Innovation Scouting: A New Challenge for the Purchasing Function

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For much of the twentieth century, technological innovation was defined as a vertically integrated process (Chandler 1977; Freeman 1982). These last decades have been marked, in many industrial sectors, by three movements whose combined effects generate some paradoxes in innovation management: (a) the tendency to focus only on the core business activities and outsource the others,[1] (b) the growing complexity of products, particularly, in the number of integrated technologies, and finally, (c) an ever-greater expectation for innovation in terms of intensity and rhythm in order to reach a sustainable competitive advantage.

The paradox is that many companies are forced to innovate a lot and quickly in markets where the products depend mainly on external technologies purchased from partners that are potentially also working with all of their competitors and sometimes being themselves competitors as well. This increasing dependence on external sources of technology was first reported by the study of Roberts in 2001. Based on an extended data collection from the largest performing companies in

[1]For example, in the French automotive sector, the INSEE annual study (2017) reports a decrease of the value-added rate ([turnover—purchasing]/ turnover) from 34.5% in 1977 to 14% in 2017. It means that for the car manufacturers, the amount of external contribution represents 86% of the turnover.

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North America, Western Europe, and Japan, the research pointed out that the percentage of companies declaring relying heavily upon external sources of technology has jumped from 20% in 1992 to 80% in 2001 (Roberts 2001).

A theorization of this movement is proposed by Chesbrough in 2003 under the general banner of "open innovation." Basically, this theory suggests that it is often beneficial for firms to collaborate with others in developing and commercializing innovations (Felin and Zenger 2014). The positive effect of the *openness* attitude on innovation performance is now well established (Cassiman and Veugelers 2006; West and Bogers 2014). Among the potential external partners for innovation, suppliers have gained a lot of attention (Brem and Tidd 2012; Pihlajamaa et al. 2017; Sjoerdsma and van Weele 2015), and even sometimes found as the most important open innovation partners (Laursen and Salter 2006; Un et al. 2010).

Few academics look at the problem from the supplier side. For example, Henke and Zhang (2010) give a comprehensive vision of the enabling factors of supplier innovation. As the purchasing function is the legitimate interface between the client and its supply base (Araujo et al. 1999), researchers have also investigated the role of this function in innovation sourcing (Schiele 2010; Luzzini and Ronchi 2011; Luzzini et al. 2015; Homfeldt et al. 2017; Servajean-Hilst and Calvi 2018; Gualandris et al. 2018). However, in practice, tapping or exploiting innovation from suppliers is far from being a well-established process.[2]

In this chapter, we investigate how a purchasing function can effectively contribute to innovation sourcing. We make a twofold contribution. First, we provide an evolutionary perspective of the purchasing function facing the challenge of acting in the offer creation process of the firm (1§). Second, we focus on an important activity that the purchasing function has to perform: the scouting of innovations (2§).

1 An Evolutionary Vision of the Role of the Purchasing Function in Offer Creation Process (OCP)

The question of the possible role of buyers in the OCP[3] arose in the academic discussion in the early 1980s. We can quote Burt and Soukup (1985) as the first academics trying to point out what they call the *new role* of purchasing in a modern design process: purchasing provides a window to new components that the suppliers have developed, gives information about the cost, performance, and market availability of the targeted components. They advocate for a formal implication of

[2]For example, in their *procurement executive study* (2016), The Hackett Group report that for Chief Purchasing Officers, among the five most important actual issues of procurement, to *"tap supplier innovation"* is the one for which they declare to have the lowest ability to address.

[3]The **o**ffer **c**reation **p**rocess refers to all activities from the opening phase of a new product development project to the launch of this product. This acronym was originally coined by Schneider Electric Company in order to identify all the activities linked to generation of new products or services.

the purchasing function in the early stages of new product development (NPD) process.

Nevertheless, more than 30 years later, it is clear that for many companies the challenge of organizing the purchasing function in order to influence the OCP is not over. And even more so, the purchasing function's involvement is sometimes even considered counterproductive for innovation (Chesbrough and Euchner 2011).

