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THE DRIVERS AND IMPLICATIONS OF INFORMATION SYSTEM PROCESS INNOVATIONS: A FINANCIAL SERVICES CASE STUDY

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ABSTRACT

This study stands for especially information systems process innovation (ISPI) and partly organizational innovation (OI) and takes into account ISPI and OI as a theoretical lens to examine a financial services case organization. It is this theoretical lens that helps us to develop a framework to articulate a number of relevant aspects for the subject matter at hand. Thus, the underlying motivation for this study is to identify a number of relevant aspects rooted in OI and ISPI that may have a potential explanatory power to surface drivers and implications of ISPI. We employ ISPI adoption (source of innovation, decision making, scope), Relational Mechanism (Business, IT, Liaison), Business Innovation (behavioral aspect) as relevant aspects. Thus, the contribution lies in understanding on which bases innovation characteristics are shaped and situated in the course of ISPI. We argue that leadership-driven innovation characteristics are particularly essential to better understand how innovation unfolds.

Keywords: information system process innovation, product innovation, leadership-driven innovation, innovation characteristics

BİLİŞİM SİSTEMLERİ SÜREÇ İNOVASYONLARINI OLUŞTURAN İTİCİ GÜÇLER VE ETKİLERİ: FİNANSAL HİZMETLER VAKA ÇALIŞMASI

ÖZET

Bu çalışmada, bilişim sistemleri süreç inovasyonu (ISPI) ve kurumsal inovasyon (OI) kavramları teorik mercek olarak kullanılarak, finans sektöründe vaka incelemesi yapılmıştır. Bu iki kavramın oluşturduğu teorik mercek, konuyla ilgili bazı unsurları anlamlandırarak, bir çerçeve geliştirmeye yardımcı olmaktadır. Çalışmanın amacı, bilişim sistemleri süreç inovasyonlarını (ISPI) oluşturan itici güçler ve etkilerini anlamlandırma potansiyeline sahip bazı unsurları tanımlamaktır ki, bu unsurlar; ISPI benimseme (kaynak, karar verme stratejisi, kapsamı), ilişki mekanizması (İş Birimi, IT, Temas sağlayıcı) ve işletme inovasyonu (davranışsal unsurlar) olarak belirlenmiştir. Çalışma, inovasyon karakteristiklerinin ISPI bağlamında hangi temeller üzerine yerleşmiş ve şekillenmiş olduğunun anlaşılmasına katkı sunmaktadır. Liderlik-etkin inovasyon karakteristiklerinin, inovasyonun nasıl ortaya çıktığının anlaşılmasında özellikle önemli olduğu tartışılmaktadır.

Anahtar Kelimeler: bilişim sistemleri süreç inovasyonu, ürün inovasyonu, liderlik-etkin inovasyon, inovasyon karakteristikleri

INTRODUCTION

The very idea of innovation has been well received by various schools of thoughts given the fact that the idea calls for studies to bring up alternative approaches to long-standing problems practice and relevant in research domains. Two particular areas are of interest to this study; organizational innovation and information systems process innovation.

The former is concerned with how organizations deal with strategic and operational changes to achieve agility, competitiveness, leadership, high-performing capabilities delivering new products, process or even new business models (Yo et al., 2012, Schilling, 2015). Innovations can be characterized and categorized in various ways. Robey (1986) distinguishes among new products (or services), administrative innovations (improving internal control, coordination, and structure), and technical innovations (changes to technology or work processes). Similarly, Damanpour and Evan (1984) present a study of "organizational lag" in innovation, based upon Evan's (1966) hypothesis that administrative innovations in organizations tend to lag behind technical innovations. Among the possible explanations of such a lag: "technical innovations are more observable, have higher trialability, and are perceived to be relatively more advantageous than administrative innovations, while administrative innovations are perceived to be more complex than technical innovations to implement" (Damanpour and Evan 1984, p. 394). We continue discussing characteristics of organizational innovation, but the notion simply may come down to adoption of an idea or behavior that is novel to the organization (Daft, 1978).

The latter is of interest to information systems practitioners and researchers to adopt similar motivation of organizational innovation in the context of information systems management, development or process and related activities. To our knowledge, Lind and Zmud (1991) have extensively examined IS innovation in terms of the interaction between the IS department and user departments. Here the relative IS innovativeness of user departments within two co-located divisions of a single firm is assessed. Differences between divisions (if any) are not reported.

