironmental influences can include culture and the degree of turbulence (Morris et al. 1995; Sheth 1973; Webster and Wind 1972). Surprisingly, despite the inclusion of environmental factors in the early models, there has been little cross-national comparative research (for an exception, see Banting et al. 1985) and few studies of buying centers in less industrialized countries (for exceptions, see Baker and Abou-Ismail 1993; Morris et al. 1995).

The structure of the buying center can be measured in terms of its size, formalization, centralization, membership, participant roles, and degree of connectedness between participants (Johnston and Bonoma 1981; Webster and Wind 1972). Social network approaches have been used to investigate the extent to which an individual's influence is determined by his or her structural position in the buying center network (see e.g. Dawes et al. 1998; Ronchetto et al. 1989). Buying center processes are typically conceived in terms of information search and processing, problem framing and other decision-making routines, conflict resolution and influence strategies (Dawes et al. 1998; Farrell and Schroder 1999; Venkatesh et al. 1995; Wilson et al. 2001). A purchase in fact consists of a sequence of activities rather than a single decision, with the structure of the buying center likely to change during the process (Ghingold and Wilson 1998). One of the most detailed processual studies to have been published, Vyas and Woodside (1984), found the decision process to be comprised of multiple 'decision rules', or problem-solving

routines established through repeated behavior, that buying center members use to reach decisions (cf. Bunn 1993's concept of 'procedural control'). A final source of variation in buying center behavior can be attributed to individual participants in the buying center, who have different levels of experience, job functions and expertise, expectations, personal stakes in the buying decision and information sources (Sheth 1973). Moreover, individuals may exhibit emotional as well as rational decision-making processes (Wilson and Woodside 1994), and their personal goals may not coincide with those of the organization (Webster and Wind 1972).

While the buying center was originally conceptualized as an intra-organizational construct, there has been increasing recognition that organizational buying decisions involve inter-firm connections, and that 'organizational membership is not necessarily the primary criterion for deciding buying centre membership' (Spekman and Gronhaug 1986, p. 51). The IMP 'interaction model' (Håkansson 1982) conceived purchasing as a relational and processual activity, with any single purchase decision affected by the 'pattern and characteristics' of the ongoing interaction between buyer and seller (Turnbull et al. 1996, pp. 56-57). In later IMP research, dyadic interactions between buyers and sellers have been analyzed as part of interconnected networks of relationships. In particular, there has been research into supply networks, with relationships between suppliers often directly or indirectly facilitated by buyers (Gadde and Håkansson 1993). Another important contribution of the IMP Group has been its international approach, with the very first IMP study investigating supplier-customer relationships across national borders (Håkansson 1982).

With the focus of extant research on buyer-seller relationships and supply networks, other external relationships maintained by the buying firm have received limited attention. The involvement of external consultants was examined by Dawes et al. (1997) and Woodside (1994). 'Communication networks' may also include informational exchange between buyers, with buyers potentially communicating with each other through, for example, industry associations, trade shows and conferences (Johnston and Lewin 1996). In some industries, relationships between buyers have been formalized through co-purchasing arrangements (Laing and Cotton 1997). The importance of external relationships was highlighted by Woodside (1994), whose network analysis identified the important role played by a 'network champion' that was neither the buyer nor seller, but nevertheless was pivotal in bringing about the purchase.

While the literature on the buying center is extensive, and has developed robust frameworks for the systematic analysis of organizational buying behavior, there is scope to explore in more detail the network of inter-firm relationships that buyers develop during the purchasing process. It is also important to take a processual approach by exploring long-term inter-organizational relationships within the buying network, their historical and strategic dimensions, and how they affect ongoing buying relationships with the seller. Such interconnections between purchasing episodes, as well as between the different stages of the process, is underplayed in the buying center tradition, which tends to examine discrete exchanges and has neglected the postpurchase evaluation stage (for an exception, see Lambert, Dornoff and Kernan 1977). Another limitation of existing buying center research is that it is focused on the purchasing of manufactured products, raw materials and components and, to a lesser extent, services - yet an early and consistent research finding is that the nature of the product is fundamental to the way in which the buying decision process is enacted (see Axelsson and Wynstra 2000 for a discussion of services). The purchase of projects has rarely featured in the buying center tradition; hence, the next section turns to existing research on project marketing to analyze the buyer from a project perspective.

