

Guest Editorial

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Preparing for new competitive challenges: Special Issue on the 24th Annual IPSERA Conference

Abstract

The 24th IPSERA conference in Amsterdam addressed the various new competitive challenges organizations face now that business environments are changing. While we can observe an increased role of - but also an increased concentration in - logistic services and IT services acting as a bonding agent of the various business processes, we also see an increased specialisation among suppliers, resulting in roles like capacity supplier, co-maker and broker. In terms of Systems Thinking: the sub-system of 'Suppliers' is breaking up into three sub-systems with distinctive different characteristics, and the traditional sub-system 'Purchasing' has transformed into an aspect-system connecting or involving all other sub-systems, while similarly, 'Logistics' and 'IT' have developed into intertwined aspect-systems, being part of each and every sub-system. These transformations have increased managerial complexity, greatly influencing the purchasing and supply chain functions within firms. The seven papers selected from the conference examine seven aspects of those changes in detail and elaborate on the role of the PSM field in this process: PSM answers to challenges by providing answers on how to move forward in practice.

Introduction: the theme

The 24th IPSERA¹ conference in Amsterdam was organized by the Faculty of Economics and Business Administration of the VU University and the Faculty of Business and Economics of the Hungarian University of Pannonia in Veszprém.

The conference theme was "*Preparing for new competitive challenges*". The theme refers to the various new competitive challenges organizations face, such as resource depletion, increasing demand in developing countries, increasingly demanding customers in traditional markets and increasing global competition. At the same time, organisations have to deal with a changing business or task environment (Wheelen et al. 2014), which has an impact on business policies and strategies, in line with the traditional strategic management literature (Johnson et al., 2008; Treacy and Wiersema, 1993). We know that the most critical factors or external forces that have an impact on the purchasing function and its policies and organisation are the degree of complexity and the dynamics, turbulence or volatility in the environment (Mintzberg, 1979; Emery and Trist, 1965; Gadde and Håkansson, 1993; Kamann et al., 2001). The occurrence of these critical factors is exactly what has been taking place, especially after the financial crisis of 2009. Companies had to rapidly assess their strengths – and vulnerabilities - and act swiftly, often resulting in shifting production locations, technologies and organisational structures.

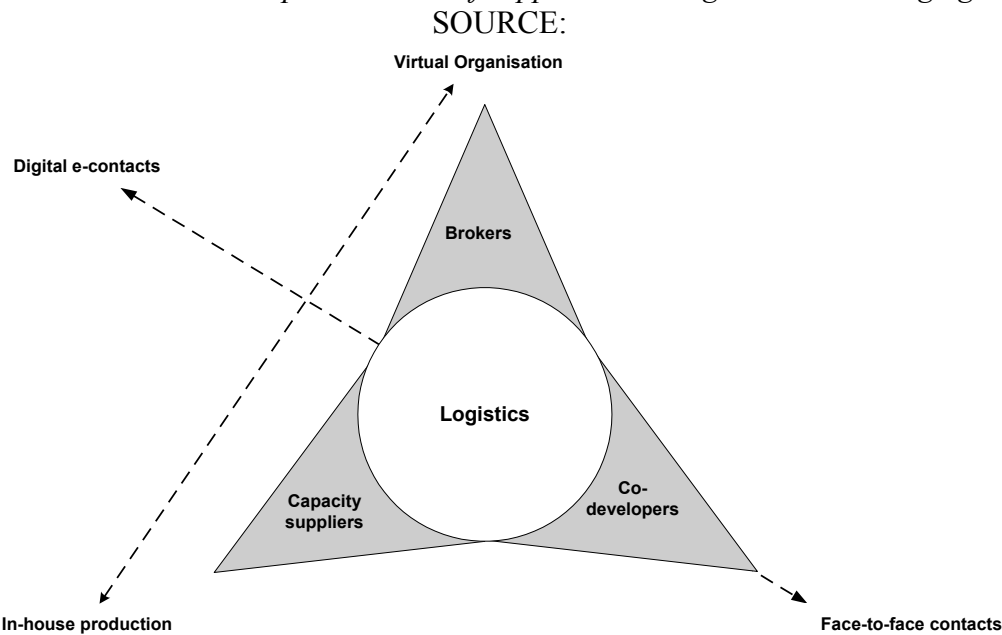
During this period of reorientation of business activities and strategies, we observed a further increase in the role and centrality of logistics and concurrently an increased *concentration* in these logistic services, resulting from mergers and take-overs. Horizontal cooperation, mergers and take-overs are believed to be beneficial by actors in the sector (cf. Cruijssen et al. 2007; Verstrepen et al., 2009). We also observed that logistics services more and more are combined with advanced IT services (LQ, 2007), where 'track-and-trace' just is

