THE DEVELOPMENT OF PURCHASING MATURITY AND ITS IMPACT ON INTERNAL SERVICE QUALITY AND SUPPLIER SATISFACTION

Work-in-progress paper

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ABSTRACT - In recent years, the purchasing function is increasingly recognized as a proactive, strategic and value-adding business function, rather than a more reactive and transaction oriented buying function. The main objective of the present exploratory study is to examine the impact of purchasing maturity on what we call 'purchasing's value creation' toward its direct partners in the supply chain. More specifically, the article addresses two issues: first, the impact of the purchasing maturity process on purchasing's internal service quality as perceived by internal customers is looked into. Secondly, the quality of the buyer-seller relationships as perceived by suppliers in terms of supplier satisfaction is analyzed. To this end, a case study research consisting of several in-depth interviews and workshops within multiple companies is conducted. The present work-in-progress paper describes the theoretical foundation, the set-up of the study and the preliminary research results.

 $Key\ words:\ purchasing\ maturity\ -\ internal\ service\ quality\ -\ supplier\ satisfaction\ -\ buyer-seller\ relationship\ -\ strategic\ purchasing\ -\ exploratory\ study$

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INTRODUCTION

In recent years, the purchasing function has evolved from a clerical buying function to a proactive, strategic and value-adding business function, contributing to the competitive position of the company (Ericson & Rycraft, 2011; Gelderman & Van Weele, 2005; Paulraj et al., 2006; Pollice & Fleury, 2010). This evolution toward maturity has its impact not only on purchasing's status (Paulraj et al., 2006) but also on the relation with its internal customers (Stanley & Wisner, 2001) and external suppliers (Lawson et al., 2009; Paulraj et al., 2006). In the present study we use a relational approach and address the impact of 'purchasing maturity' on the perceptions of suppliers and internal customers. For the suppliers we operationalize this by supplier satisfaction and for the internal customers by perceived internal service quality. Besides a thorough literature review, this study is built on a case study within multiple companies of a limited number of industries. Interviews have been conducted with purchasing staff and Chief Purchasing Officers (further CPOs), with several user divisions and with external suppliers. The present work-in-progress paper describes the set-up of the study and the preliminary research results.

The present study is important because of its implications for practitioners. They will be provided with more insight into the development of the purchasing function in an organization and its contribution to the company's value creation process. Moreover, by examining the quality of purchasing's service to internal users its role can be facilitated. By studying its relationships with external suppliers, managers will be provided with inspiration on how to enhance purchasing's added value in an integrated supply chain and how to become a preferred customer (Schiele et al., 2011). Our study contributes to the existing literature by combining literature streams that have not been widely integrated before. Namely, in academic literature we find research on (1) purchasing maturity, (2) internal relations and (3) buyer-seller relationships and networks. Although founders of stage-wise models of purchasing maturity (e.g. Van Weele et al. 1998) or levels of strategic purchasing (e.g. Paulraj et al., 2006) attempt to incorporate (one of) the latter two literature streams, such as Paulraj et al. (2006) having investigated the relationship between strategic purchasing and supply integration, in general we can argue that these streams have not yet been widely combined. To the best of our knowledge, purchasing maturity models have not been a major topic of interest within academic literature on internal service quality and buyer-seller relationships before. Additionally, supplier satisfaction has not been extensively examined in purchasing and industrial management (Essig & Amann, 2009; Ghijsen et al., 2010).

In order to identify the literature gap and to develop our research questions, literature on the (1) evolution of the purchasing and supply management field, (2) internal (customer) relations and (3) buyer-seller relations and networks was searched and analyzed. For theoretical underpinning, we looked into the resource-based view of a firm, organizational learning theory and the relational view as main organization and management theories. Literature research was profoundly executed by searching into academic journals related to the purchasing and supply management field (e.g. Journal of Purchasing & Supply Management, European Journal of Purchasing & Supply Management, Journal of Operations Management, Journal of Operations and Production Management, International Journal of Purchasing and Materials Management, Journal of Supply Chain Management, etc.), but also general or industrial marketing related literature (e.g. Industrial Marketing Management, Academy of Management Journal, Academy of Management Review and Organization Science), doctoral dissertations and conference proceedings were taken into account. Most frequently used keywords to search in electronic databases such as Web of Knowledge and ScienceDirect for academic articles and papers were 'purchasing maturity', 'strategic purchasing', 'purchasing

development', '(internal) service quality', 'supplier satisfaction', 'value (creation)', 'internal customers', 'supply management', 'buyer-seller relationships', 'integration', 'strategic relevance' and 'supplier relationship (management)'. We merely selected most frequently cited and so 'basic' studies and combined them with the most recent academic research papers and a few managerial reports and books. As a result, we were able to clearly define the literature gap and problem statement and had clear view on the evolution and latest trends within the purchasing and supply management field.

The remainder of this paper is structured as follows: in section 2, the literature background is explained. First, we examine the current evolution of purchasing and its implications on the internal relationships and the supplier relationships. Secondly, the purchasing maturity process is captured and our operationalization of purchasing maturity is introduced. Section 3 elaborates on the research objective and introduces the research questions. Section 4 explains the exploratory and qualitative research methodology that is used in the study. Finally, section 5 reports on the preliminary results of our case study and section 6 addresses future research avenues.

LITERATURE BACKGROUND

THE EVOLUTION TOWARD STRATEGIC PURCHASING

The current business environment can be characterized by increasing and strong global competition, raw material shortages, price volatility, globalization of business activities, empowered and informed customers and accelerating (information) technology developments (Dye & Stephenson, 2010; Carter et al., 2009; Hales et al., 2011; Lindgreen & Wynstra, 2005; Monczka & Petersen, 2009; Pollice & Fleury, 2010). Consequently, firms face new challenges to survive in a more complex business environment emphasizing on value creation and delivery (Lindgreen et al., 2009; Van Weele & Rozemeijer, 1996) and integrated supply chain management (Chen et al., 2004; Cousins et al., 2006; Hales et al., 2011; Paulraj et al., 2006). These trends, together with the fact that a firm's purchasing volume – as a percentage of the firm's turnover – continues to increase (Schiele, 2007), have led to a more strategic and pivotal role for purchasing and supply management (PSM) at the company level (Chen et al., 2004; Paulraj et al., 2006; Pollice & Fleury, 2010).

The changing role of purchasing in an organization

As the purchasing function is increasingly viewed as a value adding and strategic function contributing to the value creation and competitive advantage of organizations (Baier et al., 2008; Batenburg & Versendaal, 2008; Cousins et al., 2006; Paulraj et al., 2006), the function plays a greater role in corporate strategic planning (Carr & Pearson, 2002; Carr & Smeltzer, 1997; Paulraj et al., 2006) and is used as a strategic weapon (Lawson et al., 2009) and major contributor of strategic success (Baier et al., 2008; Krause et al., 2001). This finding is supported by several sourcing researchers or experts stating that "the importance of value creation in procurement is growing twice as fast as the importance of cost reduction" (Hales et al., 2011, p.1), and that "over the past century supply management has transformed itself from a backwater, administrative function to a proactive, strategic function within the enterprise that delivers true competitive advantage" (Ericson & Rycraft, 2011, p.49). Also Flynn (2011) and Monczka et al. (2010) stress that competitive advantage and long-term strategic value for customers and the company are becoming the central focus for purchasing and supply management.