# The Buyer in Project Business

Project marketing has been characterized as 'a special case of business-to-business marketing', in that the organizational buying (and selling) processes are likely to differ from those in other forms of business-to-business marketing (Bonaccorsi et al. 1996). As Bansard et al. (1993) noted,

a distinguishing feature of project marketing is that the 'mono-organisational' buying center that dominates much business-to-business marketing research does not hold. Instead, project marketing typically involves the 'extreme dispersal' (Bansard et al. 1993, p. 127) of both the buying and selling center, with both functions instead being fulfilled by multi-organizational networks. They argued that this can be attributed to the fact that 'a single organization ... is unable to anticipate all or part of the financial, technical, and communicational exchanges involved, leading it to turn to other organizations' (Bansard et al. 1993). Similar arguments can be found in Bonaccorsi et al. (1996) and Cova et al. (2002).

Despite 'dispersal' (Bansard et al. 1993) or 'fragmentation' (Cova et al. 2002) of the buying centre being seen to constitute the very nature of project marketing, there have been very few analyses of the structure and dynamics of buying networks. Most studies have discussed project marketing strategies largely from the point of view of the seller (marketer) rather than project purchasing strategies, i.e. from the point of view of the buyer (for examples, see Cova and Allen 1989; Cova, Mazet and Salle 1993; Kosonen 1991; Liljegren 1988; Welch et al. 1996). Cova and Holstius (1993) modelled project business as an interactive cycle composed of the buyer's and seller's separate cycles. They suggested that the seller should take the buyer's cycle into consideration and manage its side in tandem with the buyer's. The cycle came from two separate studies: Holstius (1987, 1989), which was seller-oriented, and Cova (1989), which was buyer-oriented. Their buyer cycle is adapted in Figure 1, and compared to the stages of organizational buying behavior suggested by Robinson et al. (1967). It shows that the cycle based on Holstius and Cova (1993), whilst similar to that of Robinson's et al's (1967), provides more detail on the buyer's activities in project purchasing - in particular, the involvement of the buyer in the implementation phase. However, the integrated cycle proposed by Cova and Holstius (1993) is analyzed mainly from the point of view of the seller's success strategies. Therefore, its does not provide an adequate analysis of the buyer's networking and relationships that are important for its decision-making. Other studies have taken a dyadic or network approach and illustrated the buying network of actors but have not analyzed the interconnections between buying network decision making, roles, power relationships, and environmental factors and their effect on supplier strategies (see Ahmed 1993; Hadjikhani 1996; Jansson 1989, 1994; Owusu 2002, 2003). Below, we discuss existing findings on project buyers, both in terms of the membership of buying networks and the implications of these networks for sellers.

\*\*\*\*Figure 1 about here\*\*\*\*

#### **Buying network composition**

Table 1 shows the buyers that have featured in previous empirical studies on international project marketing (conceptual articles have been excluded). Four studies refer to a single organizational buyer which is either institutional (a government ministry, agency or corporation) or a private enterprise. The high number of institutional buyers (see Table 1) – a contrast to the buyer center literature, where this organizational type is rarely discussed explicitly – perhaps reflects the focus on large infrastructural projects, which are often commissioned by governments, and on countries, such as China and Egypt, where government intervention in the economy is still very high. Some studies acknowledge the involvement of multiple organizations in project buying (Table 1) – although sometimes only a 'partial' buying network of just two members is analyzed (Cova, Salle and Vincent 2000; Dahlgren and Söderlund 2001; Huemer 2004). In particular, it seems that government procurement typically involves numerous institutional actors. A large grain silo project in China, co-financed by the World Bank, involved over eleven institutional actors at the tender phase of the project (Welch et al. 1996). A defence project for the construction of submarines for the Australian Defence Force involved over fifteen different types of political, military and business actors (Cova et al. 2002).

\*\*\*\*Table 1 about here\*\*\*\*

Existing studies have identified four types of actors, beyond the contractual or 'core' buyer (Cova et al. 2002), who may be involved in buying networks (Table 1). The first type consists of consultants or main contractors (Ahmed 1993; Jansson 1989, 1994). Given that the main contractor selects suppliers and the consultant may be involved in determining technical specifications, both may be considered to have buying roles that can range from that of expert advice and supervision to supplier selection. In the case analyzed by Dahlgren and Söderlund (2001), the consulting firm took control of the technical direction of the project to such an extent that it disrupted the relationship between buyer and seller. Governments are a second type of actor, since many projects require different forms of regulatory, financial and intergovernmental approval (see e.g. Björkman and Kock 1995) - thus, apart from their role as a direct contractual party, governments of both the buyer and seller may be involved in projects as regulators, lenders or guarantors (Ahmed 1993). A third actor that has been identified is previous clients, whom the supplier may use as a reference site (e.g. Cova, Salle and Vincent 2000). A fourth actor consists of different financiers, such as banks, bilateral aid agencies and multilateral lending agencies (such as the World Bank). Traditionally, their role has been conceived as an influencer or 'channel of communication' with buyers (Sharma 1988). However, Welch (2005) found that multilateral organizations may directly sign contracts with suppliers, depending on how projects are funded, and even if they are not the contractual buyer, their role in the buying process is substantial enough to be regarded by suppliers as a client. Owusu (2002) showed the critical role of bilateral funding and development cooperation organizations in achieving project business.