Schiele (2010) gives an interesting explanation about the difficulties to align the purchasing function with NPD objectives. He points out the dual *innovation* and *cost-oriented* role of purchasing. The life cycle perspective of purchasing differs in key aspects from a purely R&D-oriented view of NPD. For instance, in the uncertain context of innovation, the mobilization of classical purchasing tools such a cost breakdown analysis and risk assessments, and practices such as cost killing and panel reduction, make it impossible to establish a relationship. Under high uncertainty, the result of a risk assessment is that there are too high risks and limited means to cover them to follow-up. Similarly, the exigency of a cost breakdown before contracting for an innovation, which is not clearly defined, inhibits the innovativeness of the project: it obliges potential partners to specify the technical expectations very precisely and thus limits joint creativity by focusing on a framed solution too early, or it leads to a cost evaluation that does not have a good fit to the market because the technology is not mature enough, and thus can largely compromise the success of the project. On the other side, purchasing professionals are expected to take a total cost of ownership perspective that extends throughout the product's life cycle. NPD is only the first stage of the life cycle, and sometime the best supplier in the development phase may not necessarily be the best for the rest of the life cycle.

All these examples illustrate this duality and suggest the presence of the classic *exploration–exploitation* paradox originally proposed by March (1991), who argued that efforts to excel in *exploration* and *exploitation* naturally compete for scarce resources, such that they tend to crowd each other out.

A more recent literature adopts the *ambidexterity* lens to address this issue for the purchasing function (Andersen et al. 2018; Aoki and Wilhelm 2017; Gualandris et al. 2018; Servajean-Hilst and Calvi 2018). Ambidexterity refers to the ability to manage the trade-off between exploration and exploitation to excel simultaneously in both (Gibson and Birkinshaw 2004; O'Reilly and Tushman 2013). So, the challenge of ambidexterity should be overcome by a Chief Purchasing Officer if he is able to prove that his function results in both the control of operational criteria as cost, quality, and delivery and a real contribution in the innovation performance of the firm. Using the ambidexterity concept, we propose three organizational models for the involvement of the purchasing function in the OCP. In these models, we put forward three dimensions that we consider the most important in explaining different organizational arrangements: (1) specialization of actors, (2) cross-functional coordination, and (3) supply base management.

(a) The «ad hoc» involvement model

In terms of the specialization of actors, in this model (Fig. 1), purchasing agents are dedicated to the exploitation phase that we call "life cycle purchasing." They order to procure components and services needed for production and they may be mobilized when the NPD members decide that they are needed. In their study of the configuration typology for purchasing involvement in NPD, Lakemond et al. (2001) call this integration on an "ad hoc" basis. It can be a transitional model due to the lack of resources but also a real managerial option in some specific contingency situations. Lakemond et al. (2001) suggest that it can be an efficient option when the complexity and the size of the project are low. Luzzini and Ronchi (2011) argue that the model could be adopted if the level of uncertainty and complexity of products are low and in addition if there are tight relations among departments. This raises the question of the legitimacy of the purchasing function (Tchokogué et al. 2017) because the cross-functional coordination is not mandatory there, which is illustrated in the dotted arrows in Fig. 1. We, however, argue in favor of the importance of cross-functional interactions in this model because purchasing is not automatically included in the OCP but the need for its involvement is evaluated by the R&D and commercial functions who are responsible of the NPD process. If a buyer must spend time scouting the supplier market for an innovative technology,

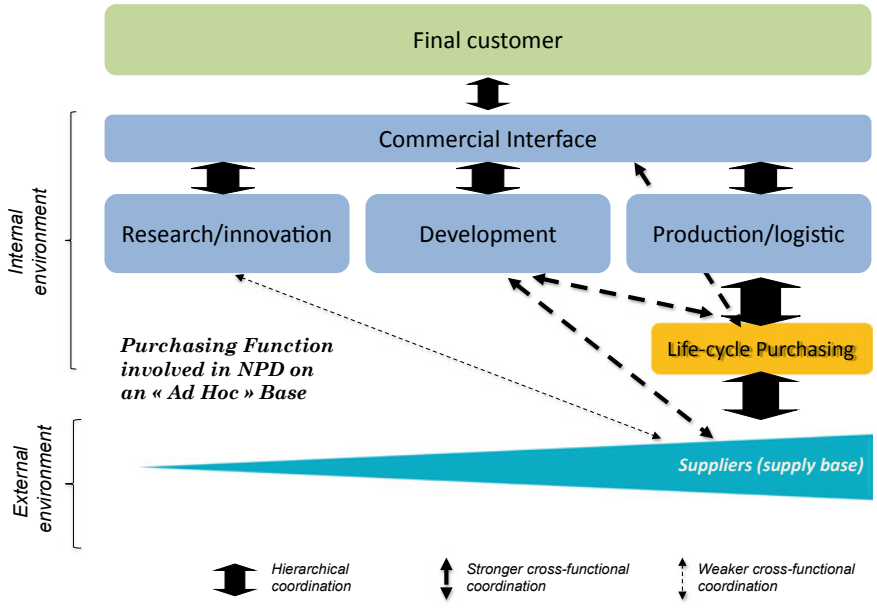

Fig. 1 "Ad hoc" involvement model (authors' own figure)

he needs to have a real *engagement letter* of these functions in order to justify all that time dedicated to an activity out of his functional objectives. In addition, if a production plant of the buying company has some troubles, the priorities might change toward more operational issues and consequently his connection with the OCP may break-up for a certain period of time.