In the academic literature, a term often used to describe the growing strategic role of purchasing within the organization is 'strategic purchasing' which is often described as "a buying firm's efforts toward strategic planning in purchasing" and "the process of planning, implementing, evaluating and controlling strategic and operating purchasing decisions for directing all activities of the purchasing function toward opportunities consistent with the firm's capabilities to achieve its long-term goals" (Carr & Smeltzer, 1997, p.201). Paulraj et al. (2006) characterize the level of strategic purchasing by three dimensions: purchasing's strategic focus, its strategic involvement and the status/visibility of the purchasing professionals. However, the internal upgrading of purchasing in the organization has also implications for the relationships purchasing holds with its internal customers and its external suppliers, which on their turn participate in creating the company's customer value and competitive advantage (Jun & Cai, 2010; Spekman & Carraway, 2006; Ulaga, 2003; Wisner & Stanley, 1999). In other words, companies increasingly need to look at entire processes that even cross organizational boundaries, instead of taking a 'single function approach' (Van Weele & Rozemeijer, 1996).

Changing internal customer relationships

As competition increases, organizations tend to focus on continuous improvement of quality of products and services for their external customers (Jun & Cai, 2010; Stanley & Wisner, 2001). Therefore, total quality management (further TQM) practices are increasingly implemented (Saravanan & Rao, 2007; Stanley & Wisner, 2001) which implies that also the 'service quality' between internal suppliers and internal customers has become an indispensable value adding factor (Love et al., 2000; Stanley & Wisner, 2001; Young & Varble, 1997). Product requirements and quality expectations tend to increase and as a result purchase specifications and supplier service requirements get more stringent (Stanley & Wisner, 2001) and technically complex (Gadde et al., 2010). Consequently, the purchasing function, as intermediary in the supply chain between external suppliers and internal customers (Dubois & Wynstra, 2005; Paulraj & Chen, 2005; Stanley & Wisner, 2001), gains heavier involvement in internal service users (Stanley & Wisner, 2001) such as R&D for new product development (Schiele, 2010; Wynstra et al., 2003). Moreover, according to Piercy (2009) there is definitely need for internal collaboration between boundary-spanning roles. Also from an industrial network theory (further IMP theory) perspective, the growing importance of purchasing's couplings to the internal functions, such as production and product development, has been recognized in this context (Gadde et al., 2010). From an organizational learning point of view, cross-functional teamwork and integration and a shared vision in the supply management process enhance learning effects (Hult et al., 2000; Meeus et al., 2001; Schiele, 2007). More specifically, the organizational learning capacity can be significantly improved if the organizational structure is process oriented and founded on TQM philosophy (Love et al., 2000). These learning effects on their turn can lead to increased competitiveness and organizational performance (Garratt, 1987; Marquardt, 2011; Santos-Vijande et al., 2011; Storey & Barnett, 2000).

Changing supplier relationships

Besides internal customer relationships, also the selection and management of the firm's supplier relationships get more significant and essential as purchase specifications and supplier service requirements become more stringent (Chen et al., 2004; Stanley & Wisner, 2001). The management of the supplier relationship is key for purchasing to better serve its internal customers and to create value.

Buyer-seller relationships have already been widely discussed and investigated from different perspectives by academics (Fredendall et al., 2005). In particular they are rooted in and investigated from the perspective of among others resource-based theory (Baxter & Matear, 2004; Penttinen & Palmer, 2007), the relational view (Dyer & Singh, 1998) and (inter-) organizational learning theory (Liu, 2012; Selnes & Sallis, 2003; Wu & Cavusgil, 2006). From an extended resource-based view, it is argued that supplier relationships and networks contribute to the firm's sustained competitive advantage (further SCA) as (1) suppliers and (2) assets accessed through the supplier relationship (network) are viewed as valuable resources from which some can generate SCA for the buying company (Eisenhardt & Schoonhoven, 1996; Lavie, 2006; Madhok & Tallman, 1998; Oliver, 1997; Steinle & Schiele, 2008). Organizational learning literature emphasizes the importance of inter-firm relationship learning (Liu, 2012) as supply chain relationships allow firms to learn from and with other organizations and provide them with access to new knowledge (Ballou et al., 2000; Berghman et al., 2012) and skills (Wu & Cavusgil, 2006). Analogous, proponents of the relational view recognize the importance of firm linkages for resources to move and in particular knowledge to flow between firms which promotes learning and generation of new knowledge and eventually contributes to the firm's competitive advantage (Berghman et al., 2012; Dyer & Singh, 1998).

In its discussion about the management and characteristics of supplier relationships and the interaction between buyers and sellers in dyadic business relationships and the wider networks in which they operate (Ford et al., 1998; Hakansson & Snehota, 1995; Raskovic & Brencic, 2009), the IMP theory focuses on business relationships and networks (between organizations) as distinctive from interpersonal relationships. The theory defines the substance of buyer-seller relationships by three interrelated layers: actor bonds, activity links and resource ties (Ford et al., 1998; Ford et al., 2011; Hakansson & Johanson, 1992; Hakansson & Snehota, 1995). Furthermore, as the IMP theory characterizes a relationship as a social exchange to reduce uncertainty in the supply chain (Bessant et al., 1994), key elements of relationships such as trust, commitment, loyalty, learning and adaptation are identified (Raskovic & Brencic, 2009) and studied to describe the development of business relationships (Ford et al., 1998; Smals & Smits, 2012).

In accordance with above mentioned organization theories, the IMP theory recognizes the potential contribution of buyer-seller relationships and networks to the organization's value creation (Baxter & Matear, 2004; Gadde & Snehota, 2000) and learning (Ford et al., 2011; Gadde et al., 2010). Moreover, purchasing plays a critical role in this resource acquisition because of its broad contact network with suppliers (Gadde et al., 2010). Recent IMP related studies demonstrate the growing importance of purchasing in managing the supplier relationships and identify concepts that we will use further. For instance, Schiele (2006) stresses the importance of innovative suppliers for a firm's drive for innovation. In the selection of these suppliers and becoming the 'preferred customer' of them to develop innovations with lies a prominent role for purchasing, according to the author. Caniëls & Gelderman (2007) indicate the expansive use of a purchasing portfolio approach by purchasing practitioners and thereby emphasize that purchasers should be aware of the vulnerability as a consequence of their dependence on suppliers. Moreover, according to Roseira, et al. (2010) purchasers must focus on the interdependencies between the company and its suppliers and exploit the benefits of a particular relation by transmitting them to other supplier relationships.

