Best Practices of Providers Advisory Services after the Adoption of e-Procurement Solutions: The Italian Market Case

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Abstract

This paper aims to analyze the impact of professional services (i.e. advisory and consulting services) provided to end-users after the implementation of e-Procurement solutions in a sample of public and private Italian companies. E-Procurement implementation is a critical task as it deals with various degrees of resistance to change (Tatsis et el., 2006). Particularly, in terms of skills, attitudes and practices, low technology literacy can make adoption costs be too high (Svidronova and Mikus, 2015) and sometimes exceeds benefits (Faridian, 2015), by limiting the overall organization performance. Even if through professional services, organizations can obtain the overall benefits achievable through the e-Procurement solution (Tatsis et al., 2006) by limiting the setbacks related to low technology literacy of end-users, such topic seems not well investigated in literature. We explore such gap by analysing the role of Providers Advisory Services after the Adoption of e-Procurement Solutions, their benefits, such as processes semplification and improvement, and setback, such as resistence to change dynamics, after by focusing on a comparative case study method based on 200 projects implemented by two Italian leading and largest players e-Procurement solutions (advisory and consulting services) providers, in order to provide useful knowledge to managers that face with such kinds of projects.

Keywords
e-Procurement; Italian market; excellence, advisory services; consulting services; professional services.

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1 Introduction

E-Procurement is the evolution of traditional procurement activities based on Internet (Croom and Johnston, 2003), throughout the use of technologies that facilitate and automate procuring goods and services (Presutti, 2003; Vaidyanathan and Devaraj, 2008).

It is considered more than online transactions (Li et al., 2015) as it also involves the overall strategic reconfiguration and integration of the buyer's and the supplier's business processes to optimize the efficiency and effectiveness of the underlying transactions (Yang et al., 2017). Both in the private and public sectors, e-Procurement impacts on administrative process and costs, by improving the performance, essentially in terms of efficiency and effectiveness gains (Puschmann and Alt, 2005), as well as in terms of integration and streamlining of many processes throughout the organization (Vaidya et al., 2006). However e-Procurement appears also to have potentially negative impacts, especially in terms of change management issues, i.e. mainly resistance to the changing of attitudes and practices of people inside the organization and of the suppliers, but also related to moral hazard and incomplete or distorted information related to electronic information (Albano et al., 2014). In order to provide more evidences about the impact of e-Procurement implementation projects, this paper aims to analyse how the advisory services can improve e-Procurement implementation projects. Procurement implementation depends not only by the specific company that implement the change, but also on national culture and regulations. From this point of view, we will focus particularly on the Italian market, where we don't have enough evidences given that most of them refers to the USA, the UK, China and South Korea.

Our analysis is particularly based on two Italian leading providers of strategic procurement technology, advisory and consulting services, namely BravoSolution Italia and i-Faber S.p.A. After an in-depth analysis of the literature in the second section of this paper, the third section reports the research methodology; the fourth section presents case studies of BravoSolution Italia and i-Faber S.p.A. and the fifth section the findings; in the sixth and last section there are the discussion and conclusions, the limitations and the proposals for future research.

2 Literature Background

E-Procurement is the use of the Internet in the purchasing process (De Boer et al., 2002). It is considered as more than implementing purchasing transactions online (Li et al. (2015), as it involves a range of functions to strategically reconfigure and integrate the buyer's and the supplier's business processes to optimize the efficiency and effectiveness of the transactions. Both in private as well as in public sector e-Procurement impacts on differents perfomance drivers. Some scholars highlight that e-Procurement improves the trasparency (Cagliano et al., 2003; Panayiotou et al., 2004; Shalev and Asbjornsen, 2010) and information asymmetry (Croom and Brandon-Jones, 2007) and then, can reduce corruption between purchasing officers and suppliers (Albano et al., 2014; Panayiotou et al., 2004; Shalev and Asbjornsen, 2010; Moon, 2005; Panayiotou et al., 2004).

Other scholars find out the improvement of efficiency and the reduction of buying and service costs (Wu et al., 2003; Cagliano et al., 2003; Schoenherr and Tummala, 2007; Shalev and Asbjornsen, 2010; Cabras, 2010; Moon, 2005), such as company inventory level (Cabras, 2010) or bureaucracy (Panayiotou et al., 2004; Faridian, 2015), also through the aggregation or centralization of purchasing (Costa et al., 2013; Moon, 2005). E-Procurement has impacts also

on quality issues. Literature, from this point of view, has highlighted that e-Procurement improve quality in different ways, such as customer service (Kauppi et al., 2013), usability and professionalism (Brandon-Jones, 2017) and services flexibility (Croom and Brandon-Jones, 2007). The relationships with suppliers can also be improved, through the possibility of eliminating "unwanted" suppliers (Smart and Harrison, 2003), the possibility of reducing the supply problems (Panayiotou et al., 2004), providing better information about suppliers (Rotchanakitumnuai, 2013; Yang et al., 2017), and therefore, reducing collusion between suppliers (Panayiotou et al., 2004; Svidronova and Mikus, 2015).