Considering supply base management, Luzzini and Ronchi (2011) have also pointed out a weakness related to multiple interfaces with suppliers in this model because here the purchasing agent can be bypassed by the other stakeholders of the NPD process. Confusing messages and high coordination costs can be the dark side of this model. However, some companies favor this model to enhance the coherence of purchasing decisions with the current supply base between the development and the life cycle phases.

(b) The integrated involvement model in NPD

At the beginning of the 2000s, few companies had decided to specialize purchasing agents as "procurement engineers" or "NPD project buyers" (Calvi 2000; Schiele 2010) creating a *bicephalous*, i.e., "two-headed," purchasing function: some actors focus on life cycle purchasing with close connections to the production and logistic function, others focus on the OCP closely interacting with the development team in the project. This configuration seems suitable for companies manufacturing complex products with a high degree of technology content purchased from suppliers and/or where new products are leverage for running business, as in such cases, the suppliers' contribution to the firm's success is critical. These companies, following advice of O'Reilly and Tushman (2004), have decided to improve their *ambidexterity* by creating two distinct units: (i) an "operational" purchasing unit for buying and defining the purchasing strategy and (ii) NPD project buyers dedicated to the serve the R&D process (see Fig. 2).

This specialization allows creating adapted procedures for each unit and, therefore, better management of the Early Supplier Involvement (ESI) in project. For example, specific procedures can be created for selecting qualified suppliers from the supply base hence increasing purchasing's ability to support the NPD process better. In addition, it becomes possible to differentiate between the various objectives of the NPD project buyer in order to transform the "dual role" of the purchasing function evoked by Schiele (2010) into a bicephalous organization driven by the effectiveness of decisions. With such organizational configuration, it becomes easier to act in NPD projects in accordance with the theoretical recommendations of what the purchasing function must do (e.g., Wynstra et al. 1999) and, therefore, develop a real management of co-development with suppliers (e.g., Van Echtelt et al. 2008).[4]

[4]We propose that the specialization of purchasing agents can facilitate the development real Early Purchasing Involvement (EPI) practices in order to effectively connect the suppliers mobilized in the NPD strategy of the firm.

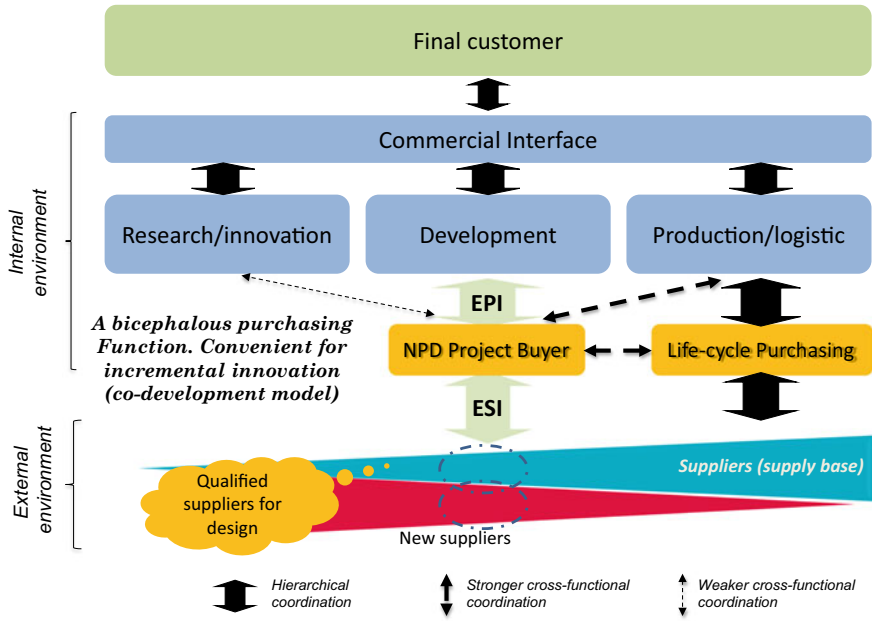

Fig. 2 Integrated involvement model (authors' own figure)