With regard to the general purchasing related academic literature concerning buyer-seller relationships, purchasing can be considered as an intermediary in the supply chain between

external suppliers and internal customers, playing a key role in the management of buyerseller relationships (Dubois & Wynstra, 2005; Paulraj & Chen, 2005; Stanley & Wisner, 2001). Moreover, purchasing is often approached as a boundary spanning function (Monczka et al., 2005; Pardo et al., 2011; Piercy, 2009) having the opportunity to increase the value creation of the supply chain by internal interaction (Piercy, 2009; Smirnova et al., 2010) and external involvement (Dumond, 1994). In fact, as purchasing develops into a strategic function in an organization, strategic suppliers are approached in more 'mature' ways (Chen et al., 2004; Lawson et al., 2009; Sharma & Sheth, 1997; Wynstra et al., 2003). This leads to long-term collaborative buyer-seller relationships (Spekman & Carraway, 2006) with techniques such as joint planning and joint problem solving (Claro & Claro, 2010), strategic partnerships (Jun & Cai, 2010; Ploetner & Ehret, 2006; Spekman, 1988), strategic supplier portfolios (Wagner & Johnson, 2004), supplier development (Ghijsen et al., 2010; Monczka et al., 2002; Sánchez-Rodríguez, 2009) and supplier involvement in new product development (Dowlatshahi, 1998; Kibbeling, 2010; Schiele, 2006; Wagner & Hoegl, 2006). From this point of view, suppliers are not only important for a realization of cost reduction, but also in the perspective of revenue generation (Ford et al., 2011). Moreover, attended with the new supplier approach, recent academic literature describes a change in supplier relationships reflecting on the transition from infinite relationships at arm's length to a reduced number of and closer, long-term relationships with preferred suppliers (Koufteros et al., 2007; Paulraj et al., 2006; Schiele et al., 2011), leading to advantages such as improved cooperation and cost, better quality and product innovation (Pardo et al., 2011; Smals & Smits, 2012).

However, concerning this 'mature' supplier approach, we have an important remark to make, based on an IMP theoretical perspective. Although it has been supported by the IMP theory and more general purchasing and supply management literature that supplier relationships represent important assets of a company, there is no one best type of supplier relationship and best practice to manage it. In their article, Gadde & Snehota (2000) argue that close, trustbased, long-lasting and collaborative supplier relationships are not always preferable above other types of relationships with a different degree of involvement, another time perspective, a different sourcing strategy (e.g. single or multiple sourcing) and a different volume of business. Every company uses its own set of supplier relationships, with its own impact on the firm performance, according to the authors. They claim that one needs to keep in mind that buyer-seller relationships are embedded in networks and are characterized interdependency¹, which can make it hard for a buying company to 'shape' its supplier relationships. They argue that firms need to balance supplier relationships according to the relationship characteristics (e.g. the degree of involvement) to remain flexible to changing conditions and to base their choices on expected economic performance outcomes. In the context of the present study and so based on the purchasing development literature, we can argue that purchasing takes a more mature approach towards key suppliers as it develops. Moreover, in general more long-term collaborative relationships with high involvement (e.g. partnerships) will be built with a limited number of suppliers (i.e. key or strategic suppliers), providing the firm with strategic assets. Nevertheless, we have to nuance that, although purchasers increasingly concentrate on building these strategic partnerships, at the same time less supply integration with other suppliers (which might be relatively less strategically important and/or deliver less strategic products/services) may occur because of above mentioned reasons (e.g. to remain efficient and flexible). So, in the remainder of the article we refer with collaborative supplier relationships to those close collaborations which are increasingly built with key suppliers as the purchasing function develops.

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¹ E.g. the buying organization needs to buy from a predefined supplier imposed by the customer; the supplier is not willing/capable to develop a strategic partnership with the buying company (Gadde & Snehota, 2000)

In the present study we will elaborate further on the increasingly important role for purchasing in supplier relationship management and investigate the impact of the purchasing maturity process on the service quality purchasing delivers to it internal customers.

THE PURCHASING MATURITY MODEL

Based on the previous literature overview it can be concluded that from an IMP perspective (1) internal collaboration between purchasing and its internal customers is critical for the value strategy of an organization and its purchasing function and (2) purchasing management is key for the management of supplier relationships. In particular, the organization of the purchasing function (e.g. organizational position, collaboration with other functions, etc.; internal dimension) needs to be aligned with the supplier market and network (i.e. buyer-seller relationships; external dimension) which can result in different outcomes that are reflected by the different purchasing orientations in the purchasing development process (Dubois & Wynstra, 2005).

This process wherein the purchasing function of an organization evolves from a reactive, passive and supportive function to a proactive and strategic one, is often called the 'purchasing maturity process' and is as such described in several academic purchasing developmental or strategic purchasing models (Cousins et al., 2006; Paulraj et al., 2006; Reck & Long, 1988; Schiele, 2007; Syson, 1989) and managerial purchasing maturity models (Hales et al., 2011; Keough, 1993; Monczka & Petersen, 2009; Van Weele, 2010). These models are mostly conceptual in nature (Schiele, 2007) and describe an evolutionary process in purchasing through a limited number of maturity stages (Schiele, 2007; Van Weele, 2010). The sequence of stages describes the hierarchical growth of and change in responsibility and autonomy of the purchasing function (Van Weele et al., 1998). In addition, it implies changes in (the number of) the relationships a purchasing organization holds with its external suppliers (Ellram & Carr, 1994; Rozemeijer, 2000; Van Weele, 2010) - whereby this optimization of the supply base on its turn eventually leads to a status of 'customer of choice' for a buying company (Schiele, 2006) - and with its internal customers (Rozemeijer, 2000; Schiele, 2007). Finally, it is remarked that most models tackle several parameters such as top management commitment, management style, purchasing strategy and activities, organizational issues, people issues and performance measures (Van Weele et al., 1998).

In the present study we will merely focus on the relatively recent and empirically tested academic maturity models developed by Cousins et al. (2006), Paulraj et al. (2006) and Schiele et al. (2007). In analogy with the latter models, one can see the extremes of the 'professionalization process' of purchasing with a more functional and price focused purchasing on the left which we will call the 'adolescent' or 'younger' side and is characterized rather by a reactive purchasing operation with purchasers as mere administrators. As purchasing gradually develops to a strategic function, and so becomes 'adult', integration with different functions and parties becomes a key issue. In particular, buyer-seller relationships evolve from a traditional transaction orientation of purchasing, whereby buyers concentrate on negotiating and contracting 'good' deals and contracts with suppliers, to management of supply chain issues and supply relationship management (Cousins et al., 2006; Van Weele, 2010). In fact, in a more evolved purchasing function, purchasing managers work hard to involve key supply partners in different business processes (Claro & Claro, 2010; Cousins et al., 2006; Lawson et al., 2009; Paulraj et al., 2006; Schiele, 2006; Schiele, 2007; Wagner & Hoegl, 2006). Furthermore, cross-organizational efforts with key suppliers and thus partnership sourcing implies higher supplier relationship outcomes, such as an improvement in product design (Cousins et al., 2006).

Concerning purchasing's relations with its internal customers, 'adolescent' purchasing covers a clerical, reactive and executive department (Telgen & Pop-Sitar, 2001; Van Weele, 2010; Van Weele et al., 1998). As a consequence, no intense collaboration with internal customers or early involvement of purchasing occurs (Cousins et al., 2006; Schiele, 2007). However, as purchasing develops, the purchasing/sourcing strategy becomes explicit and documented (Schiele, 2007) and fits the overall business strategy (Cousins et al., 2006; Paulraj et al., 2006; Van Weele, 2010). This latter offers an opportunity for a stronger integration with user functions within the company, according to the authors. Purchasing becomes internally integrated and cross-functional involvement with other functions such as marketing, logistics, production, R&D or quality management becomes significant (Cousins et al., 2006; Schiele, 2007; Van Weele, 2010)

Although we categorize the extremes of the purchasing maturity process in 'adolescent' purchasing and 'adult' purchasing (table 1), we have no intention to draw a boundary or distinction between immature and mature purchasing. However, because we currently conduct qualitative research with a limited number of cases whereby a rough, exploratory, interpretative approach is used, we cannot operationalize purchasing maturity as a continuous variable covering all elements and stages. In table 1 this 'dichotomy' is extended to some recent academic and managerial models in an attempt to compare the different stages of these models.