The buying network – like the buying center – can be fluid in its composition, with some studies noting how it changes depending on the stage of the project (e.g. Welch et al. 1996). In particular, a distinction has been drawn between the buying 'net' for a specific project and the 'milieu of demand' that exists independently of a project. The milieu consists of the set of economic and socio-political actors 'directly or indirectly influencing project demand' (Cova et al. 1994, p. 41). Some actors in this milieu represent 'poles of continuity', because they have contacts with a large number of actors that tend to endure across numerous projects (see also Cova and Hoskins 1997). These 'poles of continuity' may well be government bodies, funding agencies and international consultants rather than final buyers, but they can be crucial in providing connections across projects and between buyers.

#### Implications of the buying network for suppliers

The involvement of multiple organizations in the buying network increases the complexity of project marketing, with project sellers potentially contending with a larger 'distance' between the requirements of organizations in the buying network than is the case for members of an intraorganizational buying center (Bonaccorsi et al. 1996). Differences exist also in the aims, ways of working and resources of the organizational actors within the buying network. Distance in the buying network may also be physical in nature, with Jansson (1989, 1994) observing that the 'buyer cluster' may well comprise organizations in multiple countries. As a result, a seller's marketing effort may well need to be multinational in scope.

A key challenge for a seller is therefore to understand the composition of the buying network and determine the 'breadth' of its interaction with buyers (Cova, Ghauri and Salle 2002). A 'narrow' interaction for a specific project would involve contact between the sales force and purchasing staff to agree to and deliver a project; a 'broad' interaction involves a multidimensional linking of the buying net with the supplier net. However, the structure of the buying network may not be transparent to the seller, both in terms of the number of members involved, their relationships with each other and the roles played by each. This was regarded as a problem in the China grain project, where the sheer size of the buying net meant that 'clearly it was difficult for an individual company alone to be able to identify and activate appropriate connections' (Welch et al. 1996, p. 590). In their analysis of a similarly complex buying net, Cova et al. (2002, pp. 182-183) identified six different buying roles: core buyer, initiator, decider, influencer, approver and value creator (cf. Webster and Wind 1972). A single actor may perform more than one role, or a single role may be

performed by more than one actor (Ahmed 1993).

The structure of the buying network may be an influence on the structure of the selling network. For example, Jansson (1989, 1994) found that the multinationality of the buyer 'cluster' meant that sellers involved their subsidiaries in approaching members of the buying network based in different geographical locations. There is also some evidence that buyer networks dominated by institutional actors may have an impact on relationships among suppliers. In particular, governments may prescribe the nature of local collaborations. For example, a project seller may be required to select a particular local supplier (Hadjikhani 1992). Marketing to governments also requires knowledge of political hierarchies (Cova et al. 2002) and, possibly, the management of political risk (Hadjikhani 1998). Welch et al. (1996), as well as Ahmed (1993), suggested that sometimes the best way for a project marketer to market to institutional actors is to involve its own institutional actors in its seller network. Thus, the Finnish President visited Egypt and this helped Nokia sell its projects in that country (Ahmed 1993); while the Australian trade facilitation agency, Austrade, was important in developing relationships with the Chinese Government and World Bank (Welch et al. 1996).

As well as deciding on the 'breadth' of the interaction with the buying network, sellers need to decide on their 'depth' of interaction (Cova et al. 2002). A 'superficial approach' to a specific project involves the seller simply responding to the stated requirements of the buyer. In contrast a 'deep' approach involves the seller jointly 'constructing' demand with actors in the buying net - in other words, developing the parameters and specifications for the project (Cova and Hoskins 1997) – and contributing to customer activities. The seller may even be able to add new members to the buying net and change the 'rules of the game' for purchasing decisions (Cova, Salle and Vincent 2000). The seller's role at this stage is partly dependent on the buyer's own 'specification capability' (Bonaccorsi et al. 1996) - just as later in the project, it is affected by the buyer's own project management expertise. The direct involvement of the seller in the buying net may well continue throughout the course of a project. Ahmed (1993, p. 11) identified as a 'paradox' of project business the 'confused' role between buyer and seller, with the buyer often trying to increase its inputs into the project, thus 'acting as a part supplier' (Ahmed 1993, p. 105), while the seller may be contractually obliged to buy resources from an organization in the buying net. Bringing together the necessary skills and resources from within both the customer's and the contractor's network of external partners and functional specialists inevitably adds to the complexity and 'risks' associated with each transaction (Cova and Hoskins 1997). This may be further complicated in international projects where consideration must be given to language and cultural differences.