¹ International Purchasing and Supply Education and Research Association

one example. This applies both to consumer goods – with Amazon being the obvious example – and to Business-to-Business operations. While most models apply to ‘regular’ business flows and supply chains, we also find exceptions, like the increased attention for humanitarian supply chains requiring a tailored approach (Richardson et al. 2016).

These developments reflect a change in the causal texture of the business environment (Emery and Trist, 1965), but what does this all mean for the purchasing manager? What does it mean to the academic in the PSM field? While purchasing managers learned – or were conditioned - to see their business environment in terms of portfolio archetypes – either based on Kraljic (1983), Olsen and Ellram (1997) or Bensaou (1999) - in 1999, we described as part of a ‘vision for the future’ how suppliers would more and more be forced to specialise into one of three possible supplier *roles*: broker, co-maker or capacity supplier, where logistics would be the ‘bonding agent’ between the various business processes. Figure 1 shows these new roles, and this figure also incorporates the position on two axes: one that reflects the need for face-to-face contacts versus digital IT contacts, and one reflecting whether one is a virtual organisation in the extreme case or having in-house production. For logistics companies, actually, the same three roles would be valid: capacity suppliers – usually referred to as ‘wheels’ ‘mam-and-dad-stores’ or ‘1-car companies’ – co-makers providing total packages and brokerage roles just re-distributing, sub-contracting or – in more general terms - allocating tasks to capacity suppliers.

Figure 1: Three new roles in specialisation of suppliers with logistics as bonding agent



Source: Kamann, 1999; Lysons and Farrington, 2012, p.67)

Now, more than 15 years later, we indeed see a trend reflecting these specialisations in the role of suppliers (Booz & Co, 2013) as well as the bonding role of logistics (Bolumole, 2013). In particular this role of logistics has become more pronounced or, put differently, the dependence on a “time hazard free flow of logistics” (Kamann, 2008, p. 61) has increased. This makes the system more complex and vulnerable to disturbances. Road blockages are a nightmare not only for the transport firms, but even more so for the receiving companies, relying on this time hazard free flow of inputs. Synchronisation of business processes requires optimal IT and logistics. How to incorporate these new risks in the purchasing decision? We actually do find mixed strategies of companies to cope with the observed increased

complexity in supply chains (De Leeuw et al., 2013; Fiksel et al., 2015); there is not a ‘one solution fits all’ approach.

Reflecting on these developments in terms of Systems Thinking (Emery and Trist, 1965; von Bertalanffy, 1950, 1968) we might say that ‘Suppliers’ used to be considered as just a ‘sub-system’, *external* to the focal organisational boundaries. At best, these external sub-systems were classified and differentiated using any type of the portfolio analyses just mentioned. This could result in some differentiation in the way connections with these suppliers were filled in or designed in terms of attitude, criteria, strategies and connectivity issues. Over the past years, we can observe that the boundary of the system as perceived by its actors has become more permeable, and less clearly defined. Is a subsidiary in Hungary part of the system or outside the parent company in the U.K.? Is a Zara supplier in Spain outside or inside the system? Is the Starbucks franchisee in Budapest inside or outside and to what extent? Is it ‘them’ or ‘us’, in common language? This lack of clarity will affect the mind-set and therefore the behaviour of purchasing managers and other actors involved. To make things even more complex, we described in figure 1 how this sub-system of suppliers is in a process of splitting-up into three distinctively different types of sub-systems as a result of the specialisation described, with different roles, aims and connections involved.