However, there is no a convergent view about the impact of e-Procurement projects on company performance. Collins and Vincent-Jones, respectively in 1999 and 2006, highlight that despite e-Procurement aims to reduce or eliminate the drawbacks related to the traditional procurement, by enabling more integrated and efficient processes, it sometimes, costs more than its benefits (Faridian, 2015; Svidronova and Mikus, 2015). Moreover, even if some studies show the positive impact on performance (Varma and Khan, 2017) other studies present different evidences (Narasimhan and Kim, 2001; Da Silveira and Cagliano, 2006) and particularly the negative impacts of such projects (Brandon-Jones and Kauppi, 2018). One of the reason why e-Procurement is not always able to improve organizational performance is related to change management issue that such kind of project faces (Tatsis et al., 2006), i.e. mainly resistance to the changing of attitudes and practices of people inside the organization and of the suppliers, as well as moral hazard and incomplete or distorted information that can be created by electronic information (Albano et al., 2014).

Drawing from this literature gap, the research problem of this study aims at understanding more about e-Procurement projects and change management related issues, in order to focus on specific variables that can enable or limit change, and therefore, company performances, especially in the Italian market, where evicences seems lacking.

3 Research methodology

In order to deal with our research problem, this study is based on an exploratory, inductive investigation by using the multiple cases design, and cross-case comparising (Yin, 2003) of two cases: BravoSolution (part of Jagger group) and i-Faber (part of Unicredit group). They are two leading companies in the Italian market providers that offer strategic procurement technology, and advisory and consulting services with a e-Procurement solutions and therefore their cases allow a good evaluation in order to reach the aims of the current study.

Eisenhardt (1989) argues that case studies can be a starting point for theory development. She suggests that a cross-case analysis involving four to 10 case studies may provide a good basis for analytical generalization; however, in our case, just two companies (i.e. two cases) seems relevant too, as they cover the specific market we are going to analyse.

Following the logic of the current qualitative case sampling (N=2, case studies) we developed information-rich cases (Patton, 2002) by using multiple sources: questionnaire-based interviews, company websites and Companies materials (documentations, reports and presentations). The interviews were carried out on the phone and were supported by a questionnaire.

The purposes of the interviews were twofold: to gather insights into each research construct from the practice and to understand the appropriateness of the theoretical framework.

Six employees each from BravoSolution Italia and i-Faber S.p.A. participated in interviews: four of them hold the position of Accounts Director, four of them are Senior Managers and four of them are Procurement Consultants. Interviews lasted on average one hour.

The respondents from BravoSolution were coded as BS (BS01 to BS06) and the respondents from i-Faber as IF (IF01 to IF06).

Table 1. Companies, roles and interviews. Source: own elaboration.

Company	Role	Interview duration (min.)	ID
BravoSolution Italia	Account Director	65	BS01
	Account Director	70	BS02
	Senior Manager	59	BS03
	Senior Manager	51	BS04
	Project manager	63	BS05
	Project Manager	57	BS06
i-Faber S.p.A	Account Director	67	IF01
	Account Director	62	IF02
	Senior Manager	55	IF03
	Senior Manager	49	IF04
	Procurement Consultant	55	IF05
	Procurement Consultant	64	IF06

The questionnaire was distributed electronically to the firm's respondents in order to let them study, understand and think about it, and one week later the interviewees were called on the phone. During the phone interview, the open questions of the questionnaire were administered to the respondents and every interview was recorded. In the interview guide, in the form of open questions, the respondents were asked to talk about the positive and negative impact of e-Procurement solutions implemented by their customers. Then, the phone interviews were written down and sent to the corresponding respondents after seven days to give them the opportunity to check the contents and if necessary modify and integrate the initial answers. After having confirmed, modified or integrated the contents, the respondents returned the written interview document via mail and a qualitative analysis was carried out. The interviews were carried out in Italian; they were recorded and subsequently transcribed by a professional service provider. In order to test the reliability and validity of the interviews, they were drafted in Italian and then sent to the interviewees who read them, modified what didn't correspond to what they said and gave directions in order to meet the concept they would have meant. Only at this final stage and after having reviewed with the interviewees for validation of the contents and coding, the results were translated into English. Analysis of the interviewees data used the interview guide and the analytical framework approach, where answers from different people to common questions have been grouped by topics, in order to analyse different perspectives on central issues, and organizing question-by-question the responses by interviewees; this was possible because a standardized interviewing format was used (Patton, 2002). The data from the interviews were also grouped and analysed by topics according to the interviewing format, so as to compare answers within the same company and from different companies and then match or contrast them with the evidence provided by the literature.

4 Findings

4.1 BravoSolution Italia Company Overview

BravoSolution, with its global strategic procurement platform, more than 15 years of business experience, and directly serving over 70 countries, helps more than 600 companies and 100,000 purchasing professionals worldwide to drive financial performance, build procurement organizational excellence, manage risk, and influence innovation.