### Researching the Project Buying Network: An Integrated Framework

Our literature review has suggested that the buying center literature identifies multiple determinants of organizational buying behaviour, although findings differ on the precise relationship between specific variables. This research tradition is, however, somewhat limited when it comes to project purchasing, the role of external network relationships, macroenvironmental factors, international business variables and institutional buyers. Moreover, the preference for large-scale quantitative studies has resulted in a bias towards cross-sectional data. In contrast, project marketing research has been dominated by network studies that involve (although do not have as their main theme) institutional buyers and international business variables. Most studies to date have been based on qualitative case study research that has highlighted the continuity of inter-firm relationships across multiple projects over time. However, in these studies the buying decision process has not been studied as systematically as in the buying center literature, as the focus of research has been on the selling network.

Our argument in this section is that future research on project buying networks could best proceed by combining insights from both research streams. This is the purpose of this section,

and a summary of our integrated framework is provided in Figure 2. Our analytical framework, while using categories derived from buying center research, takes an inter-organizational as well as international business perspective and incorporates previous empirical findings on project marketing. It also allows us to suggest directions for future research on the buying network in international project marketing.

#### \*\*\*\*Figure 2 about here\*\*\*\*

The first category in Figure 2, that of the purchase situation, concerns the factors that distinguish projects from other product categories. The accepted view among project marketing researchers is that projects are characterized by discontinuity in demand, uniqueness of the solution being offered the buyer, complexity in terms of the number of actors involved in supplying the project, and the high monetary value involved (Cova, Ghauri and Salle, 2002). Existing research on the buying center has found that product novelty and complexity are related to buying center structure (such as size, level of participation and formalization) and processes (such as the extensiveness of the information search stage and the decision criteria used) (for a summary, see Kauffman 1996). It would therefore be anticipated that the degree of project complexity and uniqueness would have an effect on buying network evolution.

In our framework, the structure of the buying network incorporates all organizations that contribute to the buying decision process, even if they are not involved in supplier selection. In particular, this may involve understanding the role and structural position of organizational actors, such as financiers and government regulators, that have not featured in traditional buying center research. In particular, future research could aim at providing a typology of buying roles within project networks — including cases of role switching between buyers and sellers. The interconnections between buying and selling networks therefore form part of this level of analysis. Given the dynamic nature of structure, analysis also involves tracking changes in network positions during the various stages of a project. While there is research into the shifts that a buying center undergoes, it does not provide insight into the implementation phase of projects, during which buyers and sellers need to collaborate within extremely tight time and budget schedules in order to produce the project solution.

The next category, that of buying network processes, explores the activities and dynamics of change within buying networks. Understanding process has long been a concern of both buying center and network researchers. In buying center research, the focus has been on specifying the types of information acquisition, influence and decision-making processes that are used within the buying center, often using insights from cognitive and social psychology; while in project marketing studies, process has typically been analyzed at the level of changes to inter-firm relationships over the course of multiple projects. Common to both streams of research is the assumption that organizational buying is a form of rule-bound behavior, in which activities have the potential to become standardized over time. Buying center research has shown that such rules can be derived from formal organizational policies, as well as the 'decision rules' derived from habit and routinized behavior. Network research has shown that rules are also institutionalized through repeated inter-organizational exchange (i.e. as a 'net' becomes a 'network'), often at a social rather than just economic level. Given the inter-organizational nature of project buying, and the influence of institutional buyers, we would expect a more formalized and complex set of rules to govern project buying than has been found in other buying centers.

The final category shown in Figure 2 is that of the buying country environment. Our literature review has suggested that there is need for more research in this area, with comparative, crossnational research in particular very rare in the buying center tradition and still under-represented in IMP project marketing research. Moreover, buying center research has most often been conducted in Western environments; while this is not the case in project marketing research, there has been little systematic analysis in this research stream of how national contexts impact on inter-firm relationships. While cross-cultural differences are perhaps the most obvious, environmental factors relevant to project buying extend to political and legal features of the

buying country such as national procurement laws and regulations, protection of local firms, political risk, the incidence of corruption and collusion, bilateral relationships between project buying and selling countries, and the degree of government intervention in the economy. There is also some evidence that the level of national economic development affects the buying process in terms of project needs and specifications, requirements for technology transfer and industry development, and levels of purchasing training and expertise.