At the same time, we observed that Logistics traditionally used to be viewed as just a sub-system: the people or department responsible for getting the goods in, storing them and distributing them. These days, however, it should be seen rather as an aspect-system, intertwined with IT. In Systems theory, aspect systems are connecting all the sub-systems in a system, but are a specific part of all these connections. There may be a Department of Logistics in a company, but that does not mean that Logistics should be viewed as just a sub-system. Similar, the Purchasing Department may be seen as a sub-system – with the Purchasing Department being the physical representation and locus of that sub-system - but the Purchasing *Function* goes through the entire organisation with many participants that belong to other sub-systems, spending their time on activities that are part of this function. Hence, in fact, PSM also is an aspect system and many activities like ordering, expediting, administration and payments that traditionalists allocate to the Sub-system of the PSM Department, should in fact be allocated to other sub-systems – Production, Sales or Finance - as part of the PSM aspect system, as in fact is done in modern PSM organisations.

It is this transformation we observe, starting from a traditional view where (1) Purchasing, Logistics and IT simply were sub-systems, represented by their distinctive departments and (2) suppliers were external sub-systems, mainly differentiated by supply risk and financial importance. This traditional view slowly transforms into a more complex view, where (1) Purchasing and Supply Management is perceived as one aspect system and Logistics - intertwined with IT – as another aspect system, and (2) three distinctive different sub-systems – brokers, co-developers and capacity suppliers - have come into being, where the increased mutual dependence and need for synchronisation has made the traditional systems boundary permeable, or more open in systems terms.

In this changing and dynamic context, requiring a transformed mind-set, companies try to accommodate the new challenges they meet in their markets. As we described, this sometimes means a re-orientation on the distinctive capabilities a company – or any organisation – has (Kay, 1995) and a development of these with properly selected partners – co-makers and most suitable capacity suppliers. This means a new task and challenge for purchasing professionals (Zheng et al., 2007) to create, innovate and/or improve the supply base and to have a closer look at the optimal nature of supplier relationships. Also public bodies and health care institutions are under pressure to deliver better performance meeting stakeholder demands and go through a similar process, albeit both pressure and process usually are less pronounced. Also here, closer horizontal collaboration may mean more

permeable system boundaries, with the inevitable resistance from certain sub-systems afraid to lose power.

Hence, the increased complexity and turbulence or dynamics in the environment, the specialisation in the role of suppliers in the supply base and the transformation of certain sub-systems into aspect systems – PSM being one of them - greatly influence the purchasing and supply chain functions within firms. It is a challenge for the purchasing and supply community to assist their organisations in preparing for these new competitive challenges, and to find the proper solutions in terms of analytical tools, concepts, educational topics and skills. The seven selected best conference papers each show some aspect of this slow and often heuristic process to find these proper solutions. They deal with questions like “should we cooperate as public bodies and what are the bottlenecks in trying to do so?” (Meehan et al.), “how accurate are purchasing decisions”, or, put differently: “what is the degree of over-confidence in purchasing decisions” (Ancarani et al.), “how successful are we in aligning supply chains, actually, or is it still a bridge too far?” (Manders et al.), “isn’t it time we make more use of creativity in a team, and how to do that?” (Kiratli et al.), “what actually determines systems purchasing?” (Immonen et al.), “why do we do the things the way we do them: the role of critical incidents” (Gelderman et al.) and finally, focussing on buyer-supplier relations, the question “what is the impact of social capital and technological uncertainty on the strategic performance of such a relationship?” (Gelderman et al.). Next, we discuss the seven selected papers and how they fit with this quest to secure appropriate methods, tools and relevant topics in dealing with new competitive challenges.

The Seven Best Papers

Seven papers survived the strict selection and review procedure applied for this special issue. Two of them received a best paper award during the Conference: the IPSERA Best Paper award went to our fourth contribution by Nadine Kiratli et al., while the IFPSM Best paper award went to Gelderman et al. for their paper on the role of critical incidents, our sixth contribution.