BravoSolution Services offers adoption and support, organizational enablement, advisory services, which deliver targeted services to support strategic procurement initiatives including: increased process efficiency, decision support and improved process governance.

BravoSolution's vision is about unlocking and maximizing the unexpressed value of the purchasing process in client companies, creating new opportunities, as it appear in the business environment always trying to be innovative. The mission is about optimizing the value creation process of clients and thus generating value by means of supporting them throughout the entire procurement process in order to optimize both the buying process and the purchasing performance, through a mix of technology and consultancy, in order to achieve the twofold objectives of effectiveness and efficiency in business processes and technological innovation. It is relevant to underline that in all the previous points the supplier become the core issue in the analysis and development of technology and consultancy. The achievement of client strategic objectives leads to the achievement of the strategic objectives of Bravo Solution; thus, it becomes necessary to work together in the pursuit of common goals, going through the sharing of experiences and skills. Sharing knowledge, skills and experiences allow client to manage the change that Bravo Solution firts makes out of the client business and environment and then integrate into the consulting service and technology solution that is going to offer to the client. To manage the change means to catch proactively the push for change and to be the first on the market to offer the best solution for customers. Finally, this is the role that, as for Bravo Solution, innovation in procurement platforms plays with regard to key strategic objectives.

4.1.1 Change Implementation Strategy

Vision and mission of the Company are important as they consequently enable values that are implemented into the e-Procurement projects. The change strategy starts by mapping procurement process with the customer, and consists in the transposing the process in the platform or in the individual modules, through specific configurations related to the different customer needs.The change implementation strategy, from a technological point of view is cloud-based, by being the software automatically set up in the customer system.

"The main steps of the change strategy are: the analysis of the procurement process of the customer in order to evaluate the specifications, the needs and the requirements to be parameterized and implemented. Then it is necessary to understand how the current customer process works and were it is possible to improve the existing structure and procedure. In the third phase it is possible to draw the procurement process, which is going to be replaced by the e-Procurement solution, which will be tested in order to ensure that the solution fits the customer requirements. Finally, we have the adoption of the whole platform or just of different modules of the platform according to the individual customer need" [BS02].

What is important in this step is the support and the ongoing dialogue that Bravo Solution ensures to the customer during the strategic implementation phase.

"Once the process has been drawn and the solution developed the e-Procurement solution can be implemented: the BravoAdvantage Suite which is the whole solution or the different modules that the customer has chosen. Nevertheless, there is an on-going dialogue with the various functions within the company" [BS05].

Moreover, it is relevant to state that there are projects that have also a post go-live support which can lasts for months; it depends on the solution that is going to be implemented and on the kind of support that customer needs, which sometimes wants Bravo Solution resources to enter the client companies as if they were outsourced buyers who conduct their operations on the platform or sit next to the buyers and step by step guide him in the daily work.

"After go-live activity there is the resource training and the post go-live support in the first weeks of deployment (the lasting of the support depends on the project: we are negotiating projects that have a post go-live support which can last even months, it depends on the solution that is going to be implemented and on the type of support that the customer wants, which sometimes needs the resources of Bravo solution within the customer company as if they were outsourced buyers sit next to the buyer and step by step guide him in his daily work" [BS03].

4.1.2 Main barriers to e-proc implementation

The main barrier regarding both the public and the private sector is the bureaucratic procedure existing in almost all public entities and in some private ones (as banks) characterized by features similar to those of public sector.

"A barrier deals with the bureaucratic procedures which concern both the public and the private sector, in fact, if we think of the banks we realize that their environments are very plastered by many regulations and procedures that are applied to them" [BS06].

These are rigid and inflexible environments because of internal regulations that do not facilitate e-Procurement tools implementation and do not allow to easily override them. Thus, such barriers influence change management output, that always copes with people as it is very difficult to manage employees and succeed in making them leave their habits and established practices for the innovation (Schein, 2004; Bonnet and Nandan 2011).

"The biggest barrier is about change management, in fact, in some contexts, to introduce technology in processes involves such an entity changes that require to be guided with an incisive and pervasive method" [BS03].

Anyway, it is important to state that barriers of such an entity are very few in recent years while they were more important ten years ago. Furthermore, the younger are the employees the easier and faster is the implementation of e-Procurement tools; on the contrary, the older are the employees and the environment they play in the harder is the change management to deal with (for example, in the public sector employees are used to using the sealing wax and it seems to be very difficult going from sealing wax to digital signature); more specifically, the lack of ICT-skills prevented them from completely understanding both the functioning and the advantages of the new technology (Raffa et al., 2006).

"The more employees are younger, the easier and faster the process of adoption is (because the world is more and more in the digital direction), the more the context you play in is older the harder it is to flow along with change" [BS04].

The main risk is people attitude towards change and technology: the rejection to change by the people who use the instrument or by the end users of the tool make the return on investment be zero and the investment on e-Procurement platform become a sunk cost. If the end users within the firm implementing e-Procurement platform avoid to change their habits and to embrace technology the information remains fragmentary, the various business functions

pursue different directions and the benefits achievable going through e-Procurement platform implementation are not reached.