	Adolescent	Adult					
	Academic models						
Cousins et	Undeveloped purchasers	Capable purchasers					
al. (2006)	Celebrity purchasers	Strategic purchasers					
Paulraj et	Nascent purchasing	Tactical purchasing					
al. (2006)		Strategic purchasing					
Schiele (2007)	Purchasing as best practice activity/tool method	Purchasing task defined and documented and applied					
	Purchasing task performed by position or	Cross-functional integration					
	person						
	Managerial mod	els					
Hales et al.	Transactional interactions	Strategic sourcing projects					
(2011)		Strategic supplier relationship					
		management					
		Cross-enterprise					
Monczka &	Basic beginnings	Limited integration					
Petersen	Moderate development	Fully integrated supply chains					
(2009)							
Van Weele	Transaction orientation	Process orientation					
(1000	Commonsial animatetian	Cumple aboin orientation					
$(1998-2010)^2$	Commercial orientation	Supply chain orientation					

Table 1: developmental stages of the different purchasing developmental models, ranked adolescent versus adult purchasing.

However, a critical reader will wonder how the purchasing maturity process can be directed, i.e. what are the managerial actions to let the purchasing function evolve in the purchasing maturity model?

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² Because meanwhile the model of Van Weele et al. (1998) has been modified and republished in books of Van Weele as one of the founders of the model, we will refer to it as the model of 'Van Weele (1998-2010)' further on.

The realization of purchasing maturity

The evolution toward a more mature purchasing organization is manifested in a shift in focus from cost (i.e. price) and operational efficiency to total cost (i.e. total cost of ownership), value and sustainable competitive advantage (Batenburg & Versendaal, 2008; Ericson & Rycraft, 2011; Paulraj et al., 2006; Pollice & Fleury, 2010). Furthermore, based on the previous literature overview, purchasing maturity can also be "related (among others) to the level of professionalism in the purchasing function as expressed in status of the function, role and organizational status of the purchasing department, availability of purchasing information systems, quality of the people involved in purchasing, and the level of collaboration with suppliers" (Rozemeijer et al., 2003, p.10). Building on academic literature on the purchasing function's evolution and development, the purchasing maturity process is reflected by among others dimensions or variables related to the internal upgrading of the purchasing function's position, role and responsibilities ('strategic purchasing'), supplier relationships (management), internal relationship characteristics and purchasing skills. For an elaborated overview of purchasing maturity (sub) dimensions, we refer to appendix A.

Following the purchasing maturity models and dimensions enumerated in appendix A, we would view purchasing maturity as a broader, more comprehensive concept than strategic purchasing which is in accordance with the conceptualization of it in other academic studies (Schiele, 2007). However, these (sub)dimensions contain reflective as formative items as well, i.e. they give an indication of what is needed to become mature and how this purchasing maturity is or will be reflected as well. Systems, processes, structure characteristics, effects, and so inputs and outputs intermingle and cannot be easily distinguished (also called the chicken-egg problem). Moreover, several purchasing dimensions interrelate. For instance, researchers have demonstrated that higher levels of strategic purchasing – operationalized by dimensions such as purchasing status, strategic involvement and strategic focus - correspond with a higher level of supply (i.e. relational, process, information and cross-organizational team) integration (Lawson et al., 2009; Paulraj et al., 2006) and internal integration (e.g. cross-functional teams and collaboration) and involvement (e.g. joint problem solving and strong information exchange) in the activities of its internal customers (Cousins et al., 2006). Also internal and external integration interrelate (Paulraj et al., 2006). Indeed, based on the literature review we assume that the purchasing maturity process is a complex one of interaction and interdependence between the supply chain partners, i.e. between buying organization with purchasing as a boundary-spanning function, the suppliers and other partners in the organization's industrial network (Gadde & Snehota, 2000) and between internal functions within the buying organization. As purchasing maturity increases, growing acceptance about (the strategic importance of) each other's activities, expanding openness about strategy, activities, information, etc. and increasing thinking along and involvement in each other's activities are assumed. Value is co-created by supply chain partners (Aarikka-Stenroos & Jaakkola, 2012; Lindgreen et al., 2012; Monczka et al., 2010; Spekman & Carraway, 2006) and these latter co-evolve on the stairs of value offerings (Matthyssens et al., 2009) lifting each other - and in particular the buying company - to a next stage in the purchasing maturity model, strengthening the value creation and integration of the supply chain.

As mentioned above, in the present study, we merely build on purchasing maturity as recently described by Cousins et al. (2006), Paulraj et al. (2006) and Schiele et al. (2007). In contrast to other and conceptual models, the authors provide empirical evidence of investigation and development of purchasing maturity levels (Schiele, 2007). An analysis of these studies and their operationalization of purchasing maturity yields following proxy measure of purchasing

maturity (table 2), used in the present research. We assume that as purchasing develops, the respective dimensions are in balance.

Dimension	Sub dimension
Strategic importance/integration	 Strategic involvement (Cousins et al., 2006; Paulraj et al., 2006; Schiele, 2007) Purchasing status (Cousins et al., 2006; Paulraj et al., 2006; Schiele, 2007; Van Weele, 2010)
Strategic focus /orientation	 Long term (versus short term) orientation (Chen et al., 2004; Cousins et al., 2006; Paulraj et al., 2006) Risk taking (versus risk aversion) (Cousins et al., 2006; Paulraj et al., 2006) Value (versus price/cost/efficiency) focus (Cousins et al., 2006; Van Weele, 2010)
Supply chain integration (process versus function)	 Internal/cross-functional integration (Cousins et al., 2006; Schiele, 2007; Van Weele, 2010) External integration (Cousins et al., 2006; Paulraj et al., 2006; Schiele, 2007; Van Weele, 2010) Relational (versus transactional) buying behavior (Cousins et al., 2006; Paulraj et al., 2006; Schiele, 2007; Van Weele, 2010)
Purchasing approach	- Pro-activeness (versus reactiveness) (Cousins et al., 2006; Schiele, 2007)
Purchasing skills	 Technical expertise (Cousins et al., 2006; Schiele, 2007; Van Weele, 2010) Soft skills (e.g. interpersonal and communication skills) (Cousins et al., 2006; Van Weele, 2010) Research and analytical skills (e.g. ability to execute and interpret environment scan/ supplier market analysis) (Cousins et al., 2006; Schiele, 2007) Managerial abilities (e.g. decisiveness, team building, TCO reduction, etc.) (Cousins et al., 2006; Van Weele, 2010)

Table 2: operationalization of purchasing maturity: proxy measure used in the present study.

RESEARCH OBJECTIVE/ PROBLEM STATEMENT

From a supply chain view, purchasing can be seen as a boundary-spanning function, executing a mediating role between external suppliers and internal customers (Dubois & Wynstra, 2005; Paulraj & Chen, 2005; Stanley & Wisner, 2001). From this point of view, the aim of the present study is to examine what we call 'purchasing's value creation' to its supply side and its customer side – as its direct partners in the supply chain – in function of purchasing maturity.