#### Conclusion

Our review of the buying centre literature shows that it has concentrated mainly on analyzing single firm buying centers. Organizational, group and individual participant aspects of buying centers have all been studied. The literature provides a good account of interaction within the organizational buying center, decision-making structures and processes, interaction, power and even psychological issues within the buying center, and interactional issues between the buyer and seller. The gap in that stream of literature is in the area of inter-organizational buying networks, and project buying involving multiple organizational buying actors. The IMP-related project business literature has characterized different types of project buyers and has delved into network aspects of project business. However, this stream has focused on project marketing and not adequately studied the dynamics of multi-organizational buying networks. We believe that our discussion brings the issue to the fore and that our framework provides descriptive and analytical tools for further research.

By calling for research into both international project marketing and purchasing, we can perhaps be seen as returning to the approach of the first IMP study, as reported in Håkansson (1982). Our argument in this paper has been that theories of international project marketing will be enhanced through better understanding of international project purchasing. As our literature review has indicated, there is evidence that the multi-organizational character of the project buying network has a direct impact on project marketing strategies and the network positioning of sellers.

Our contribution in this paper lies in not only identifying the need for future research into project buying networks, but by providing an analytical framework with which to do so. Moreover, our literature review has identified numerous topics where existing research has been limited, such as cross-national, comparative studies and buying roles. While our understanding of international project marketing has advanced rapidly in recent years, there remain many issues yet to explore.

#### References

Ahlström, Magnus and Steffan Brege (1999), "Project Marketing: Managing Seller Alliances in Offset Agreements," in *Proceedings of the 15<sup>th</sup> Annual IMP Conference*, Damien McLoughlin and Conor Horan, eds, University College Dublin.

Ahmed, Mohamed M. (1993), *International Marketing and Purchasing of Projects: Interactions and Paradoxes: A Study of Finnish Project Exports to the Arab Countries.* Helsingfors: Swedish School of Economics and Business Administration.

Axelsson, Björn and Finn Wynstra (2000), "Interaction Patterns in Services Exchange: Some Thoughts on the Impact of Different Kinds of Services on Buyer-Supplier Interfaces and Interactions," 16<sup>th</sup> Industrial Marketing and Purchasing (IMP) Conference, Bath.

Baker, Michael J. and Fouad Abou-Ismail (1993), "Organizational Buying Behaviour in the Gulf," *International Marketing Review*, 10 (6), 42-60.

Bansard, Denis, Bernard Cova and Robert Salle (1993), 'Project Marketing: Beyond Competitive

Bidding Strategies', International Business Review, 2 (2), 125-141.

Banting, Peter, David Ford, Gross Andrew and George Holmes (1985), "Similarities in Industrial Procurement Across Four Counties," *Industrial Marketing Management*, 14, 133-144.

Björkman, Ingmar and Sören Kock (1995), "Social Relationships and Business Networks: The Case of Western Companies in China', *International Business Review*, 4 (4), 519-535.

Bonaccorsi, Andrea, Fabio Pammolli and Simone Tani (1996), "The Changing Boundaries of System Companies," *International Business Review*, 5 (6), 539-560.

Bunn, Michele D. (1993), "Taxonomy of Buying Decision Approaches," *Journal of Marketing*, 57 (January), 38-56.

Cova, Bernard (1989), "Stategies de soumission aux appels d'offres internationaux de projets industriels". doctoral dissertation. Dauphine University, Paris

Cova, Bernard and Timothy Allen (1989), "New Vistas in Competitive Bidding Strategies," *European Management Journal*, 7 (4), 451-456.

Cova, Bernard, Crespin-Mazet Florence and Robert Salle (1994), "From Competitive Tendering to Strategic Marketing: An Inductive Approach for Theory-Building", *Journal of Strategic Marketing*, 2, 29-47.

Cova, Bernard, Florence, Crespin-Mazet and Robert Salle (2001), "Ambiguity in Choice of Entry Modes in Project Marketing: A Case Study," Paper presented at the 17<sup>th</sup> Annual IMP conference, 9-11 September, Oslo.

Cova, Bernard, Pervez Ghauri and Robert Salle (2002), *Project Marketing: Beyond Competitive Bidding*, Chichester: John Wiley & Sons.

Cova, Bernard and Karin Holstius (1993), "How to Create Competitive Advantage in Project Business," *Journal of Marketing Management*, 9, 105-121.

Cova, Bernard and Robert Salle (2000), "Rituals in Managing Extrabusiness Relationships in International Project Marketing: A Conceptual Framework," *International Business Review*, 9, 669-685.

Cova, Bernard, Robert Salle and René Vincent (2000), "To Bid or Not to Bid: Screening the Whorcop Project," *European Management Journal*, 18 (5), 551-560.