Bravo Solution offers two kinds of solutions: technology and consulting. Consulting (Bravo Solution Consulting Service) is powered by an experienced team of global procurement practitioners that help customers ensure success of their initiatives, meet the challenge, search for innovative ways to drive efficient, effective and value-driven results by unlocking the power of procurement across the organisation, processes and technology. More than 600 companies and over 65,000 purchasing executives across 70 countries rely on Bravo Solution to drive organisational transformation, end-user adoption, and develop procurement strategy based on years of practitioner experience.

4.1.3 Advisory and consulting services

There are not particular activities or processes able to decisively influence the impact (benefits or risks, potential or critical issues) of the e-Procurement platform's adoption on customer firms, but the relationship between Bravo Solution and the customer.

In other words, the relationship has to be taken care and managed as well as possible in time in order to maximize the empathy between Bravo Solution and his customer.

"After the adoption process has been completed, we remain in the company of the customer and intervene every time there is a delicate buying process" [BS04].

To be effective, the relationship has to be based on trust, clarity and transparency, by constantly sharing the emerging needs by the customer side and the updates by the provider side.

"There are not activities and processes able to decisively influence the potential or critical issues of the adoption of new processes of e-Procurement but the area of the relationship between BravoSolution and his customer dealing with empathy. Hence, the importance of communicating on a daily basis in order to constantly share the updates of our platform and their emerging needs. This approach translates the potentiality into reality and reduces critical issues" [BS01].

Trust, clarity and transparency are very impactful for both the customer and Bravo Solution, especially when there are hidden critical issues, the offered solutions do not satisfy the customer's needs, do not semplify the customer's processes and do not make the end-user activity productive.

"It is necessary to build a relationship based on trust, clarity and transparency from the starting point, especially when critical issues appear, when the offered solutions are not able to meet customer needs; the solution is successful when it makes the daily work easier and more productive. This kind of relationship has to be built from the beginning, when you start studying the project in order to reach a point where everything is shared, to prevent situations in which BravoSolution implements in the platform something that does not meet the actual processes of the customer" [BS01].

From the beginning of the study of the project, this approach has to be applied in order to avoid that Bravo Solution transpose in the platform the wrong customer's need not corresponding to the real process of the customer.

This is the only approach able to translate potentialities into reality and to minimize risks, weaknesses and criticalities. At the beginning of a project, it begins a path of exchange and sharing knowledge that lasts for months, the area responsible for the study of the project is called project management which has to examine all the various issues and activities useful to the project.

Thus, strictly from the Bravo Solution point of view, the turning point in building an effective relationship based on trust, clarity and transparency is avoiding to make overselling.

"The most important thing is to build relationship with customer without overselling. Who sells has also the responsibility to join the projects; if someone oversells then has to handle an unmanageable number of projects, because in BravoSolution there are not two different figures: those who sell and those who make the platform work. There are sellers who are implementers, too. Usually, these figures are the account directors who are responsible for business development and customer management" [BS03].

Those who sell are those who have the responsibility to join the projects as well as possible in order not to have to manage during the execution phase an unmanageable number of projects given the fact that the employees who sell are the employees who make the platform operational. There are not the sellers and the implementors. Usually there are figures called account director who are responsible for both the business development and the customer management. The distinctive capabilities of BravoSolution is the continuous support of Bravo Solution to its customers even after the implementation of e-Procurement solutions, in fact it is by his customers side every time there is a mild purchase process as consulting professional and expert of the market, thus the distinctive capability of Bravo Solution is people and consulting service over time.

4.1.4   Change implementation strategy

The way to escape the risk and negative impact coming from the people attitude towards change is a high level of top management commitment able to drive all the end users towards the same direction, towards the same objective. Thus, to have an influent internal sponsor as a person or a group of people is very important in order to take full advantage of the e-Procurement tool. Change implementation allows the integration of the top management commitment in the business functions using the tool and to redesign the process after the implementation while avoiding blackout and problems from the old to the new way to work. Therefore, it is very important to accompany the end-users in the introduction to the operational use of the tool that is precisely one of the strengths of Bravo Solution. If it does not happen it is likely to take a large sum of money for something that lies idle (sunk cost).

4.2   i-Faber S.p.A. Case Company Overview

i-Faber is a subsidiary of Unicredit (also partially-owned by Salini-Impregilo and Oracle) founded in 2001 with a vision: the electronic marketplace as an ideal place where supply and demand meet, able to create efficiency, reduce costs and promote the digital market.
In Italy as well as in Europe, i-Faber is a partner for both Government Agencies and Private Companies operating within major industrial sectors, providing assistance across the supply chain through consulting services, IT solutions, and business support services to IT solutions.