- (1) How does a variation in purchasing maturity affect purchasing's perceived internal service quality?
- (2) How is supplier satisfaction affected by a variation in purchasing maturity?

In the article of Brookshaw & Terziovski (1997), the authors suggest that a purchasing strategy aligned with an organization wide business strategy will strengthen the value to the customer. In the academic literature, the term value has several meanings (Dumond, 1994; Vargo et al., 2008), such as relative worth, the difference between price and cost, the price of an offering or a buyer's willingness to pay for a particular service or a good of a given quality (Dumond, 1994). More in general, in their literature review on value in business markets, Lindgreen & Wynstra (2005) and Lindgreen et al. (2012) argue that there is no universally agreed definition of value. The authors distinguish two research streams that approach 'value' from a different perspective: one dealing with the value of a good/service and the other

dealing with the value of buyer-seller relationships. The latter, relationship value, is an extension of the actual product or service being exchanged. The importance of relationships in building value has been recognized many times in the academic literature. Moreover, the relationship value has been widely discussed by the IMP Group arguing that the activity links, resource ties and actor bonds are three interlaying aspects of a relationship providing value for the buyer (Lindgreen & Wynstra, 2005). Furthermore, the relationship value has been seen as a measure of joint value creation, wherein the nature of interaction between supplier and customer plays a critical role (Lindgreen et al., 2012) and has been associated with relationship constructs such as trust, commitment and dependency (Smals & Smits, 2012). In a purchasing context, the value added by the purchasing function can be classified in multiple categories such as value added to the organization, to the specifier (i.e. internal customer), to the purchasing process and to the supplier (Leenders & Schiele, 1999; Telgen & Pop-Sitar, 2001). In the present study, we will limit our perspective to the value added for the internal customer and the supplier.

PURCHASING MATURITY AND INTERNAL SERVICE OUALITY

Applying a supply chain view, for the first part of our study we will focus on the value of the service offered by purchasing to its direct customers, i.e. internal customers, and how this is affected by a variation in purchasing maturity.

The concept of internal service quality

An organization can be approached as a chain of individual units, linked together to satisfy external customers (Finn et al., 1996; Jun & Cai, 2010; Marshall et al., 1998). In this sense, purchasing can be considered as one of these units, functioning as supplier serving its internal customers (Stanley & Wisner, 1998; Wisner & Stanley, 1999), i.e. individuals or departments in an organization for whom both materials and information are provided and thus for whom the material or service is being bought (Nagel & Cilliers, 1990; Jun & Cai, 2010; Stanley & Wisner, 1998) such as R&D and manufacturing (Schiele, 2006; Wisner & Stanley, 1999; Wynstra et al., 2003; Young & Varble, 1997).

In the present study, purchasing's value creation for its internal customers will be evaluated in terms of the internal service quality (further ISQ) of the internal customer service. In the academic literature, the internal customer service refers to "a two-way exchange process between individuals in different functional departments of a firm in which the provider is charged with responding to the needs of his/her internal customer, resulting in a satisfied internal exchange partner" (Marshall et al., 1998, p.382). The internal service quality refers to "the attitudes that people have towards one another and the way people serve each other inside the organization" (Heskett et al., 1994, p.164) and "the perceived quality of service provided by distinctive organizational units or people working in these to other units or employees within the organization" (Brandon-Jones & Silvestro, 2010, p.1291).

So far purchasing literature has paid scattered attention to internal service quality of purchasing departments (Jun & Cai, 2010). These studies explore among others the dimensionality of ISQ (Finn et al., 1996; Marshall et al., 1998; Jun & Cai, 2010; Wisner & Stanley, 1999) as shown in table 3, but also its determinants (Stanley & Wisner, 2002; Wisner & Stanley, 1999) and potential consequences on internal customer satisfaction (Jun & Cai, 2010) and external service quality (Stanley & Wisner, 2001). Research has also focused on the types of collaboration and relationships between purchasing and other functions in the organization (Dubois & Wynstra, 2005; Pagell, 2004; Piercy, 2009; Rossler & Hirsz, 1996; Stanley & Wisner, 1998; Van Weele & Rozemeijer, 1996; Wisner & Stanley, 1999).

Dimension	Literature support
Reliability	Finn et al. (1996); Frost & Kumar (2001); Jun & Cai (2010); Large & König (2009); Parasuraman et al. (1985); Young & Varble, (1997)
Responsiveness	Frost & Kumar (2001); Large & König (2009); Parasuraman et al. (1985); Rossler & Hirsz (1996); Stanley & Wisner (2002); Wisner & Stanley (1999); Young & Varble (1997)
Assurance	Large & König (2009); Parasuraman et al. (1985)
Communication	Jun & Cai (2010); Parasuraman et al. (1985); Rossler & Hirsz (1996); Stanley & Wisner (2002); Wisner & Stanley (1999)
Quality of goods/services delivered	Stanley & Wisner (2002); Wisner & Stanley (1999)
Flexibility	Stanley & Wisner (2002); Wisner & Stanley (1999)
Understanding the needs of and thinking along with the internal customer	Young & Varble (1997); Young & Varble (1997)
Continuous improvement	Jun & Cai (2010)
Empathy	Frost & Kumar (2001); Large & König (2009); Young & Varble (1997)
Ability to meet internal customer's expectations	Stanley & Wisner, (2002); Wisner & Stanley (1999)
Tangibles	Frost & Kumar (2001); Jun & Cai, (2010); Large & König (2009); Parasuraman et al. (1985); Young & Varble (1997)
Competence & professionalism	Finn et al. (1996); Frost & Kumar (2001); Jun & Cai (2010); Large & König (2009); Parasuraman et al. (1985); Rossler & Hirsz (1996); Stanley & Wisner (2002); Young & Varble, (1997)
Collaboration	Jun & Cai (2010); Rossler & Hirsz (1996)

Table 3: a non-exhaustive list of (internal) service quality dimensions as operationalized and/or supported in the academic literature

Several researchers argue that the internal service quality delivered is equally important as external service quality (Stanley & Wisner, 1998; 2001), because internal service quality is expected to positively affect external service quality (Wisner & Stanley, 1999; Stanley & Wisner, 2002) and external customer satisfaction (Jun & Cai, 2010; Stanley & Wisner, 2001). This statement is supported by the service profit chain theory (Heskett et al., 1994) which argues that internal service quality has an indirect, positive effect on external service quality and even leads to profit and growth for the selling organization, through respectively employee and customer satisfaction and loyalty. Also proponents of internal marketing support the importance of internal service quality (Jun & Cai, 2010), arguing that all employees within an organization should take a customer conscious approach (Grönroos, 1981) and should have a shared vision of customer issues (Piercy, 2009). However, most distinct adherence to and use of the internal service quality concept results from total quality management literature, which states that other organization members with whom an employee interacts, should be considered and treated as valued customers (Finn et al., 1996; Stanley & Wisner, 2001).

Purchasing maturity – purchasing's internal service quality

We suggest that purchasing's internal service quality is affected by the purchasing maturity process. In particular, we will investigate how a variation in purchasing maturity might impact on perceived service quality within the company.