This study stands for especially information systems process innovation (ISPI) (Mustonen-Ollila & Lyytinen, 2004) and partly organizational innovation (OI) and takes into account ISPI and OI as a theoretical lens to examine a financial services case organization. As shall be discussed, it is this theoretical lens that helps us to develop a framework to articulate a number of relevant aspects for the subject matter at hand. Thus, the underlying motivation for this study is to identify a number of relevant aspects rooted in OI and ISPI that may have a potential explanatory power (Dishaw and Strong, 1999) to surface drivers and implications of ISPI. Thus, the contribution lies in understanding on which bases innovation characteristics are shaped and situated in the course of ISPI.

RESEARCH BACKGROUND

Information system process innovations (ISPIs) embrace both technological (such as new IS functionalities, adoptions of operating systems and programming languages) and administrative innovations (project management methods, new approaches to development interactions and contracting) (Ollila & Lyytinen, 2004). Swanson (1994) uses the terms Type Ia for administrative process innovations and Type Ib for technological process innovations. Type I innovation is defined as IS process innovations and includes these two sub-types, Type Ia and Type Ib. Administrative innovations are classified into two sub-categories; management innovations (changes in rules and administrative processes that improve, control, manage, and coordinate development activities) and descriptive innovations (changes in notational systems and standards describing and communicating development products and processes between different stakeholders). Technological innovations are classified into two sub-categories; tool innovations (capital sensitive software assets such as case tools) and core technologies

innovations (improvements in technical platforms programming languages, database management systems, telecommunication software etc.) (Ollila & Lyytinen, 2004).

An ISPI adoption occurs when an adoption unit learns about an ISPI and makes a decision about its use or non-use, from the organizational learning point of view. The ISPI adoption raises three questions: (1) what is the origin of the ISPI? (2) what is the scope of the ISPI? (3) who is the decision maker? ISPIs can be developed internally in an organization or grafted externally. The scope may contain a single organizational unit, a partial unit or several units. Decision makers can be company level, department level, and the project level. They are categorized into these three types; centralized, distributed, and situational correspondingly. (Ollila & Lyytinen, 2004).

Adoptions of and innovations with digital technologies are radically changing the nature of products and services (Yoo et al. 2012). To comply with characteristics of an innovative products and services, an organization looks for favorable circumstances to evolve/reengineer the processes to improve, manage, and coordinate development activities, into its most efficient formation.

An effort to reshape processes reveals boundary spanning. Roles and responsibilities may shift or evolve to respond the emergent needs and characteristics of an innovative product/service. Communication patterns and information distribution among key agents such as IT, business unit and customer sides may differ. Sensing the need of the customer and offering a solution may not follow the common relational mechanisms of conventional IS projects.

RESEARCH METHODOLOGY

The case is chosen for the purpose of examining ISPIs innovation in a competitive setting. Thus, the case is a strategic sampling (Yin, 2013).

To articulate some ISPIs of a finance institution and look into transforming acts and mindset changes at such levels as enterprise, department and individual, we employ an explorative study accompanying open-ended questions and discourse analysis that reveals the hidden motivation in transforming information systems development (ISD) processes in the finance industry.

Source of data is twofold. One is informants with whom we conducted interviews, the other is public available documents. At the outset the approach used for this case is in line with a typical case study (Yin, 2013), but has distinct characteristics with respect to unit of analysis and data analysis. The unit of analysis is the phenomenon (the research matter that deserves to be a phenomenon of research interest, which can not be framed logically prior to deep understanding of how innovation unfolds in a real-word context) concerning ISPIs in an organization where it unfolds along with key roles which are subject to discourse analysis (Cukier *et al.*, 2009), which is used as data analysis technique for interview transcripts (Myers, 1997).

Six face-to-face interviews are conducted with people from various roles in a business unit (called it Unit I); with a chief of Unit I (called the person A), a project manager of Unit I (called the person B), and an expert test engineer and team leader from IT department (called the person C), to understand how are ISPIs originated and adopted in the organization. First round interviews are conducted to clarify the Unit I's structure, processes and relational mechanisms. Second rounds are for method adoption and sample project examination.

We address two basic questions: "what drives process innovation in IS project?" and "what are the organizational implications of this process innovation?" Research questions are generated to reveal the organization's ISPI practice to surface the perceptions of IT, business and customer sides on that practice.