Based on the strength of its consolidated experience in several sectors, i-Faber offers its clients a simple, innovative approach, supporting companies with competence, sustainability, flexibility and promptness in achieving continuous supply chain improvement. i-Faber aims to ensure companies have a wide range of qualitative and quantitative benefits in terms of: reducing the overall costs of the tendering process and procurement, greater efficiency and effectiveness of the negotiation process, greater transparency in processes and relationships, and greater environmental sustainability.

Procurement solutions making them get benefits related to costs reduction, improvement of time to market and optimization of the resources used in the purchasing process. In order to

reach the goal, i-Faber uses its skills, 15-year experience and know-how resulting in platforms, advisory and consulting services and networking dealing with suppliers and buyers.

The vision of i-Faber is about innovating and integrating e-Procurement solutions with the purchasing processes of the firms, making them obtain benefits related to costs reduction, improvement of time to market and optimization of the resources used in the purchasing process. The mission is about generating value for the firms implementing an e-Procurement solution, offering innovative solutions, skills, experiences achieved through collaboration with many large companies, making clients realize time and energy savings, reducing management costs across the entire procurement chain, and creating a culture and relationships towards a unique networking system that turns participants into the driving force of an ever-growing community. i-Faber mission can be synthesized in three main points:

- i-Faber aims to make clients realize time and energy savings and reduce management costs across the entire procurement chain.
- i-Faber offers expertise, experience, service and aided solutions to support the purchasing process of both buying and supplying companies.
- i-Faber creates culture and relations towards a unique network system that turns participants into the driving force of an ever-growing community.

The solutions through which i-Faber realize its mission – advisory and consulting service, skills, e-Procurement solutions, experiences, customer support – are the real distinctive feature of i-Faber in the market.

4.2.1 Change Strategy Implementation

In i-Faber Italia S.p.A, change strategy implementation (the development phase and the implementation phase) is nowadays integrated; in fact these two phases are no more two different phases aiming at the development of a new solution, but the same integrated phase.

Since about 3 years, i-Faber uses the IT methodology, called *agile*, in order to develop a new software. During the past, the development of a new solution started analyzing customer needs, then gathered requirements from customers going through meetings and workshops with them and only after having developed and tested a highly complex solution, i-Faber placed it on the market. On the contrary, the *agile* IT methodology starts from a stage called *inception*: it just focuses directly on the primary needs of the customer and in this phase i-Faber starts doing workshops with customers to understand which is the main need and then builds a prototype or the so-called *story* that just meets the primary need of the customer, thus avoiding developing a complete but complex, time consuming solution as well as i-Faber did in the past. Moreover, if the customer is the driver for the kind of solution he requested, for i-Faber the same customer is the pilot of the solution development. This is easily readable from the quotes below:

"With the "agile" methodology, we focus directly on the primary need of our customer; so if customers ask us to approach a new particular solution, we begin to develop the core of the solution in collaboration with the customer, without starting building a castle when maybe customer needs just the door".

Initially, therefore, going through workshops and interactions with the customer we try to define what are the basic needs and building the so called stories, which are the minimal functional specifications. So while you are in the phase of analysis and discussion we already begin to create a prototype" [IF01].

After the first phase of *inception*, i-Faber and its customer start testing the solution so that the customer can give his feedbacks and i-Faber can integrate them in the prototype, modify

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what needs to be modified and then the process is repeated again and again until i-Faber fully succeed in meeting customer requirements.

"We use agile IT methodology. We begin with a phase called inception, where we starts gathering client requirements in order to develop a prototype and go for testing it together with customer. Then customer gives us feedback and to that point process is repeated until we fully meet customer needs" [IF06].

What really matters is the continuous cross-check between the needs of customer and the e-Procurement solution i-Faber develops in order to establish a close fit between the two:

"There is a continuous cross-check between customer needs and the solution we developed" [IF02].

Therefore, nowadays the development process and the implementation process have been integrated in the same dynamic phase dealing with a twofold involvement: that one of i-Faber and that one of customer. When that prototype reachs the minimum functional set and begins to work meeting the primary customer needs, then i-Faber sends it into production and place it on the market.

"When the solution prototype starts meeting the basic needs of the client, we send i tinto production in order to place it on the market" [IF05].

Thus, nowadays i-Faber does not develop a highly complex solution but creates a minimal solution, which meets primary customer needs and can be immediately used by the customer, thanks to the agile IT methodology. Moreover, if while using the solution, consumer discovers he has further additional needs, customer can contribute to the upgrading of the solution and with the help of customer i-Faber can update the solution going through the integration of new releases of the same product.

"While using that solution, customer may discover to have new further needs and therefore contribute to the development and additional release of that new solution" [IF03].

4.2.2 Advisory and consulting services

Another important distinctive element is the networking. It is the only way to create culture about these themes since only through the exchange and sharing knowledge and experiences, firms can start a share and growth process. As for the services i-Faber offers its customers, the strategic objective shown above results in a very strong commitment in the training and teaching activities to the whole territory. The end-users of the solutions are municipalities, the central and local governments that need to be taught and accompanied in the use of the platform going through advisory and consulting service about how to use the platform: i-Faber does not explain them just how the solution works but also how they should best carry out their activities on the platform.