In “*Collaborate public procurement: an institutional explanation of legitimised resistance*”, Joanne Meehan of the University of Liverpool, Michael Ludbrook of Value Time Consulting (UK) and Christopher Mason of the Swinburne University of Technology in Victoria, Australia, deal with the barriers to regional collaborative procurement. They report on an empirical study of five UK public authorities in the emergency services sector. They find that strategic responses of institutional logics, protectionism and symbolic tick boxing legitimise stakeholder resistance to isomorphic forces and entrench operational barriers. Their findings contribute to an understanding of choice mechanisms in public procurement research by exploring tensions occurring from collaborative procurement strategies within and between organisations. The lesson we learn from this is that the ‘multiple stakeholders’ perspective adds to current thinking on how organisations create institutional logics to legitimise their actions. Or, putting it differently, ignoring this perspective may well block implementation of seemingly sound solutions.

The issue of ‘over-confidence’ was treated by Alessandro Ancarani, Carmela Di Mauro and Diego D’Urso of the University of Catania in “*Measuring over-confidence in purchasing decisions*”. They consider the relevance of this issue, and their study supports the view that over-confidence may lead purchasing managers to be less careful in the management of inventories. This may well result in higher costs. According to their results, managers should be trained to discount their expectations of success by removing this

optimistic bias. They also find it important to provide managers and employees with benchmarks that allow them to correctly compare their performance. This study underlines the effect of environmental uncertainty as a moderator between the cognitive and psychological factors of over-confidence and the strength of over-confidence itself.

The topic of Supply Chain Flexibility is dealt with by Jorieke Manders, Marjolein Caniëls and Paul Ghijsen, of the Dutch Open University in Heerlen. In their contribution titled “*Exploring supply chain flexibility in a FMCG food supply chain*”, they observe that many studies about supply chain flexibility mainly focus on one (manufacturing) company, occasionally incorporating the adjoining view from a supplier, distributor, or retailer. Manders et al. state that there is a lack of studies that include the view and experiences of *several* organizations within a supply chain at once. Drawing on network theory and stakeholder theory, they carried out a single embedded case study to explore how eight organizations that together form a fast moving consumer goods (FMCG) supply chain experience supply chain flexibility. Findings show that each chain member implements flexibility to fulfill the direct needs of the next tier chain member. However, there is no supply chain flexibility in which the supply chain (all organizations included) reacts flexibly as a whole. At the surface one can observe shared goals and coordination in information systems throughout the chain, but daily supply chain practice shows many obstacles. Manders et al. provide an in-depth analysis of daily operations in the chain and point out why overall flexibility is hard to achieve. Furthermore, they show why each organization prioritizes other flexibilities, especially at the medium term.

Nadine Kiratli, Frank Rozemeijer and Tim Hilken, of the University of Maastricht, Ko de Ruyter of Cass Business School in London and Ad de Jong of Aston Business School in Birmingham deal with the topic of creativity in “*Setting a Climate for Creativity In Sourcing Teams: A Measurement Scale for Team Creativity Climate*”. They state that ‘Creative’ sourcing strategies, designed to extract more value from the supply base, have become a competitive, strategic differentiator. To fuel this creativity, companies in practice install sourcing teams that can capitalize on the specialized knowledge and expertise of their employees across the company. The authors introduce the concept of a team creativity climate (TCC), referring to the team members' shared perceptions of their joint policies, procedures, and practices with respect to creatively developing sourcing strategies. Strategies that should be viewed as a means to address the unique challenges associated with a collective, cross-functional approach to develop value-enhancing sourcing strategies, including the ones we referred to in our introduction. Using a systematic scale development process that validates the proposed concept, the authors confirm its ability to predict sourcing team performance, and suggest some research avenues extending from this concept.

The study carried out by Mika Immonen, Jukka Hallikas and Mikko Pynnönen of the Lappeenranta University of Technology analyses the relation between business-to-business (B2B) service integration and purchasing strategies. The study aims to provide new knowledge regarding the antecedents of complex purchasing systems. In their contribution - entitled *Antecedents of system purchasing in B2B services* - they present results of an empirical study in the infrastructure management sector (i.e., electricity and telecom networks) where integrating business-to-business services is a current concern among network operators. They compare the influence of operational services and strategic services on B2B relationships between service providers and customers. Using PLS on the effective sample from customers of the case company consisting of 143 valid responses – the response rate being 18% - they concluded: (1) Integrating strategic design activities increases collaboration between service providers and their customers; (2) Integrating complex planning processes requires in-depth and long-term development of service offerings; (3)

Integrating operational services has no effect on collaboration. (4) Integrating process solutions to optimize performance does not deepen the B2B relationship; (5) Cooperation in business development positively influences customers' orientation toward systemic purchasing and finally (6) Systemic purchasing strategies are related to long-term development and co-learning; (7) A systemic purchasing strategy increases the expected reliability of the service; (8) Systemic purchasing tends to increase the quality of the processes related to complex service systems.