Dahlgren, Jorgen and Jonas Söderlund (2001), "Managing Inter-Firm Industrial Projects: On Pacing and Matching Hierarchies," *International Business Review*, 10, 305-322.

Dawes, Philip L., Don Y. Lee and Grahame R. Dowling (1998), "Information Control and Influence in Emergent Buying Centres," *Journal of Marketing* 62 (July), 55-68.

Dawes, Philip L., Paul G. Patterson and David F. Midgley (1997), "Involvement of Technical Consultants in High Technology Business Markets," *Journal of Business and Industrial Marketing* 12 (2), 83-102.

Dubois, Anna and Gadde, Lars-Erik (2000), "Supply Strategy and Network Effects: Purchasing Behaviour in the Construction Industry," *European Journal of Purchasing and Supply Management* 6, 207-215.

Farrell, Mark and Bill Schroder (1999), "Power and Influence in the Buying Centre," *European Journal of Marketing* 33 (11/12), 1161-1170.

Gadde, Lars-Erik and Håkan Håkansson (1993), Professional Purchasing, London: Routledge.

Garrido-Samaniego, M. José and Jesús Gutierrez-Cillan (2004), "Determinants of Influence and Participation in the Buying Center: An Analysis of Spanish Industrial Companies," *Journal of Business and Industrial Marketing*, 19 (5), 320-336.

Ghingold, Morry and David T. Wilson (1998), "Buying Center Research and Business Marketing Practice: Meeting the Challenge of Dynamic Marketing," *Journal of Business and Industrial Marketing*, 13, 96-108.

Hadjikhani Amjad (1992), "Managing International Package Deals Projects," in *Managing Networks in International Business*, Mats Forsgren and Jan Johanson eds. Philadelphia: Gordon & Breach, 138-150.

Hadjikhani, Amjad (1996), "Project Marketing and the Management of Discontinuity," *International Business Review*, 5 (3), 319-336.

Hadjikhani, Amjad (1998), "Political Risk for Project-Selling firms: Turbulence in Relationships between Business and Non-Business Actors," *Journal of Business and Industrial Marketing*, 13 (3), 235-255.

Holstius, Karin (1989), "Project Business as a Strategic Choice", Lappeenranta University of Technology, Research papers, No. 12. Lappeenranta.

Holstius, Karin (1987), "Project Export", Lappeenranta University of Technology, Research papers, No. 1. Lappeenranta.

Huemer, Lars (2004), "Activating Trust: The Redefinition of Roles and Relationships in an International Construction Project," *International Marketing Review*, 21 (2), 187-201.

Håkansson, Håkan, ed. (1982) International Marketing and Purchasing of Industrial Goods: An Interaction Approach, Chichester: John Wiley & Sons.

Jansson, Hans (1989), "Marketing to Projects in Southeast Asia," *Advances in International Marketing*, 3, 259-276.

Jansson, Hans (1994), *Industrial Products: A Guide to the International Marketing Economics Model.* New York: International Business Press.

Johnston, Wesley J. and Thomas V. Bonoma (1981), "The Buying Center: Structure and Interaction Patterns," *Journal of Marketing*, 45 (Summer), 143-156.

Johnston, Wesley J. and Jeffrey E. Lewin (1996), "Organizational Buying Behavior: Toward an Integrative Framework," *Journal of Business Research*, 35, 1-15.

Kauffman, Ralph G. (1996), "Influences on Organizational Buying Choice Processes: Future Research Directions," *Journal of Business and Industrial Marketing*, 11 (3/4), 94-107.

Kohli, Ajay (1989), "Determinants of Influence on Organizational Buying: A Contingency Approach," *Journal of Marketing* 53 (July), 50-65.

Kosonen, Heikki M. (1991), "The Internationalization of Industrial Systems Suppliers". Acta Academiae Oeconomicae Helsingiensis, Series A:78. Helsinki: Helsinki School of Economics and

Business Administration.

Laing, Angus and Seonaidh Cotton (1997), "Patterns of Inter-Organizational Purchasing: Evolution of Consortia-Based Purchasing Amongst GP Fundholders," *European Journal of Purchasing and Supply Management*, 3 (2), 83-91.

Lambert, David R., Ronald J. Dornoff and Jerome B. Kernan (1977), "The Industrial Buyer and the Postchoice Evaluation Process," *Journal of Marketing Research*, 14 (May), 246-251.

Lampel, Joseph, Roger Miller and Serghei Floricel (1996), "Impact of Owner Involvement on Innovation in Large Projects: Lessons from Power Plants Construction," *International Business Review*, 5, 6 (1996), 561-578.

Lau, Geok-Theng, Mark Goh and Shan Lei Phua (1999), "Purchase-Related Factors and Buying Center Structure: An Empirical Assessment," *Industrial Marketing Management* 28, 573-587.