"The platform features of our competitors are absolutely similar to our features. The advantage is probably about our training and internal structure which is very supportive to customers, so that they know they have a real reference to rely on"[IF02].

As it is easily readable from the company website, i-Faber's offering framework supports companies across their supply chain with three areas of service: consulting services, IT solutions, business support services.

Consulting services, IT solutions and business support services are about three main themes:
- Scouting products, services and suppliers;
- Negotiation and contract;
- Supply chain execution, collaboration and purchase data analysis.

"Our distinctive capabilities are: providing consulting service not only technological solutions, being very close to customers and best satisfying their needs, being customer-oriented during the whole project related to a customer, a remarkable quality customer support with experts supporting customers and helping traders, the procurement consultant who gives advices and continuously supports clients in the use of the e-Procurement platforms" [IF05].

As for consulting services: i-Faber offers consulting services for analysis and evaluation of suppliers, strategies evaluation during the tendering phase, definition of environmental sustainability criteria in the purchasing process. As for Business support services: i-Faber offers business support services through a team with distinctive expertise, dedicated to its clients and suppliers for the optimal use of technological solutions during every phase of the tender:

- Multilanguage support to suppliers before/during/after e-auctions as well as during qualification process;
- Monitoring and management of negotiations;
- Training and support delivered to buyers through all purchasing cycle phases.

Sales and Customer Support Services for Buyers and Suppliers. Distinctive capabilities of i-Faber are:

- the ability to act more quickly than competitors on software when it does not work; on the contrary, competitors are more focused on a logic of product rather than on the individual customer satisfaction;
- the ability to offer customers not only the e-Procurement platform but the consulting service, too, to be closer to the customer going through the best satisfaction of its requirements and translating them in the product roadmap;
- an high quality customer support that helps the customer and constantly supports the traders at all stages of process;
- The role of procurement consultant who continuously gives advice and support the customer. Thus, customers know they have a strong reference to rely on.
- Finally, it matters to state that each customer has a procurement consultant who is his point of reference always close to him and supporting him both in the maintenance phase and in the next future use of the solution. This is easily readable from the comments below:

"Each customer has a procurement consultant as a point of reference, who is supportive and close to him during the whole project and after the implementation, too" [IF04].

The adoption of e-Procurement platform brings to the customer the expected benefits, if the provider supports the client in a certain way and whether or not certain activities occur. In fact, it is not enough to implement the platform; it is also fundamental that the provider guide the customer in the appropriate use of the solution. In particular, the respondents state that the critical issues decrease and potential grows if the project manager or consultant procurement manager projects going through professionalism, taking track of all the activities carried out.

"I am a project manager, thus, in the daily management of my work what creates critical issues rather than facilitates the result is definitely the high professionalism that I put in the management of my projects" [IF05].

Moreover, the provider has to be transparent in managing the project with the customer, should guide the client in managing the project and has to give customer what customer needs and not what customer asks; because it happens that sometimes customers ask for something that he thinks he needs but he does not really need it; thus consulting service is fundamental to understand what is really needed.

"According to me, it is important to establish a trust-based relationship able to make customer understand that we are giving him what he really needs and not what he thinks he needs. This is the aim of our consulting service: to understand the real need of our customer and the real turning point" [IF02].

It is also important "how" the customer is guided in the use of the e-Procurement platform: this is the activity of procurement consultant. The software solution is a solution that by itself does not solve problems, but it is important to know how to use it; therefore, the support service to the customer's procurement consultant is more than essential. It does not matter if the customer buys and implements within his firm an e-Procurement platform rather than another one; what really matters and what makes the difference is the customer support, in the mean of advisory and consulting service, that has to concern:

- training, especially in the first period;
- sharing knowledge and all project information with clients;
- A trust-based relationship between the customer and his provider;
- A continuous support and help to the consumer in order to solve the occurring problems related to the e-Procurement solution.

"I think it is the consulting service of procurement consultant which can be an impactful variable as for the positive or negative result in the use of e-Procurement platform. The software solution alone is not enough to solve the problems, an instrument is just a solution and the customer need to know how to use in the right way. The support that you give is essential. The consulting service matters and makes the difference. Between us and our main competitors there is not a big difference as for technology, the platform is almost the same, there may be some small differences but they are not relevant; what is relevant concerns your customer service and support" [IF06].

The surveys also provided insight into how some aspects or activities of the daily work of the employees can influence the potential or critical issues of the implementation of an e-Procurement solution, but also underlined the right attitude, behaviour and commitment that practitioners should have and integrate in order to enhance and maximize the benefits achievable after the implementation of an e-Procurement solution, which is a relevant contribution to the existing literature on e-Procurement.

4.2.3 Main Barriers

As for the barriers to the adoption of an e-Procurement solution, it is relevant to state that there is not a clear distinction between the private sector barriers and those of public one, because both of them do not come from different core interests, as for drivers, but have a common origin which lives in the macro-category related to people culture and denial of change.