Cees Gelderman, Janjaap Semeijn - of the Open University in the Netherlands – and Niels Plugge – of LyondellBasell Rotterdam, the Netherlands – deal with “*The role of critical incidents in the development of global sourcing: results of an in-depth case study*”. They state that while marketing and production strategies are being adjusted in this time of globalisation, purchasing is often overlooked. They show how global sourcing can be largely triggered by critical incidents rather than strategic choices. They employed a single embedded case study at Royal Brinkman - leader in the Dutch horticulture industry - to explore the role of critical incidents in the development of global sourcing strategies. Company documents and interviews revealed the process of the development of global sourcing, and indicated which critical incident had a substantial impact on this process. It was found that critical incidents can initiate and further stimulate global sourcing. They conclude that a proactive strategy does not appear to be a requirement to advance up the global sourcing ladder (cf. Monczka and Trent, 1991).

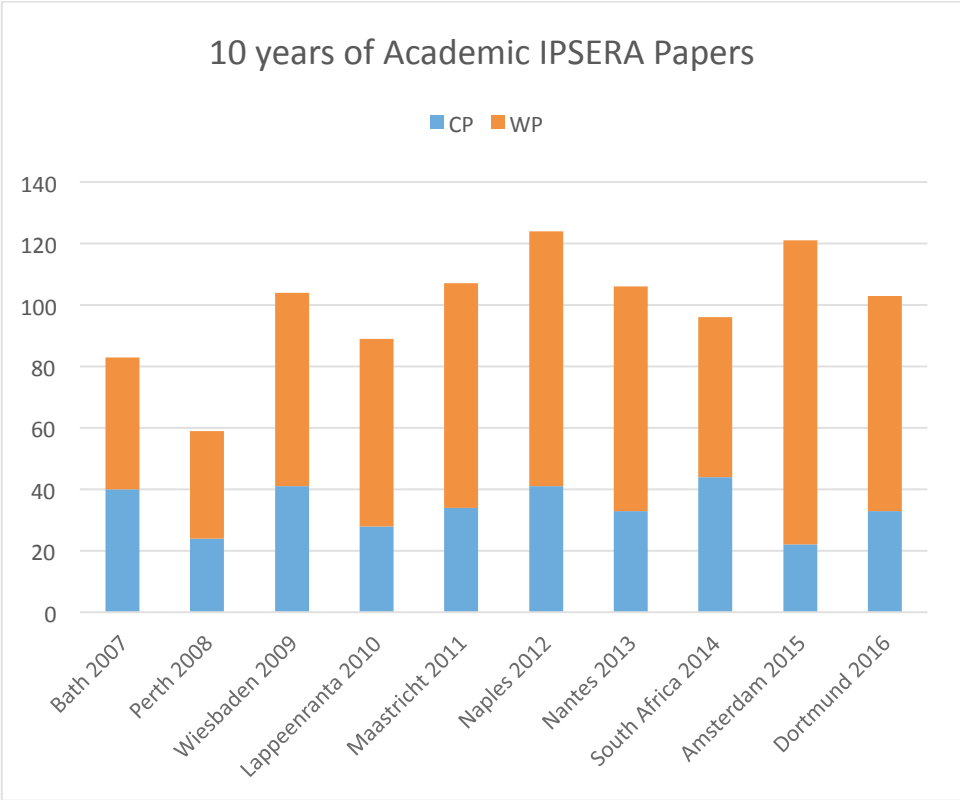
Our last selected paper is by Cees Gelderman, Janjaap Semeijn – both from the Open University in the Netherlands – and Patrique Mertschuweit from Philips Healthcare in Eindhoven. Their contribution, entitled “*The impact of social capital and technological uncertainty on strategic performance in buyer-supplier relationships*”, uses the definition of social capital as ‘the sum of resources embedded within and derived from the network of relationships’. Social Capital Theory (Nahapiet and Ghoshal, 1998) emphasizes the role of a firm's social network in gaining competitive advantage. Social capital is a valuable asset for companies because of the access to resources made available through buyer-supplier relationships. Many studies have investigated the antecedents and/or the impact of cognitive, relational, and structural dimensions of social capital on some performance measure. The authors extend this research by considering the moderating effect of *technological uncertainty* on the relations between social capital dimensions and strategic performance. Using a sample of 88 European manufacturing firms, their analysis shows a positive, significant impact of cognitive social capital, but failed to confirm the expected influence of the relational and structural dimensions, and no moderator effects were found. There was however a positive association between technological uncertainty and strategic performance, suggesting that technological uncertainty stimulates companies to develop new products and to enter new markets – a point which is very relevant to the discussion with which we started this Special Issue.