Based on academic literature demonstrating (1) the interrelationship between the different dimensions of purchasing maturity (table 2; Cousins et al., 2006; Paulraj et al., 2006), (2) the

fact that a firm's learning performance is positively affected by the level of cross-functional integration (Hult et al., 2000; Meeus et al., 2001; Schiele, 2007), (3) that the generation and dissemination of knowledge within the purchasing process are key for a customer orientation, i.e. satisfying internal customers (Hult & Nichols, 1996) which (4) corresponds with a high internal service quality (Finn et al., 1996), we can argue that cross-functional integration positively affects internal service quality. Furthermore, relationship marketing theory would imply that relationship strength (Smith et al., 2005) increases value creation (Grönroos, 1981). Hence we may assert that purchasing maturity leads to a higher service quality.

However, more specific, building on the (increasing) literature on purchasing maturity, purchasing's internal integration and ISQ, we wonder how aspects (i.e. dimensions) of purchasing's internal service quality will be affected by a variation in purchasing maturity. For instance, does a more mature purchasing approach leads to a more responsive service for internal customers in relation to an adolescent purchasing function? Do purchasers increasingly respond in a proactive way to the internal customers' needs as purchasing becomes mature? And how do service reliability and accuracy vary with a change in purchasing maturity? Shortly, what aspects or dimensions of ISQ will be affected and in which way with a variation in purchasing maturity and which aspects of purchasing maturity are responsible for the effect?

Research question 1: How does a variation in purchasing maturity affect purchasing's perceived internal service quality?

PURCHASING MATURITY AND SUPPLIER SATISFACTION

A second part of this study focuses on the supply side of the supply chain from a purchasing point of view. In this study, the changing supplier relationships attended with the evolution in purchasing have been introduced. Now we will examine how well purchasing manages these supplier relationships as perceived by the suppliers as a function of purchasing maturity. In other words, we will focus on how purchasing maturity affects the quality of the buyer-seller relationship – and thus the value of the buyer-seller relationship – as perceived by the suppliers for which the construct of 'supplier satisfaction' is used as indicator (Essig & Amann, 2009).

Supplier satisfaction

Although supplier satisfaction has been an underexplored construct in the context of buyer-seller relationships (Schiele et al., 2011), the importance of it cannot be ignored. On the one hand, unsatisfied suppliers may lower the quality of the buyer's products (Essig & Amann, 2009) and on the other a satisfied supplier may treat the buyer as a preferred customer (Schiele et al., 2011). As such, its commitment and goodwill to the buyer-seller relationship may grow (Benton & Maloni, 2005). As buying companies increasingly become dependent upon their strategic suppliers (Schiele, 2006), supplier satisfaction can be considered as having a critical impact on the purchasing department's performance and the organization's business success (Benton & Maloni, 2005; Essig & Amann, 2009; Ghijsen et al., 2010).

In the academic literature, the construct of supplier satisfaction is defined as "a supplier's feeling of fairness with regard to buyer's incentives and supplier's contributions within an industrial buyer-seller relationship as relates to the supplier's need fulfillment" (Essig & Amann, 2009, p.104) and "a condition that appears if the quality of outcomes from a buyer-supplier relation meets or exceeds the supplier's expectations" (Schiele et al., 2011, p.8). According to Essig & Amann (2009) and Benton & Maloni (2005), supplier satisfaction is

driven by key premises of relationship quality such as trust, cooperation and commitment. Furthermore, consistent with Smals & Smits (2012), Schiele et al. (2011) argue that it is even one of the requisites to obtain a preferred customer status. A customer of choice might benefit a preferential treatment concerning allocation of materials (Bew, 2007), access to new product ideas (Bew, 2007) and innovations (Schiele, 2006) and cost reduction opportunities (Bew, 2007) which results in higher value creation for the customer (Smals & Smits, 2012).

A non-exhaustive list of supplier satisfaction (sub)dimensions is provided in table 4. A critical reader can see that no general agreement exists yet in the academic research on the choice of dimensions, neither on their responding indicators (Essig & Amann, 2009). Essig & Amann (2009), attempted to develop a supplier satisfaction index based on a literature review and Schiele et al. (2011) drew up an overview of the antecedents of supplier satisfaction.

Dimensions	Sub dimensions, supported in academic literature
Intensity of cooperation	Intensity of integration with RandD (Essig & Amann, 2009) Degree of earliness of integration in production process (Essig & Amann, 2009) Willingness to accept suggestions for improvement (Essig & Amann, 2009; Wong, 2000) Early supplier involvement (Maunu, 2003) Participation in decision making (Nyaga et al., 2010) Degree of constructive controversy (Wong, 2000)
Order process	Adherence to arrangements (Essig & Amann, 2009) Time schedule (Essig & Amann, 2009) Ordering procedure (Essig & Amann, 2009)
Communications	Quality of information (Essig & Amann, 2009) Frequency of information (Essig & Amann, 2009) Politeness of employees (Essig & Amann, 2009) Level of information sharing (Nyaga et al., 2010) Feedback (Maunu, 2003) Openness and trust (Maunu, 2003)
Billing/delivery	Payment habits/procedures (Essig & Amann, 2009) Required effort needed for delivery (Essig & Amann, 2009) Delivery deadlines (Essig & Amann, 2009)
Conflict management	Quality of reaction (Essig & Amann, 2009) Reaction speed (Essig & Amann, 2009) Agreements (Maunu, 2003) Searching for a mutually beneficial solution (Wong, 2000)
Management	Management of activities (Nyaga et al., 2010) Level of commitment (Nyaga et al., 2010) Coordination of activities (Nyaga et al., 2010) Forecasting/planning (Maunu, 2003) Flexibility (Maunu, 2003)
Outcome	Strategic value (Essig & Amann, 2009) Profitability (Maunu, 2003) Dealing benefits (Ghijsen et al., 2010) Innovation (Maunu, 2003)

Table 4: a non-exhaustive list of supplier satisfaction factors and dimensions as operationalized and/or supported in the academic literature

Purchasing maturity – supplier satisfaction

In the literature background section, we have already introduced the change in (key) supplier approach (Chen et al., 2004; Lawson et al., 2009; Sharma & Sheth, 1997; Wynstra et al., 2003) with concepts such as joint planning and joint problem solving, strategic partnerships, strategic supplier portfolios, supplier development and early supplier involvement. Moreover, attended with the changing supplier approach, recent academic literature describes a transition

from relationships at arm's length to a reduced number of and closer, long-term relationships with preferred suppliers (Koufteros et al., 2007; Paulraj et al., 2006), leading to advantages such as improved cooperation and cost, better quality and product innovation (Pardo et al., 2011; Smals & Smits, 2012).

With respect to the link between the above explained purchasing's 'mature' supplier approach and supplier satisfaction, Ghijsen et al. (2010) provide evidence for the positive effect of capital-specific supplier development on supplier satisfaction. According to the authors, suppliers consider supplier development as an indicator of long-term commitment by the customer. Furthermore, the authors prove that information exchange and recommendations to improve the supplier's performance – which we assume to occur more significantly as purchasing gets mature - positively affect supplier satisfaction. Besides supplier development and indirect influence strategies, also supplier involvement in buyer-supplier programs increases the supplier's assessment of the relationship (Monczka et al., 1995). Nyaga et al. (2010) hypothesized the relationship between collaborative activities and supplier satisfaction. The authors find that information sharing, dedicated investments and joint relationship efforts increase supplier satisfaction, whereby the effect of each collaborative activity is mediated by trust and/or commitment. Shortly, a cooperative approach plays a critical role in promoting supplier satisfaction (Schiele et al., 2011).