However, we can notice two drawbacks of this model. The first one is connected with the coordination costs that are substantial in this model (Luzzini and Ronchi 2011). Indeed, with at least two purchasing actors interacting with suppliers at different stages of the life cycle of the product, the challenge lies in the efficiency of coordination activities between the stakeholders. This challenge is well illustrated by Van Echtelt et al. (2008, p. 197). They argue that *"the success of involving suppliers in product development as a strategy depends on the firm's ability to capture both short-term (project) and long-term benefits (purchasing strategy)."* The purchasing function must align the decisions taken by the NPD project buyers with the purchasing strategy defined by category managers in order to capture long-term benefits. The quality of the routines developed to reach this objective is key a factor for success.

The second limit of the model is connected with the level of innovation expected from ESI. In some sectors, for example, the automotive sector, the increasing number of NPD projects[5] and the willingness to reduce the time-to-market for each one induced a tremendous pressure on project members in NPD. In this context, Maniak and Midler (2008) suggest that when the purchasing function sets up a co-development process, it must deal mainly with well-known suppliers in the

[5]According to the annual report of Renault Group, they have launch 21 new vehicle programs in 2017. An increase from 8 programs in 2012.

project time-scheduling and with a clear vision of the shared responsibilities between client and partners in order to reach the project targets. Therefore, co-development is an efficient support intrinsically for incremental innovation, but when a company seeks to introduce more discontinuous innovations the purchasing function must often investigate beyond the traditional supplier base and address fuzzy ideas of value added for the firm's OCP (Phillips et al. 2006). However, this is not compatible with the constraints of co-development, and the NPD project buyer is likely to be reluctant to carry out this type of approach. Thus, it is obvious for Maniak and Midler (2008) that to manage that kind of processes effectively and at the same time to introduce a substantial level of radical innovation in OCP, companies must define a new organizational model expanding its ambidexterity level. The last model presented is aligned with this objective.

(c) The emergence of "innovation buyer" function

In this model, the purchasing organization decides to specialize some professionals in order to early integrate the possible contributions of suppliers in the fuzzy front end of the project. This **E**arly **P**urchasing **I**nvolvement in **I**nnovation—EPI^2 (Servajean-Hilst and Calvi 2018) is an evolution of a structural ambidexterity strategy aiming at maximize the possible contribution of external resources to innovation performance (Fig. 3).

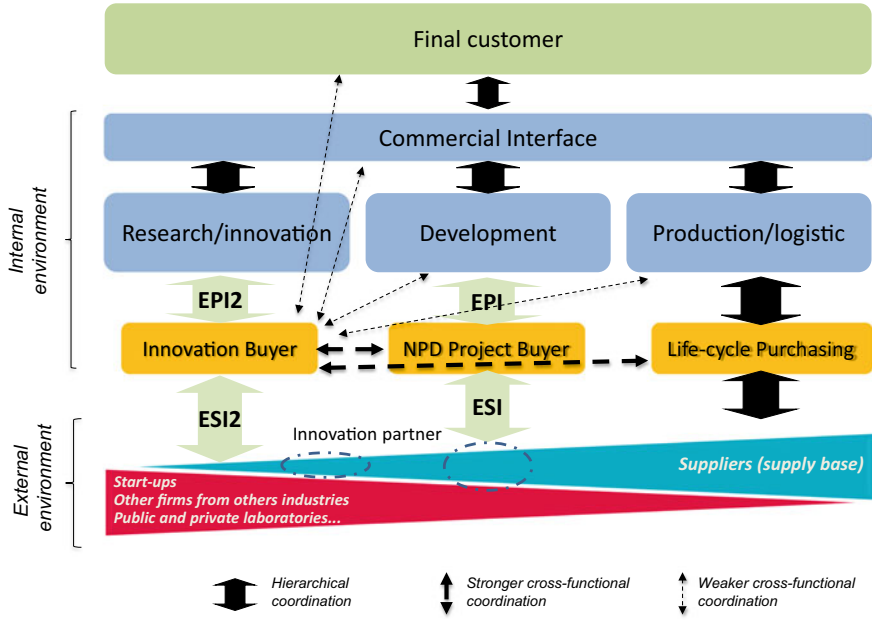

Fig. 3 Innovation buyer model (authors' own figure)

The main difficulty for the function EPI^2 resides in its legitimacy. All kinds of supply bases may be mobilized for innovation projects. In some cases, the suppliers can be from the existing supply base: e.g., existing prototype providers or an external engineering office. In other cases, they can be from brand new supply bases: start-ups, experts, or academia that may have new technologies to include in products. For the first kind of supply base, the management resembles the classical purchasing process provided by exploitation-oriented purchasing agents; but this is not the case for the second where there identification, evaluation, and integration of new partners and technologies requires to think "out of the box" of classical rules (Homfeldt et al. 2017; Servajean-Hilst and Legenvre 2017).