As conference organizers and guest editors of this special issue we are grateful to members of the conference Scientific Committee that participated in the initial refereeing processes that gave authors access to the conference. Some of them also participated in refereeing the papers a second time for the special issue. They were assisted by additional JPSM reviewers that have shown great skill and flexibility in delivering high quality referee reports facing review deadlines that were quite short. Most of all, we would like to thank the authors for their patience and flexibility. Finally we are indebted to Louise Knight, co-Editor of JPSM for her relentless support in composing and finalising this special issue.

The 24th IPSERA Conference

The International Purchasing and Supply Education and Research Association (IPSERA) is a multi-disciplinary network of academics and practitioners dedicated to the development of knowledge concerning Purchasing and Supply Management. The 2015 Annual Conference was held from March 29th to April 1st. More than 200 delegates presented and discussed the 121 academic papers and 4 practitioner papers. Two pre-conference events were held Sunday, the second Educator’s Conference and the Doctoral Workshop. On Sunday evening, a reception at the City Hall of Amsterdam with a presentation by Hans Dussel, CPO of the City of Amsterdam in the Council was followed by an informal welcoming reception hosted by the City of Amsterdam. On Monday morning, the President of IPSERA, Helen Walker formally opened the Conference, with the Chair of the Local Organising Committee, Wout Dullaert. Two key note speakers followed, one from academia –Jan Fransoo from Eindhoven University of Technology – and one from practice, Stijn Kiens, Head of the Logistics department of Médecins Sans Frontières in Amsterdam. The rest of the conference was devoted to the presentation and discussion of the 22 Competitive Papers (CP), 99 Working Papers (WP) and 4 practitioner papers. If we look at the number of academic papers over the last 10 conferences, we find a relatively stable number between 90 and 120 papers over the last 8 years (Figure 2).

Figure 2: Competitive papers (CP) and Working papers (WP) at IPSERA Conferences, 2007-2016



The number of registered participants that were reported over the years varies between 180 to around 210 in the last eight years, which seems a rather stable figure and corresponds with the rather stable number of total academic papers we mentioned. Practitioner papers remain a rather small category, with on average four papers at each conference.

Reflecting the special theme of the conference and topics popular at every conference, papers were clustered around the following topics:

- Sustainable procurement and CSR
- Electronic procurement
- Global sourcing and outsourcing issues
- Back sourcing
- Purchasing organisation, skills and competences
- Supply chains and networks
- Supply chain risk
- Supplier evaluation and performance measurement
- Humanitarian supply chains
- Health care procurement
- Innovation, NPD and supplier involvement
- Performance based contracting
- Purchasing services
- Supplier relationship management
- Supply strategy
- Supply chain security
- Supplier selection

All Conference and Sunday pre-Conference sessions were held at the campus of VU University in Amsterdam, while the social events were organised in restaurant the Veranda (lunch for Educators Conference and Doctoral Workshop), the Amsterdam City Hall (Opening and Welcoming reception Sunday evening), the Zuiderkerk (Buffet on Monday evening) and the KIT Royal Institute of the Tropics (Gala dinner on Tuesday evening). We would like to thank our sponsors and all suppliers involved for their wonderful commitment to make these events a success.

The Guest Editors wish you a lot of inspiration when studying the contributions in this special issue.

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