CASE IN A NUTSHELL

The case organization is a bank serving to 3 million corporate customers operates in the finance industry for almost 30 years. Due to confidentiality reasons, the organization's name is not disclosed. In this research, we examine a business unit (called it Unit I) responsible for analytics marketing, strategy and project management. Unit I is part of a business division whose target customer is small and medium business and companies in the agriculture industry.

The organization is present in the competitive industry that requires undertaking strategy driven projects and developing innovation critical products and services to obtain competitive advantage.

Unit I's main functions briefly are corporate client services, customer-centric innovation, strategy development, marketing analytics, business intelligence, branch performance measurements, reporting, and project management. Interviewee (A) states that,

"*Unit I functions like a brain of the organization for all types of modeling, analytics, measurements, reporting and decision making*".

Unit I's stakeholders are divided into two groups: IT stakeholders and business stakeholders. As business stakeholders, Unit I interacts with PR teams, analytics teams and consultancy firms. As IT stakeholders, the unit interacts with IT purchasing team, database management systems provider, cloud application and platform service provider, packaged software provider, and GSM operator. Other stakeholders are Banking Regulation and Supervision Agency (BDDK), spin-offs, customers, and employees. IT is established as spin-off, a legal, non-profit support unit. By nature, it provides services to all kinds of customers. Unit I, cooperates with law unit as well, since the legal constraints and consumer rights need to be taken into account.

At the outset, the firm has a typical hierarchical structure in which employees are grouped by areas of specialization in separate functions/departments (as shall been seen later on, the term silo used as a metaphor by the informant) and managed at different levels. Each functional silo places more emphasis on its own efficiency and functional specialty. The organization benefits certain characteristics of silos such as lots of integration within the silos and clearly defined career paths in specializations. However, cross-functional projects require integration from multiple silos. The organization encounters difficulties, since each silo focuses its own departmental work and ignores the problems and efficiencies of other functions. Interviewee (A) states that,

"*There are such works in the projects where the products must be intertwined. In these cases, there might be problems concerning working with silo logic. Any department may be triggering the project in any direction. Because IT project is not just IT project, it is actually a cultural work. IT must be able to see the things from the bird's-eye. When you look at the organization from the top, it may be seen the effect of one action on other aspects. Yet working with silo logic makes it difficult to carry out sometimes*".

Interviewee (A) prefers IT working on more project-oriented rather than silo-oriented. He requires high-level of understanding, more integrated and macro view –an ability to see the big picture- and being capable of sensing how various processes fit in to each other as a whole. He emphasizes the need of a more open culture for cross-functional projects and suffers the silo-oriented structure that results in limited visibility outside of own silo, lack of cross-functional communication and restricted effort at integration.

Backgrounds of Key Players in Unit I

Team of seven employees who studied mathematics engineering, physics and statistics, work in Unit I. The Interviewee (A) studied public administration, archeology, and EMBA. He states that,

"All these studies enables me to reflect the notions of business units to IT".

His atypical journey has evolved from such background to data mining and business intelligence in finance sector. He first started data analysis as a member of a team that provides data to call centers in another finance group. After a while, he noticed that he was very good at predicting customer behaviors, eliminating some customers for some offers, preparing lists for offering appropriate products to potential customers. He studied abroad and certified on business analysis by IIBA® (International Institute of Business Analysis). Afterwards he worked for a consultancy firm abroad for two years. He states that,

"*The background may not seem an ideal formation for the position. But if you have an interest and opportunity to improve your skills, you can succeed in a different domain*".

Some of the authorities and responsibilities of Interviewee (A) are as follows: project management, designing innovative projects, launching innovative/creative products on CRM optimization and efficiency, investigating the new Business ways, managing adoption process of innovations, data mining, modeling, data analytics, decision support services to senior management, customer/product analysis to support marketing teams, IT-related works, and stakeholder management. Even Interviewee (A) is main responsible for the projects, he is considered as responsible for all activities with hands on effort throughout the project including both technical and non-technical works.

Interviewee (B) studied business administration and MBA. After 10 years of field experience on portfolio management in a finance group, (B) became a branch manager. (B) is currently the project manager in Unit I, whose main business function is to conceive the need of business units and convert it to IT's point of view and understanding. (B) recognizes improvement opportunities in IT to ease the customer operations.