Further, Brattström and Richtnér (2013) describe how the quality of purchasing integration in NPD could arise from the distribution of roles between purchasing and innovation actors, specifically related to troubles in managing innovative relationships: Purchasing may take the role of the *bad cop*, innovation being the *good cop*. This division of roles toward external resources can also be found between the "classical" and this emerging purchasing functions, the innovation buyer. As an illustration, there is sometimes a need to address the classical supply base with innovative contractual forms: a need to treat panel supplier with out-of-panel methods, sometimes going against the rules of the panel, and framework agreements. The managerial difficulty here is that such tricephalous, i.e., "three-headed," organization needs a case-by-case way of managing each project-supplier and, as we can see in Fig. 3, a huge amount of coordination for the EPI^2 actors.

Having now discussed different models of how purchasing can work with other functions, we next focus on a specific activity—*innovation scouting*—that determines how well new innovation opportunities can be identified and seized. We argue that the purchasing function is particularly suitable of carrying out innovation scouting in order to have an impact on the company's innovation performance. In the next section, we discuss how purchasing can engage in innovation scouting in various situations.

2 The Roles of the Purchasing Function in Innovation Scouting

The purchasing function is a natural interface with suppliers and is therefore in a great position to scout innovations from the supply markets and support OCP (Luzzini et al. 2015). This position allows purchasing to act as a so-called *gatekeeper* between the supplier base and the rest of the buyer organization, scouting and monitoring the external environment relieving the R&D and commercial functions to focus on other domains (Cohen and Levinthal 1990).

Gatekeeping refers to acting in a mediator role between knowledge boundaries conveying ideas and knowledge from external domains to a company's internal networks (Tushman 1977). Since the amount of potentially valuable knowledge in a company's external environment is vast, gatekeepers need to filter relevant ideas

and make them understandable for the rest of the organization (Lau et al. 2003). And through this selection and translation process, they also preserve the integrity of valuable knowledge (Howells 2006).

Because of its go-between position in the middle of suppliers and internal constituents, purchasing often has direct access to external knowledge. It can increase the short-term efficiency of knowledge sourcing by pre-selecting valuable external knowledge. Moreover, it can reduce risks of internal and external knowledge leakages through the management of the emerging relationships around OCP. For instance, it is realized through the management of confidentiality agreements and through the briefing of internal and external stakeholders about the existence and the perimeter of such agreements (Servajean-Hilst and Calvi 2018). Purchasing can, therefore, become a channel for integrating innovations from the supply markets, broadening the organization's access to external innovation opportunities.

To successfully enforce the gatekeeper role and act as an innovation scout, the purchasing function needs to carry out three distinct tasks: gathering, filtering, and transmitting (Hallenbeck et al. 1999). First, there is a need to ***gather information*** from the supply markets on new ideas and innovations. Proactive and continuous supply market intelligence activities are a requirement for an up-to-date understanding of the changes in existing and potential suppliers and in available technologies and new products (Handfield et al. 2009; Wynstra et al. 2003). Gathering information may take two distinct forms. In the *pull model* of innovation scouting, the buyer is the active party of finding new information that is typically related to predefined technologies or specific needs (Homfeldt et al. 2017; Wagner and Bode 2014). In contrast, in the *push model,* the buyer works to encourage its suppliers to take the initiative to present their ideas and innovations to the buying firm. Therefore, to gain a comprehensive understanding of the latest developments, the purchasing needs to both proactively search for new information and interact with suppliers and of course to be receptive to their contributions.

The second task is ***filtering*** out those developments that do not have a potential fit with the organization's goals and choosing the ones with the most potential that are then conveyed to internal stakeholders (Hallenbeck et al. 1999). In some cases, filtering is very straightforward: e.g., locating suitable technology for a well-defined need. However, sometimes innovation scouting may serve more future-oriented and strategic purposes and the criteria for choosing innovations may be ambiguous (Felin and Zenger 2014). In these cases, filtering is supported by continuously obtaining updated information on the company's internal innovation strategy. By comparing external changes to the current company strategy, new innovation opportunities may be formulated. Innovation strategies may be defined, for example, at the level of "strategic arenas" that offer potential new product opportunities (Cooper et al. 2001). Sufficient technical and business proficiency is needed in the purchasing function for selecting the best innovations for further investigation (Cousins et al. 2011). In addition, it has been proposed that individuals with intrinsic motivation, self-control, company-specific work experience, long overall

tenure, and a well-developed internal and external network are optimal for adopting the role of an innovation scout (Maier et al. 2017).