Liljegren, Goran (1988), "Interdependens och Dynamik i Långsiktiga Kundrelationer". doctoral Dissertation. Stockholm: Stockholm School of Economics.

McCabe, Donald L. (1987), "Buying Group Structure: Constriction at the Top," *Journal of Marketing* 51 (October), 89-98.

Morris, Michael H., Sven D. Hansen and Leyland F. Pitt (1995), "Environmental Turbulence and Organizational Buying: The Case of Health Benefits in South Africa," *Industrial Marketing Management* 24, 304-315.

Owusu, Richard, A. (2002), "Project Marketing to Africa: Lessons from the Case of IVO Transmission Engineering and Ghana's National Electrification Scheme," *Journal of Business and Industrial Marketing*, 17 (6), 523-537.

Owusu, Richard, A. (2003), "Collective Network Capability in International Project Business Networks", doctoral dissertation, Department of Marketing, Swedish School of Economics, Helsinki, Finland.

Park, Jeong E. and Michele D. Bunn (2003), "Organizational Memory: A New Perspective on the Organizational Buying Process," *Journal of Business and Industrial Marketing*, 18 (3), 237-257.

Robinson, Patrick J., Charles W. Faris with Yoram Wind (1967), *Industrial Buying and Creative Marketing*. Boston: Allyn & Bacon.

Ronchetto, John R., Michael D. Hutt and Peter H. Reingen (1989), "Embedded Influence Patterns in Organizational Buying Systems," *Journal of Marketing*, 53 (October), 51-62.

Sharma, D. Deo (1989), "Technical Consultancy as a Network of Relationships," *Advances in International Marketing*, 3, 57-74.

Sharma, Deo D. and Jan Johanson (1987), "Technical Consultancy in Internationalisation", *International Marketing Review*, 4 (4), 20-29.

Sharma, Deo D. and Robert Keller (1993), "Exporting in a Network: Relationship between Technical Consultancy and the Sources of Procurement," *Advances in International Marketing*, 5, 235-245.

Sheth, Jagdish N. (1973), "A Model of Industrial Buyer Behavior," *Journal of Marketing*, 37 (October), 50-56.

Skaates, Maria-Anne, Henrikki Tikkanen and Kimmo Alajoutsijärvi (2002), "Social and Cultural Capital in Project Marketing Service Firms: Danish Architectural Firms on the German Market," *Scandinavian Journal of Management*, 18, 589-609.

Skaates, Maria Anne, Henrikki Tikkanen and Kimmo Alajoutsijärvi (2003), "The International Marketing of Professional Service Projects: To What Extent Does Territoriality Matter?" *Journal of Services Marketing*, 17 (1), 83-97.

Skaates, Maria Anne, Henrikki Tikkanen and Jarno Lindblom (2002), "Relationships and Project Marketing Success," *Journal of Business and Industrial Marketing*, 17, 5, 389-406.

Spekman, Robert E. (1981), "Segmenting Buyers in Different Types of Organizations," *Industrial Marketing Management*, 10, 43-48.

Spekman, Robert E. and Kjell Gronhaug (1986), "Conceptual and Methodological Issues in Buying Centre Research," *European Journal of Marketing* 20 (7), 50-63.

Spekman, Robert E. and Louis W. Stern (1979), "Environmental Uncertainty and Buying Group Structure: An Empirical Investigation," *Journal of Marketing*, 43 (Spring), 54-64.

Turnbull, Peter, David Ford and Malcolm Cunningham (1996), "Interaction, Relationships and Networks in Business Markets: An Evolving Perspective," *Journal of Business and Industrial Marketing*, 11, 44-62.

Venkatesh, R, Ajay K. Kohli and Gerald Zaltman (1995), "Influence Strategies in Buying Centers," *Journal of Marketing*, 59 (October), 71-82.

Vyas, Niren and Arch G. Woodside (1984), "An Inductive Model of Industrial Supplier Choice Processes," *Journal of Marketing*, 48 (Winter), 30-45.

Webster, Frederick and Yoram Wind (1972), "A General Model for Understanding Organizational Buying Behavior," *Journal of Marketing*, 36 (April), 12-19.

Weiss, Allen M. and Jan B. Heide (1993), "The Nature of Organizational Search in High Technology Markets," *Journal of Marketing Research*, 30 (May), 220-233.

Welch, Denice, Lawrence Welch, Ian Wilkinson and Louise Young (1996), "Network Development in International Project Marketing and the Development of External Facilitation," *International Business Review*, 5 (6), 579-602.

Welch, Catherine (2005), 'Multilateral Organisations and International Project Marketing', *International Business Review*, 14 (3). Forthcoming.