Based on the above mentioned definitions of supplier satisfaction and literature supporting on the one hand a significant link between purchasing maturity dimensions (e.g. strategic purchasing and supply integration; Cousins et al., 2006; Paulraj et al., 2006) and on the other hand a clear relationship between supply integration and supplier satisfaction as indicator of the quality of buyer-seller relationships as perceived by the supplier (Essig & Amann, 2009) and driven by the nature of buyer-seller relationships (Benton & Maloni, 2005), we could expect a positive effect of purchasing maturity on supplier satisfaction. In addition and in analogy with the first research question, we would like to have more detailed insight into the effect, i.e. on dimension level. Building on the (increasing) literature on purchasing maturity, supplier integration and supplier satisfaction, we wonder how aspects (e.g. which dimensions of table 4) of supplier satisfaction will be affected by a variation in purchasing maturity.

Research question 2: How is supplier satisfaction affected by a variation in purchasing maturity?

METHODOLOGY

To the best of our knowledge, purchasing maturity and internal service quality have not been widely related to each other and investigated in one study before. Also supplier satisfaction has been remained underexplored in a purchasing context (Essig & Amann, 2009; Schiele et al., 2011), and as far as we know neither has been related to the construct of purchasing maturity. For these reasons, but also because of the importance of the organization's internal processes and context (Yin, 1990) and to lower the distance between theoretical constructs and practice (Siggelkow, 2007), a qualitative research design is appropriate. More specifically, we use an exploratory, interpretive approach, executing successive interviews and workshops with senior managers in a limited set of 'case' companies. By this, we are certain to receive more insight in this relatively new research topic, i.e. how purchasing maturity impacts on ISQ and supplier satisfaction.

We are working on multiple case studies focusing on international companies in a limited number of industries. Multiple semi-structured interviews (Bryman & Bell, 2007) are

organized in different rounds. We finished a <u>first interview round</u> with CPOs, purchasing directors and purchasing managers of the companies in four companies, as indicated in table 5. Each interview lasted one to two hours. During these in-depth interviews, we merely focused on the purchasing function within the organization (e.g. purchasing organization, orientation and responsibilities) and the internal processes with respect to (1) relationships with other internal functions and (2) supplier relationship management. Concerning the investigation of the impact of purchasing maturity on internal service quality, we are currently interviewing major user departments in a <u>second round</u> within these companies. More specific, purchasing's major internal customers are inquired about the perception of the service quality offered and thus value added by purchasing. Again, interviewees are managers with strategic responsibilities. After processing the information, we will have a clear view about purchasing's internal service quality as perceived by the internal customers and purchasers. In a <u>third round</u> we will couple back the findings of ISQ to the purchasing staff and management in workshops in which we will discuss potential approaches to obtain more internal and external alignment.

We maintain the same approach to investigate the impact of purchasing maturity on supplier satisfaction. In the respective second round we execute interviews with major suppliers. In these we uncover whether the suppliers perceive an evolution in purchasing maturity of the buying organization and how purchasing's 'up scaling' in maturity impacts on their satisfaction. So far, we have executed some initial interviews with suppliers of four companies (see table 5). We intend to contact additional important suppliers of the case study companies and anticipate that we will be able to visit them by the end of the summer.

	Telecom industry		Aerospace industry	Public transport industry	Energy industry
	Company 1	Company 2	Company 3	Company 4	Company 5
ISQ	X	X	X	X	
Supplier satisfaction		X		X	X

Table 5: current case study sample (temporary)

All of the interviews and workshops are held in the participants' offices or meeting rooms to provide the interviewees with a confidential environment. In addition, all conversations are recorded and transcribed (Bryman & Bell, 2007). Afterwards, interviewees are contacted again for an approval of the transcriptions and additional comments.

To assure the validity and reliability of the case studies, we regard the following based on Yin (2003): to provide for construct validity all informants receive draft versions of the interview report for comments, we interview different internal representatives and the results will be discussed during round table meetings with prime contacts. Participants need to agree on (adjusted) explanations and interpretations. With regard to the internal validity, we make use of a conceptual framework wherein relationships between the different variables are identified and substantiated. To assure external validity the cases at the firm are theoretically selected. Finally, to maintain reliability a semi-structured interview questionnaire is developed and used repeatedly.

PRELIMINARY RESULTS

Based on the academic literature, we expect that purchasing maturity positively affects purchasing's internal service quality, as described above. Indeed, as purchasing takes a more mature approach, we have argued that internal integration and collaboration will increase between purchasing and its internal customers which on its turn will positively affect the understanding of and service to the internal customer. However, a preliminary analysis of the interview data demonstrates that this relationship is not always supported and self-evident. In particular, it is only supported in a few cases and for some aspects of ISQ.

During the interview rounds, we have observed that as the purchasing function develops (i.e. gets more involved on a strategic level, takes a more value instead of a cost focus and becomes responsible for supplier relationship management, etc.; table 2), the internal service quality may deteriorate. In particular, as the purchasing function becomes more mature and consequently receives more (strategic) responsibilities and tasks (e.g. developing long-term contracts with suppliers, conducting an in-depth supply market analysis, attending strategy meetings, etc.), the workload per purchaser may increase which subsequently leads to a 'neglect' of the operational needs of internal customers. Indeed, although purchasing's importance, focus and approach evolve, operational internal customer needs or service requirements (e.g. receiving ordered goods/services on time meeting all requirements and specifications, getting prompt service and real-time information of the purchasing function when needed, etc.) remain unmodified.

Another case where operational internal customer needs such as a reliable and responsive service were not met, was caused by the inflexibility of the purchasing function in the context of its supplier selection. As supported by the IMP theory in section 2, for some products or services purchasing may be restricted in choosing its suppliers because of external customer requirements. In case a supplier is imposed by the customer, purchasing does not have the freedom to execute a supply market analysis to find the appropriate supplier(s) and perhaps to develop a strategic partnership with the latter. Then, the purchasing function relies on the service of that 'unknown' supplier. However, also strategic partnerships selected, developed and managed by the purchasing function can restrict the flexibility of the purchasing function, as supported by the IMP theory (section 2), and consequently, however not per definition, it's ISQ. For instance, we have noticed a situation of single sourcing whereby a strategic supplier had problems to increase its production capacity to cope with unexpected changing market conditions, so that the buying organization's purchasing department experienced delivery problems on its turn. Therefore, in some contexts, a more transactional or commercial orientation, whereby the purchasing function exploits its bargaining power in negotiations and supplier relationships are more at arm's length, may increase purchasing's flexibility to change suppliers or to replace a particular order to another supplier to keep up ISQ in this kind of situations.