When suitable opportunities are found, the third step is to manage the flow of information between external sources and internal recipients. It means to ***transmit*** the information to relevant internal constituents (Hallenbeck et al. 1999) and to ensure the integrity of these information exchanges (Servajean-Hilst and Calvi 2018). As the purchasing function is closely involved with the suppliers, it is usually the unit that is in the best position to understand their ideas and integrate them in the buyer's organization. Close relationships with innovative suppliers bring about trust and openness that makes it easier to access their contributions (Wagner and Hoegl 2006). And, as the purchasing function monitors supplier risk, it is in the best position to operationally monitor and prevent the risk of knowledge leakage. Furthermore, supplier innovations often include a tacit element—i.e., based on individual's experience—that is difficult to transmit (Sjoerdsma and van Weele 2015). Tight social ties and frequent meetings are a good way to ensure that the suppliers' inventions are not understood merely on a superficial level and that external knowledge is correctly transferred.

Close ties to suppliers are, however, just one side of the story. To make sure that the new knowledge has an impact, it needs to find a receptive audience. This requires well-working interfaces with other organizational functions such as R&D, marketing, services, and production (Schiele 2010) Companies' efforts to exploit new sources of innovation are often plagued by the not-invented-here syndrome: the tendency to reject ideas and knowledge when it is received from external sources (Araújo Burcharth et al. 2014; Pihlajamaa 2018).

Innovation scouting may take different forms depending on what is actually scouted and where. Indeed, we have proposed in the previous section that the main dimensions to understand the organizational challenge of the purchasing functions' role in innovation is the degree of novelty in terms of both the supply base and the technology. So next, we discuss contingencies that should be considered when planning innovation scouting strategies: (i) scouting innovations from existing versus potential suppliers and (ii) scouting ready-to-use innovations versus ideas and concepts.

(a) Existing *versus* potential suppliers

Innovation scouting tends to focus on existing suppliers as collaboration on innovation is a common step in strengthening relationships with key suppliers. Familiarity and previous experience—positive at the very least—with suppliers make it easy to access their knowledge base and help evaluate whether their innovation capabilities match with the buyer's needs. Therefore, the purchasing unit is a good candidate to evaluate suppliers on their abilities for product development, and their fit with the buying firm, organizational culture, and compatibility of technical systems (Petersen et al. 2005; Pulles et al. 2014; Schiele 2006; Wagner 2010), which are considered important predictors of innovation outcomes. Purchasing is hence likely to have a valuable understanding of the scouting of supplier

innovations, which may lead to better results compared to R&D taking the sole responsibility of the task.

In addition to scouting innovations from existing suppliers, new suppliers should be considered as they may be able to provide new perspectives and allow for the development of more innovative products (Phillips et al. 2006). By focusing too strongly on existing suppliers, companies may limit the diversity of the innovations they receive. In strong partner networks, the knowledge bases of the parties tend to converge (Dyer and Nobeoka 2000; Jouini and Charue-Duboc 2018). While this makes collaboration easier, eventually "group think" may emerge (March 1991) and truly novel ideas become rarer and rarer (Birkinshaw et al. 2007).

To ensure access to fresh innovations, purchasing should scan potential suppliers outside the current networks, and this is likely to require a new set of skills and methods for locating potential suppliers and evaluating their abilities for product development. To find new suppliers, purchasing managers may, for example, attend to trade fairs to seek new technologies (Bathelt and Gibson 2015; Servajean-Hilst 2014), organize open innovation competitions (Langner and Seidel 2009), or work with innovation intermediaries that help locate and evaluate new suppliers (Billington and Davidson 2013; Tran et al. 2011). Getting to know new ventures or start-ups can also provide an access to new products and the skills of highly innovative teams (Zaremba et al. 2017).