The main barriers to the use of an e-Procurement solution, after having implemented it, are related to the fear of digitalization (it is a barrier noticeable both in the public sector and in the private one): in fact, nowadays what was a tangible document becomes a digital file or something that you cannot touch so that traders feel to lose control of the whole purchasing process: their biggest fear is to expose themselves to a danger and they fear that their workflow is not safe, since a file placed on Internet is considered unsafe. In the past, every buyer knew his trusted vendors, with whom he had a closer relationship. Nowadays, however, while playing on the electronic market, the buyer has to evaluate the offers from vendors from all over the world that he does not know. These vendors who join the tender may offer a more competitive

bid than that of usual suppliers thus the buyer has to evaluate it, though he does not know them and does not have a closer relationship with them.

"What was tangible has now become an electronic solution, something that you cannot touch. Consequently, the fear to lose the control of the situation" [IF01].

In the public sector, the main barrier is the length of the decision-making process and the rigidity of bureaucracy. It is enough just to think of the many phases and activities of an approval process or that of a specification definition;

"As for the government, a big barrier and an important limitation is the bureaucracy in the sense that the decision-making process is very long and time-consuming, dealing with, for example, the bureaucratic approval process and the definition of a specification needed in order to publish a tender" [IF04].

"The public sector is old and always afraid to innovate, thus, bringing innovation in public administration is something very tangible, like a spaceship that takes you to the moon. In contrast, the private sector is already used to managing and taking advantage of e-Procurement solutions because it pays more attention to the careful analysis of costs and revenues" [IF01].

The need for buyers to maintain status quo, in fact, very often, especially at the starting point, buyers consider the e-Procurement platform as something that can limit their ability to act.

"In my opinion, an important barrier is due to buyers aiming at keeping the status quo". [IF06].

The culture of the people, which, especially in the public sector, too, are used to work in the traditional way and, therefore, to change their habits and the way they work sometimes can be a great difficulty, also because in the public adiministration the average age is quite high and this features makes it even more difficult to shift from the traditional way employees work to the electronic manner. For this reason, change management is so important while going from the traditional way employees work to the new one.

"According to me, people culture is maybe the main barrier and this is the reason why the activity of change management is so important. We know that especially in the public sector employees are used to work in the traditional manner and to be obliged to change habits could be a great difficulty, especially when the average age is quite high" [IF05].

As for public sector, an additional barrier to the adoption of e-Procurement solution is due to the fact that Procurement Code does not involve specific topics about electronic tender procedures but it just refers to the tender procedures without specifying whether traditional or electronic type. There are neither clear regulations nor laws regarding electronic tenders so that this leads to an interpretation of the rule, also on the customers side. Thus, each customer has his interpretation of the law, therefore each interpretation of the law means different needs on customer side, resulting in different e-Procurement solutions required to providers. The various legal bodies should decree about this issue but, at present, they have not done it yet.

"In my opinion, a further barrier is the result of the fact that nowadays, although we have a new Procurement Code since ten years, it is not clear while dealing with electronic tender procedures; in fact, it deals with procedures but not with electronic procedures. This state of affairs imply an interpretation of the law on customer side involving so many interpretations of the same law" [IF03].

A further benefit is due to the fact that, after having built a closer relationship with the provider of technology and consulting services, i-Faber in this case, the customer knows that he can ask the provider to support him for any further need of technological solutions. In fact, the provider becomes almost an internal IT consultant able to continuously help customers to satisfy any information technology occurring need. This is true for both the public and the

private sector. Critical issues can occur only in the short term after the implementation of an e-Procurement solution, while there are not in the long run. Especially in public administration, the most critical issue is people culture, both vendors that buyers side. In fact, at starting point there might be difficulties in the use of the e-Procurement platform, since along with the introduction of the platform is going to change the traditional way of working and to completely disrupt end-user habits which are the human to human relationships, the use of the mail and of the phone. This kind of critical issue is surely limited in time and certainly can be overcome going through the implementation of a right strategy of change management and training. It is important and essential that the customer believes in the principles of the implemented change and is really committed in the advices coming from the consulting service of the provider, otherwise the whole investment in the e-Procurment platform might be unuseful and turn into a sunk cost.

4.2.4   *Change implementation strategy*

From the survey, it emerges that the most critical issue is people culture, both vendors that buyers side and both private sector side that public sector side. In fact, at starting point there might be difficulties in the use of the e-Procurement platform, since along with the introduction of the platform is going to change the traditional way of working by means of the disruption of end-user habits; and we talk about this issue defining it as a barrier. But, if it does not change in the long run, it is not just an ex-ante barrier to the implementation of an e-Procurement solution but becomes the main risk and negative impact ex-post, too: it is people attitude towards change and the fear of digitalization that can make the return on investment be zero and the investment on e-Procurement platform become a sunk cost. From the survey emerges that, in public sector the risk is higher than in private sector, first because the public sector is a context even older than the private sector, thus, when you introduce an important change the transformation is very impactful, second because, in public sector, the average age is higher than the average age of private sector.