Relationship among Key Players

In conventional projects, business analyst (BA) is a bridge between business unit and IT. How IT performs demand management can be explained briefly as the following: When there is a service request from a business unit, IT receives the demand and evaluates its impacts, whether it causes an increase in efficiency or not. Each month, senior management conducts regular meetings with IT, and prioritizes the requests. The demand becomes a project after its approval. A project team is formed and initial project activities are planned. BA communicates with the business unit that is the owner of the request, and tries to understand the need. Data gathered from the business unit is structured and transferred to IT by BA (see Figure 1a).

Interviewee (A) explains the mechanism as follows;

"*If we are to talk about the way the corporation operates; it consists of two parts as business units and IT. The BA connects the business unit and IT. Analysts, carrying the data of the work to be conducted, transfer that to IT and then after understanding the project, they provide the information about how they can do that, how many days it may take, what they can and can't do via analysts repeatedly to the business unit. Business unit approves the analysis document while deciding commonly with analysts and at the end of that, IT starts the work process. Today, in conventional projects, organization continues to its interactions by working in this manner*".

In innovative projects, BA is eliminated. (B) is involved as a permanent key role in the department as a player having domain knowledge and field experience. (B) directly works with

IT with the drop of BAs from the process (see Figure 1b). Other departments of the organization continue with the BAs as described in the conventional projects. As shall be discussed further, one of the exemplary innovative projects is "The Mobile Tablet Application (MTA)" – a tool that is giving small to medium size enterprises (SMEs) and corporate customers a tailored experience that is also untethered from the physical branch. MTA increases branch effectiveness by allowing relationship managers to locate existing and prospective customers while traveling via GPS, weigh their value and risk to the organization and gain insight about their product propensities. For that project, the implications of eliminating BA role are worth to discuss further.

Figure 1a. Relational Mechanism in conventional projects

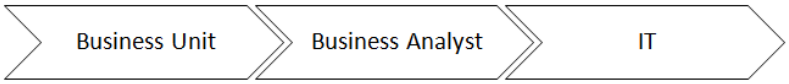
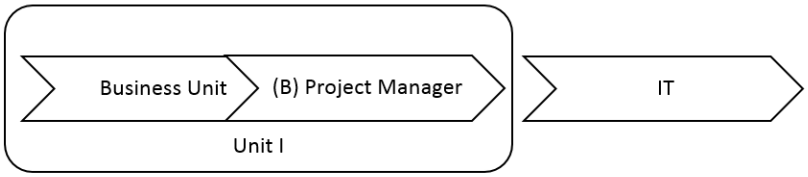


Figure 1b – Relational Mechanism in innovative projects



The organization uses both conventional (waterfall) and agile methods in software development projects. Interviewee (C) from IT, emphasizes the need to employ agile approaches and work closely with business units as follows;

"*Especially in the last two years, the changes in business processes has resulted in an increase in the number of projects. We completed more projects, and the business units invested more efforts. Effective work outcomes increased as well. We started internalize different business application logic. This increase is continuous. Agile software development is a new approach. The project that you examined with the contribution of (B) is also an example of the same principle; IT and business unit work together closely*".

When the project manager (B) works independently from BAs, a better project process has been conducted by being independent from processes such as software problems controls, the usefulness, usage or non-usage after the software is finished. These works belong to Unit I directly. When there is a project manager who understands the market in the end, she works on issues such as future of the product, increasing the familiarity, either it contributes to the business or not. Interviewee (C) states that,

"*BAs are working as a contact between business unit and IT. A developer does not consult directly to business unit because the languages of these departments are different. Analyst understands the language of developer and designer. Business unit cannot understand this language that well. The things developer and designer wants to hear are different and technical. Therefore, their contacts are the analysts. It is the same in every industry. Moreover, there is the reflection in the IT side of this situation. Business department may miss them but analysts examine them as detailed QA processes. Demand is received but there is this aspect of problem about practicability in the technical side. Business department does not know that process. When we look at the issue from two different aspects, instead of this governance and communication method, when you have analysts with 5-6 years of branch experience, it has been observed that they know both IT side and Business side with field experience and can solve majority of the problems*".

IT confirms that, the way of conducting business is facilitated by (B) having branch experience, in such a mechanism.

Findings concerning origin, decision making and scope of innovation

In the organization, customers are ultimate users of products developed by IT. Their experience and satisfaction are vital. If ultimate users' future needs are well defined, the organization gets an opportunity to develop products appealing customers prior to potential demand. A need for a new role, which precisely recognizes customer expectations, was encountered. (B)'s branch experience keeps pulse of customers. (B)'s profile makes the difference in such a mechanism. From (B) to Unit I, to BA, then to developer, ear to ear, the need/message may be coded and decoded differently, and may lose its meaning. The gap between the message sender's and receiver's mindsets may lead to lack of understanding.