(b) Ready-to-use innovations *versus* fresh ideas

Another contingency addresses the maturity of the scouted innovations. Mature innovations may already be implemented in some context, and therefore many uncertainties and problems related to their use have already been resolved. Suppliers who have managed to introduce a new technological solution are likely to be highly skilled to apply it also to other contexts. Such suppliers can, therefore, be given high autonomy in subsequent collaboration, e.g., the responsibility of independently designing a part or a component (Le Dain et al. 2010). Scouting for mature innovations is, therefore, suitable for situations where the buyer has limited know-how in a domain and needs suppliers to complement the buying firm's expertise areas (Pihlajamaa et al. 2017).

In other cases, the scouting may be directed toward finding fresh ideas that are still at an early stage of the development process: for example, new product ideas and concepts (Jouini and Charue-Duboc 2018)—or even the competences of a supplier (Wynstra et al. 2003). These cannot be benefited from right away but need to be explored, integrated or co-developed with a supplier first. Compared to mature innovations that may have already been made public and, therefore, be easy to identify, ideas and concepts are likely to be more difficult to find.

With existing suppliers, high trust, frequent interactions with suppliers and including innovation as a regular topic in meeting agendas may provide a solid basis for accessing new ideas early on (Hartley et al. 1997; Henke and Zhang 2010; Schiele 2010). Acquiring ideas from potential suppliers may be more difficult and

require the purchasing managers to nurture wide networks to various suppliers to hear from new developments among the first. The situation may be easier for highly attractive companies as the suppliers may proactively present them with new ideas (Bianchi et al. 2010; Schiele 2012). Further, to provoke and identify fresh ideas that are not explicitly expressed, there is a need to develop and exploit the purchaser's network in order to rely on the "strength of weak ties" (Granovetter 1983): sourcing for brand new opportunities is generated through interactions with acquaintances, multiplying serendipitous interactions. In all the cases, after the ideas have been identified, tighter relationships can be formed to ensure their effective integration.

3 Synthesis

In this article, we have argued that the purchasing function has high potential in scouting new innovations and that it may act as a gatekeeper for the organization, gathering information of new innovations, filtering out the ones that are not relevant, and transmitting the rest to internal constituents. As the purchasing function adopts this role, it faces the challenge of ambidexterity: how to balance between the two conflicting goals of managing for operational criteria, i.e., exploitation, and contributing to the organization's innovation performance, i.e., exploration. To respond to the challenge, suitable organizational structures, roles, and scouting practices are needed.

We have discussed two sources of uncertainty that require more exploration-oriented structures: scouting from new suppliers—as opposed to existing suppliers—and scouting for ideas and concepts—as opposed to mature technologies. We propose that when the scouting focuses on ready-to-use innovations and existing suppliers, it is close to *exploitation* by nature. When the focus turns to pre-commercial ideas and concepts and to new suppliers, the nature of the scouting becomes more *explorative* and managing the challenge of ambidexterity gets more difficult.

Different organizing models are proposed for dealing with these challenges (Fig. 4). The "ad hoc" involvement model works when the exploration goals are modest. In such context, the scouting activities can be managed by commodity managers and partly by NPD project buyers connected with the suppliers. When moving toward more explorative direction and including new suppliers and pre-commercial ideas in the scope of the scouting, the integrated model should be considered. Finally, when there is a need for highly explorative scouting, the key actors involved should be innovation buyers or from R&D. In that case, it is important to coordinate and align decisions with the more exploitation-oriented purchasing function and determine responsibilities between purchasing and R&D. By choosing the right organizing model for innovation scouting, companies may ensure that purchasing function can act toward its strategic goals.

In all organizing models, purchasing needs to carry out the three tasks related to each innovation scouting: gathering information, filtering, and transmitting. How to carry out these tasks varies with innovation source and innovation maturity, and depending on the situation the purchasing managers face different challenges (see Table 1).

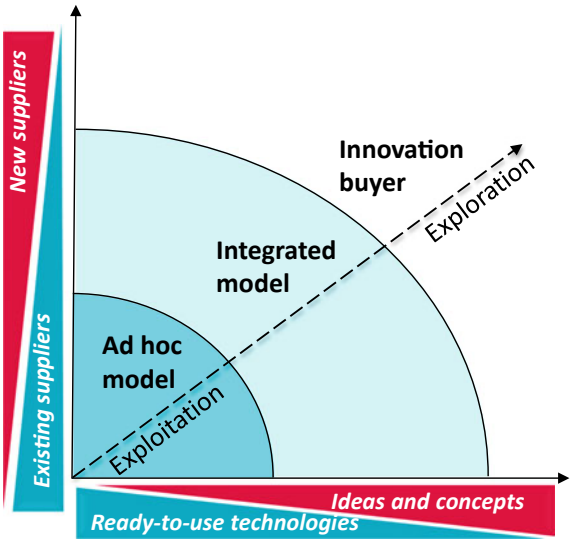

Fig. 4 Framework for choosing suitable organizing model (authors' own figure)