We have also remarked that when purchasing is very focused on its 'up scaling' toward a next stage in its maturity, it might get entangled too much in the development of its own department, by for instance allocating a great proportion of time and resources to education of (new) purchasers, developing and learning of new purchasing skills and implementing new procedures. This excessive attention to internal alignment, organization, restructuring, etc. may cause purchasing to lose sight of evolving and more 'strategic related' internal customer expectations and perceptions of purchasing's service. For instance, we have perceived such a problem within one company where the purchasing function did not recognize the dissatisfaction of their internal customers concerning service reliability, but in particular about

the limited cross-functional integration of the activities with purchasing and the latter's lack of proactive behavior. Furthermore, the purchasing function did not perceive the internal customers' emerged need for purchasing to consult them about supplier relationship developments and ask them for feedback, so that purchasing's internal service quality could improve and problems would become solved efficiently.

Next, based on our observations, we reason that if purchasing develops and improves its internal customer service, internal customers might adjust their expectations. Consequently, we may find that although purchasing responds to emerging needs of the internal customers, internal customers may not perceive an improvement in the ISQ because of their higher requests and expectations. The latter reasoning might also be valid for the relationship between purchasing maturity and supplier satisfaction. As purchasing intensifies its collaboration with a particular supplier (for instance by a supplier development program, joint problem solving or joint product or process development), the supplier will set its expectation of the buyer-seller relationship higher. We will anticipate in this 'subjectivity' when interpreting the inquired supply chain actors' perceptions and elaborating on a quantitative research methodology and the design of a longitudinal study.

In line with the above, we can argue that a very acknowledged supplier benefiting from a quasi-monopoly position because of its highly beneficial trading conditions, specific technological know-how or differentiated products/services, will be aware of its bargaining power and consequently might not be 'easy to satisfy' in comparison with a supplier of a standardized product.

In addition, one should keep in mind a potential trade-off between the economic (i.e. profitability, market share or sales growth) and relational (i.e. the degree of satisfaction with the dealings and collaboration itself) aspect of supplier satisfaction, a division supported by Nyaga et al. (2010). We have noticed one strategic supplier being relationally satisfied because of the higher customer commitment, close cooperation, feedback and long term value creation for the its company (e.g. development of new business opportunities, critical information about customers and markets, creation of new products or product enhancements, etc.). On the other hand, this supplier was found economically unsatisfied in the early beginning of the partnership, because of the high transaction costs (i.e. developing the formal contract, agreeing on intellectual property rights, etc.), high relationship specific investment and excessive time to market of a joint product development. The opposite (i.e. low relationship satisfaction and high economic satisfaction) might be observed with non-strategic suppliers during future interviews. However, this all depends on the expectations of the suppliers. Some non-strategic suppliers do not expect or need for instance high involvement and close collaboration. Analogous, key suppliers can anticipate in low short term economic benefits. Indeed, in general all other key and non-strategic suppliers (so far) inquired, expressed reasonably high overall supplier satisfaction and positive future expectations and consequently no consistent and apparent supplier satisfaction differences have been noticed. It is clear that expectations should be considered as well in the investigation of supplier satisfaction (Essig & Amann, 2009), and that a positive relationship between purchasing maturity and supplier satisfaction is not that obvious.

We can conclude that the effect of purchasing maturity on internal service quality and supplier satisfaction is not that self-evident and needs further examination.

RESEARCH AGENDA

This paper is work in progress and therefore limited in scope and empirical results. It serves as a framework for future research in several respects. A first research avenue is to generate an extended research framework and hypotheses and tests of the impact of purchasing maturity. Therefore, we apply the same methodology to some additional cases and perform a quantitative test in companies spread over several phases of purchasing maturity. In addition, we will extend the current research of one-way effects to interaction effects and investigate additional relationships with related constructs as well. Moreover, a potential link between 'ISQ' and 'supplier satisfaction will be explored by generating an updated operationalization of purchasing maturity. This latter will result in a 'two-bridge-model' with purchasing maturity as central construct. Furthermore, mediating/moderating factors will be identified and incorporated in further research. For instance, we assert that a time dimension should be taken into account and the link between purchasing maturity and corporate strategy must be analyzed. We expect that different corporate or business strategies - such as a cost leadership strategy, a short-term surviving strategy or a differentiation strategy - and different time frames require different levels of maturity. We will also look into the differences between ISQ visions. Internally will be looked at strategic versus operational departments and technical versus business oriented departments in first instance. Another point of future research is a longitudinal analysis to research the 'lagged' effect of purchasing maturity.

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APPENDIX A

See below (table 6).

Dimension	Sub dimension
Strategic	-Strategic focus, i.e. purchasing takes a value over a cost focus (Cousins et al.,
purchasing	2006; Van Weele, 2010)
	 Strategic relevance and purchasing tasks, i.e. purchasing plays a strategic versus an operational, administrative role (Lawson et al., 2009; Van Weele, 2010); Fit purchasing strategy - corporate strategy (Carr & Smeltzer, 1997; Van Weele, 2010; Watts et al., 1995);
	-Supply chain perspective, i.e. maintaining a process instead of a functional approach (Cousins et al., 2006; Monczka et al., 1998; Paulraj et al., 2006; Schiele, 2007), e.g. use of supply chain metrics
	- Time base perspective (long term versus short term) concerning purchase and supply management decisions (Carr & Pearson, 1999; Chen et al., 2004; Cousins et al., 2006; Paulraj et al., 2006; Paulraj & Chen, 2005)
	- Strategic involvement (i.e. in corporate strategy planning process) (Carter & Narasimhan, 1996; Cavinato, 1999; Cousins et al., 2006; Heberling, 1993; Paulraj et al., 2006; Schiele, 2007);
	-Purchasing status, i.e. purchasing's reporting level and visibility in the organization (Cousins et al., 2006; Gelderman & Van Weele, 2005; Paulraj et al., 2006; Van Weele, 2010);
	-Purchasing's organizational structure (Schiele, 2007; Van Weele, 2010)
Supplier relationships/supply integration	-Long-term supplier relationships (joint action and partnerships) with a reduced number of (preferred) suppliers in contrast to an infinite number of at arm's length or hostile supplier relationships (Koufteros et al., 2007; Paulraj et al., 2006; Schiele et al., 2011; Van Weele, 2010);
	- Cross-organizational collaboration (e.g. information sharing and systems, cross-organizational teams) between purchasing and its supplier (Axelsson & Wynstra, 2002; Cousins et al., 2006; Gelderman & Van Weele, 2005; Paulraj et al., 2006)
	- Supplier involvement (e.g. in new product development) (Carter & Narasimhan, 1996; Cavinato, 1999; Cousins et al., 2006; Heberling, 1993; Paulraj et al., 2006; Schiele, 2007);
	 Implementation and use of cross-organizational (information and controlling) systems (Schiele, 2007; Van Weele, 2010)
Internal integration	 Cross-functional integration and collaboration of purchasing with other internal functions (Cousins et al., 2006; Schiele, 2007; Van Weele, 2010);
	 Purchasing involvement in activities of internal service users (Schiele, 2010; Schiele, 2007; Stanley & Wisner, 2001; Wynstra et al., 2003);
	 Implementation and use of cross-functional (information and controlling) systems (Schiele, 2007; Van Weele, 2010)
Purchasing skills	 Technical capabilities and education (Cousins et al., 2006; Van Weele, 2010)
	 Management skills (e.g. leadership, decisiveness and analytical skills) (Cousins et al., 2006; Gelderman & Van Weele, 2005; Van Weele, 2010)
	 Interpersonal skills (e.g. communication and team work orientation) (Cousins et al., 2006)

Table 6: non-exhaustive list of purchasing maturity parameters.