Interviewee (A) has described the source of the ISPI in Unit I as follows:

"*I need to state that when we talk about IT works, employees such as mathematics engineers and computing engineers are always necessary. Yet there should be employees such as (B). IT makes the development. Generally, in the finance industry in Turkey the process is as follows: Business side states the need. This need is explained to IT. IT designs the display. Then why did we need a role such as (B)? (B) used to be a branch manager and dealed with the customer for long time and she knows what to use in branch and what are needed briefly. Ultimately, this is a company works on profit driven manner and the legs of this profit-oriented company are branches. We touch to the customer via branches. They are the end users. Therefore, the need of end user is quite important for me. In order to touch customer more and better, to convince him and to gain him we need roles such as (B). Her vision, feelings, and business knowledge are very critical for us. If we summarize the old work method, our (B) employee used to tell us the need when she was in the branch. Then, we used to explain it to IT. The bridge was established in this way. Now, we took employee (B) inside our entity. Therefore, we located her in front of the IT. We managed her to tell us everything in her mind. While you communicate on the grapevine kind of bridge, there may be huge differences between the mind of analysts and employee (B). However, if (B) explains everything directly to the developer, clearest statement is being realized. Therefore, we need people who are not technical and who can dream. It is our discovery. It is not in this way, in other financial institutes. This is our structure; we have decided that this structure is correct*".

Organizational Implications

Organizational implications are presented as process and product related implications. Regarding process implications, it is worth noticing to see what Interviewee (A) states,

"*In organizations with this mindset, it is believed that, IT department does the job based on its practicability. On the other hand, business unit says, that work may not be good in practice. IT is not aware of that situation. Therefore, there are disconnections between IT department and business unit. BAs are used to solve this problem. Yet roots of BAs are in the IT departments therefore they explain the work to IT department mostly. Some problems still occur because of that*".

Informants on the other hand confirmed that some positive effects of this new role (B) have been realized in Unit I with respect to cost reduction, effective usage of resources, and acceleration of project activities. (B) imagines the successive needs of the customers based on her domain knowledge and notifies IT accordingly. (B)'s two-year experience of branch management enables her envision the forthcoming needs. She states that,

"*We work together with IT in harmony. There is a tight link and cooperation between us. That is unusual in our sector. In other organizations, IT and business units are a little more*

distant to each other. IT and our department are closely connected to each other in our organization".

Interviewee (A) reinforces ISPI benefits with an example;

"*If there were an analyst instead of the new role, the project would take longer. By more details, IT department and business unit managers are not in the same location. IT is located in free zone because of the tax advantages. Decrease in number of meetings prevents the difficulties of different locations and day losses*".

Regarding product related organizational implications, due to challenging market conditions and increasing competition, the organization decides to differentiate itself, initiates a project to develop an innovative product/service to gain competitive advantage that is: "The Mobile Tablet Application (MTA)" – a CRM application equipped with a tablet. MTA enables the organization to:

- offer services outside the organization to satisfy and exceed customers' expectations,
- expand its CRM efforts beyond the organization to ensure effective site visits,
- carry out location-based management, monitoring and reporting of customer visits,
- achieve instant communication with headquarters, branches and customers during field visits,
- raise customer acquisition rates and improve cross-sell capabilities,
- optimize operations, control costs, and determine the best branch locations,
- use the latest technologies to lower costs and improve efficiency,
- raise relationship managers' job satisfaction and efficiency.

With the innovative product/service, the employees can see the past and present needs of corporate customers and take advantage of 500 different parameters to predict their future needs (based on patent-pending analytics). The MTA uses satellite services, and activates certain CRM features when the customer and tablet locations match. One module gives relationship managers the ability to create customer segments by region/branch or by filters (customer value, rating, location) and prioritize the visits with efficient and higher chance of sales. It stores all new information from customer visits on the system to create a corporate memory.

Many workers from several departments, including Unit I, IT, sales, corporate relationship managers, HR, GPS service provider, and the tablet vendor collaborated on this project. Almost 20 people worked on the solution under the direction of the project manager (B). Unit I team managed the architecture and design of the database, algorithms and deep dive analysis to develop a clear understanding of actual and potential customer needs. All the design, security solutions, server efforts and integration with the organization's other tools were handled by IT. The relationship managers involved during the pilot were also key to the project's success. The HR department also develops training sessions – a comedy series with professional actors – to help users take full advantage of the application. It took 20 months to complete the project (idea generation: 12 months, development: 8 months) and eight-week pilot in 14 branches for 50 relationship managers. Since MTA's launch, marketing efficiency has jumped six-fold and cross-selling by 24%.