Table 1 Innovation scouting challenges (table compiled by authors)

		Innovation source	
		Existing suppliers	New suppliers
Innovation maturity	*Gather information*		
	Ready-to-use innovations	A key practice is to become close with suppliers to be informed about novel innovations first. The key purchasing actor must be a good business partner, i.e., to understand the expressed and latent needs of the business by developing good internal networks.	Identifying new technologies/solutions from information sources • Updated information through dedicated IT solutions (auction, sourcing platforms…), and/or visits in fairs/places and/or relays • Be updated on internal needs by a goof internal professional network
	New ideas and concepts	Be a preferred customer in order to getting access to new technologies first (Schiele 2012). Close relationships with suppliers enable hearing first about new ideas and/or commonly generating new ideas. • Good quality of information exchange through face-to-face contacts • Be a good *business partner*	Relying on informal networks in becoming aware about new developments • Be ready to listen to out of the box ideas • Translate external knowledge into potential needs • Think in terms of functionality rather than focusing only on technologies or markets • Be updated on internal roadmaps

(continued)

Table 1 (continued)

		Innovation source	
		Existing suppliers	New suppliers
	Filter		
	Ready-to-use innovations	The proposal must be approved by the R&D team and aligned with the product strategy. Suppliers' capabilities and financial stake must be aligned with the purchasing strategy of the company	Find an internal client and accompany him in the evaluation of the potential innovation. Keep in mind the alignment with the purchasing strategy
	New ideas and concepts	Previous collaboration and trust help evaluate new ideas and their feasibility. Be ready to propose new dedicated rules—exceptions to panel rules on contracts and share of IP. Listen to new ideas or capacity to organize dedicated workshops with key potential internal users	Ability to translate external knowledge into understandable information for internal stakeholders Find the right in-house expertise to evaluate new idea value and identify suitable right actor in the exploitation-oriented purchasing function who can take charge of the evaluation of suppliers' capabilities
	Transmit		
	Ready-to-use innovations	Check the quality of connections between suppliers and internal users Transmission to a life cycle buyer—when not involved in scouting—must not be forgotten	Importance of identifying and committing internal stakeholders before supplier involvement Transmission to a life cycle buyer—when not involved in scouting—must not be forgotten
	New ideas and concepts	Obtain feedback from internal clients and prepare continuous involvement of the purchasing function in the future OCP When innovation target is related to other panel than the supplier's, connection needs to be formed with relevant purchasing function	High championing efforts are needed to reduce initial opposition to ideas before supplier involvement Involvement of life cycle purchasing can be vary with the differences in knowledge bases—often mere information transmission is sufficient

Scouting innovations from existing suppliers is easier as there are lots of mechanisms already in place to facilitate collaboration. In the case of new suppliers, the purchasing function needs to find suitable methods for identifying novel

technologies and actors. New suppliers are often sought for their distinct knowledge bases and perspectives. New insights can be valuable, but they are associated with many uncertainties. This brings about challenges as the value of contributions is more difficult to measure and the integration of ideas and technologies may face resistance from internal stakeholders, keeping in mind that the longer the way from fuzzy front end to commercialization of innovation the higher the number of resistance's opportunities, and the fewer the number of levers that are available for purchasing to solve them.

Similarly, when innovation scouting targets mature innovations the level of uncertainty is lower than in the case of ideas and concepts that may have still to go through a long process before being ready for implementation. Mature technologies are easier to find, evaluate, and integrate as there is more information available of them: there may be reports of their application in various contexts and many problems related to their implementation have already been identified and solved. However, scouting for ideas and concepts may also be valuable as it allows the buyer to get in the forefront of technological development in its industry. Idea scouting requires an approach that relies on informal networks as information about ideas is often not publicly available. As this mode of innovation, scouting addresses the early stages of the innovation process where there are still many open questions, evaluating the suppliers' contribution, and convincing internal stakeholders is more challenging than in the case of ready-to-use innovations.

In this chapter, we addressed the problem of absorbing external innovations by looking at the purchasing function role and focusing on the scouting activity which determines the ambition of the openness of a firm. We proposed organizational models for that stake taking into account a double contingency: the supply base and the innovation maturity addressed. How to manage innovation scouting in various settings is still a real open agenda and we hope that our proposal can contribute to stimulate research in this topic in order to perform and improve this emerging function.

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