It is relevant to underline that from this research a clear distinction between the private sector barriers and those of public one does not emerge, because both of them do not come from different core interests, as for drivers, but have a common origin which lives in the macro-category related to *culture of employees* who want to keep the status quo and *denial of change*. But, it is possible to state something more as for public sector where the main barrier is about the bureaucratic procedures existing in almost all public entities. Within this context, each procedure is rigid and inflexible besides overregulated. This state of affairs does not enhance e-Procurement solutions implementation and do not allow to easily override the difficulties.

5   Discussion and Conclusions

This paper has analyzed the main issues related to e-Procurement implementation projects in ordert to understand more about barriers and positive impact of e-procurement on company performance. We find important variables related to such implementation projects, such as the employee's culture and competences, as well as the customer relationships and procurement platform issue and procurement code.

From the change management point of view, we observe the importance both of change management implementation and a strong internal sponsor that can be the way to the successful adoption of an e-Procurement solution. This can support also employees to change their

working habits and to accept and sustain change and technology in order to fully exploit the potential of e-Procurement solution. This argument is in line with literature that highlights the importance of culture and attitude towards change (Hayes, 2014; Schein, 2004) in order to make effective the change process, by modifying the level of skills, capabilities and technology literacy. As first implication of the study, we highlight the importance of the investment on change management, training and equipment, important in order to implement e-Procurement project, to innovate the organizational structures of firms, especially public entities, improve the professional and skills levels of the employees, and fully exploit the high potential benefits of e-Procurement solutions.

From the customers' relationship perspective, the main issue is the focus on the relationship between provider and customer, in order to optimally manage such relationship and maximize the customer journey empathy (Buttle, 2004). Hence, the importance of communicating on a daily basis in order to constantly share the updates of the platform and the customer emerging needs. As highlighted by literature (Brandon-Jones, 20017) this approach translates the potentiality into reality and reduces critical issues.

From the Technological Platform point of view, we state that e-Procurement solution is not allowed to work properly because end-user does not want or is not able to adapt his internal purchasing process to the platform as it is not always possible that the platform fit the particularism of the individual customer process. This technological issue of adaptation represents a drawbacks for the projects success.

Another important finding is related to the differences with European countries, where with respect to European end-users, respondents pointed out that there are not substantial differences related to process management and culture between them and the Italian ones. However, major differences appear with respect to high skilled professionals and to high rate of technological literacy. These differences almost always come from cultural aspects, employees attitude towards change and technology literacy and are not related to technological infrastructures; in fact, as we said, the e-Procurement solutions are user-friendly and can be integrated with almost all pre-existing systems.

Despite the interesting findings related to this research, we meet also some research limits. The first one is related to the generalizability of the results. Case study method allows in-depth understanding of a specific context, but, on the other hand, results can not be generalized. However, our aim is not the generalization of the findings but the understanding of e-Procurement projects implementation and their barriers. The second limit is related to the cases analyzed. We analyze only two cases. Even if they cover the majority of e-Procurement market, future research culd analyze more cases, also in a quantitative perspective, in order to improve the results generalization.

Appendix

Questionnaire

The track of the questionnaire administered to the respondents of BravoSolution Italia and i-Faber S.p.A. is shown below. The questionnaire deals with questions focusing on three macro-themes: (1) vision and mission, (2) development and adoption, (3) positive and negative impacts after the adoption of an e-Procurement solution.

VISION AND MISSION

Can you describe the vision and the mission of your company? How do they impact in characterizing your products and services?

What are the main strategic objectives of your company and which is the role of innovation in characterizing procurement platforms?

DEVELOPMENT OF AN E-PROCUREMENT SOLUTION

What are the drivers in the adoption of an e-Procurement solution by your customers?
What are the barriers in the adoption of an e-Procurement solution by your customers?
Which e-Procurement solutions do you develop and offer to your customers (online auction, marketplace, e-reverse auction)?
What are the e-Procurement solutions that bring the most significant satisfaction to your customers?
Which are the main steps in the development process of a new e-Procurement solution?
Which are the main steps in the adoption process of an e-Procurement solution?

POSITIVE AND NEGATIVE IMPACTS AFTER THE ADOPTION OF AN E-PROCUREMENT SOLUTION

Which types of benefits do your customers get after the adoption of an e-Procurement solution?
Which risks and negative impacts do your customers get after the adoption of an e-Procurement solution?
Which types of innovation do your customers need after the adoption of a new e-Procurement solution in order to use it?
The impact, in terms of benefits, determined by the adoption of an e-Procurement solution is greater in the public or in the private sector?
The impact, in terms of risks and negative impacts, determined by the adoption of an e-Procurement solution is greater in the public or in the private sector?
If you have foreign customers, I wonder if the impact in terms of benefits determined by the adoption of an e-Procurement solutions, is greater in the Italian market or foreign countries?
If you have foreign customers, I wonder if the impact in terms of risks and negative impacts determined by the adoption of e-Procurement solutions is greater in the Italian market or foreign countries?

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