Wilson, Elizabeth J., Gary L. Lilien and David T. Wilson (1991), "Developing and Testing a Contingency Paradigm of Group Choice in Organizational Buying," *Journal of Marketing Research*, 28 (November), 452-466.

Wilson, Elizabeth J., Robert C. McMurrian and Arch G. Woodside (2001), "How Buyers Frame Problems: Revisited," *Psychology and Marketing* 18 (6), 617-655.

Wilson, Elizabeth and Arch G. Woodside (1994), "A Two-Step Model of Influence in Purchasing Decisions," *International Journal of Physical Distribution and Logistics Management* 24 (5), 34-44.

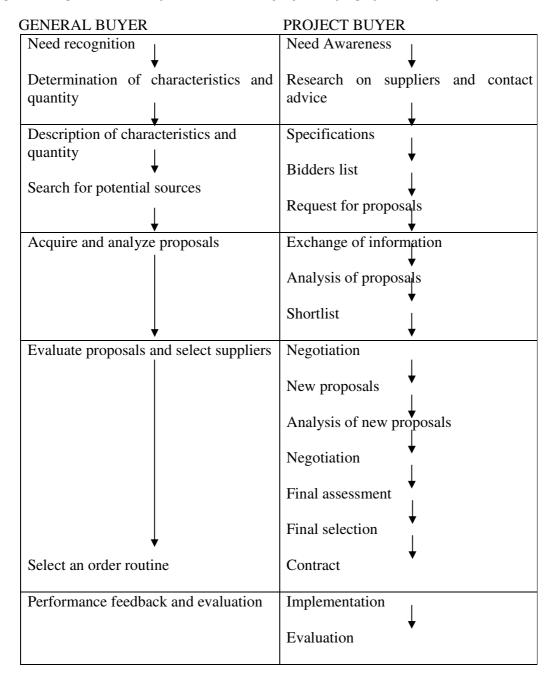
Woodside, Arch G (1994), "Network Anatomy of Industrial Marketing and Purchasing of New Manufacturing Technologies," *Journal of Business and Industrial Marketing*, 9 (3), 52-63.

Table 1: The project buyer in existing IMP project marketing research

Project buyer	Source
Not specified	Cova, Mazet and Salle 1994; Dahlgren and Söderlund 2001;
	Sharma and Keller 1993; Skaates et al 2002a; Skaates et al.
	2002b (Danish architectural case)
Single buyer	Ahlström and Brege 1999; Hadjikhani 1992, Hadjikhani 1998: Sharma 1989
(Partial) buying network	Björkman and Kock 1995; Cova, Salle and Vincent 2000;
	Cova, Ghauri and Salle 2002 (Australian submarine case);
	Dahlgren and Söderlund 2001; Huemer 2004; Jansson 1989;
	Jansson 1994; Owusu 2002; Welch et al. 1996; Welch 2005
Milieu	Cova and Hoskins 1997; Cova, Mazet and Salle 1996
Institutional buyer(s)*	Ahlström and Brege 1999; Ahmed 1993; Björkman and Kock
	1995; Cova, Crespin-Mazet and Salle 2001; Cova, Salle and
	Vincent 2000; Hadjikhani 1992, Hadhijkani 1996; Hadjikhani
	1998**; Owusu 2002; Sharma 1989; Skaates et al. 2002b
	(FINSYS case); Sharma and Johanson (1987) (KM case);
D: I I	Welch et al. 1996
Private buyer(s)	Cova and Salle 2000; Huemer 2004; Sharma and Johanson
	(1987) (J&W case); Skaates, Tikkanen and Alajoutsijärvi
Consultant/svinsa contractor	Abrard 1000: Cava Grania March and Calla 2001: Deblaran
Consultant/prime contractor	Ahmed 1993; Cova, Crespin-Mazet and Salle 2001; Dahlgren
	and Söderlund 2001; Hadjikhani 1996; Huemer 2004:
Cavarament as regulator lander	Jansson 1989; Jansson 1994
Government as regulator, lender or guarantor	Björkman and Kock 1995
Financier	Ahmed 1993; Hadjikhani 1992, Hadjikhani 1996; Skaates et
	al. 2002b (FINSYS case); Welch et al. 1996
Previous client of supplier	Cova, Salle and Vincent 2000; Hadjikhani 1996

<sup>\*</sup> including government corporations
\*\*In one of the three cases, the core buyer was a private firm later nationalized by the Iranian government

Figure 1: Organizational buyers: General and project buying cycles compared



Source: Adapted from Robinson et al. 1967; Cova and Holstius 1993

Figure 2: Factors determining the project buying cycle