Interviewee (A) states that,

"*The uniqueness of MTA lies in the fact that it is the first selling force and CRM tool to show all current and potential customer locations with customized financial solutions"*.

DISCUSSION and CONCLUSION

The argumentation below is based on the framework indicating leadership-driven Innovation Characteristics (see Table 1). We basically suggest and employ three aspects as relevant: exclusively ISPIs- related elements (Ollila & Lyytinen, 2004), relation mechanism, and business innovation. Internal, situational, single organizational unit of ISPI is subject to discussion further.

The evidence suggests that, the case organization discovered that BA is by-passed and non-technical but the responsive profile that actually matches with Interviewee (B) is involved for better interactions in the development process. That process innovation is a management type of ISPI and is demonstrated in Unit I that clearly shows that it is a single adoption unit. Interviewee (A) is the decision maker and perhaps the most applicable category for decision-making strategy is situational as the project associated with the case is only MTA. Distributed strategy would be possible if a similar innovation spirit is adopted in more projects carried out by various players at different departments.

Ollilla and Lyttinen (2004) asserts that "the prominent role of business managers in ISPI adoption (Sauer & Lau, 1997) was not confirmed with our data, but our finding is in line with Huff & Munro's (1985) findings that project teams make adoption decisions. No support was found for Kozar's (1989) observation that individuals play a critical role in ISPI adoptions". The findings presented here support (Sauer & Lau, 1997), but not (Ollilla and Lyttinen, 2004). In other words, leadership-driven innovation as opposed to team-driven innovation is identified and articulated in the present case study.

Table.1. Key Results and Interpretation

Leadership-driven Innovation Characteristics			
ISPI adoption	Source/Origin:	Decision making:	Scope:
	Internal	Situational; Project level	Single organizational unit
	Roles & Observed Behaviors		
	Business (Unit I)	IT	Liaison
Relational mechanism (way of working)	Proactive / Accelerator	Reactive	Experimental
Business innovation (behavioral aspects)	Passionate / Dominant	Passive / Weak	Facilitator / Strong

We further consider two aspects to enrich our understanding of ISPIs, which are relationship mechanism and method adoption. Relationship mechanism is examined with respect to roles and their relationships. Furthermore, the method adopted is subject to discussion as it affects the way of working (Aydin *et al.*, 2005). We identified a new role and called Liaison that appears to have a significant effect on overall interactions between IS (IT), Business, Customer (Branch), end-customer. Ex-customer (B) who used to be the branch manager is a Liaison.

The evidence states that, an unusual but efficient communication was realized in the case organization. The informants (A and B) emphasize efficiency by referring to ability to get fast feedback from customers and to shorten overall process completion. It is worth noticing that Interviewee (A) plays a very active role on improving systems development process. Even in the organization Interviewee (A)'s formal title is chief of Unit I, we consider his project leadership as business leadership that leads the innovation.

Regarding method use, even though brand-named method was not used, but some of the principles of typical agile methods are adopted. In fact, Interviewee (C) recognized the very existence of conventional method is dominant, but indicated potential innovation areas in

method adoption. We argue that a true source of innovation with respect to method adoption lies in the truth of a special way of working reflecting some agile principles including early and continuous delivery for end-customer or business, building projects around motivated individuals (Dzamashvili *et al.*, 2010).

Regarding the Business Innovation aspect, which helps us to reflect on the implications of organizational innovation, aligned with ISPI. The evidence suggests that the distinction between process and product innovation is not clear as we see that the MTA project demonstrates the product innovation on the one hand (since the financial services organization launched a new product or service to the market) and process innovation on the other hand (since the organization shows the operations touching end-customer were changed and that resulted in significant improvements). In fact, this goes even further in that a truth in business innovation is manifested since this MTA appears to provide the company with a new strategic position in the market (that is, competitive intelligence driven business). Overall, the product and process innovation unfolds as ISPI has emerged. Thus, we can argue that organization innovation and IS co-evolved and becomes ex-ante and ex-post relation for OI and ISPS. From innovation behavior point of view, we argue that the perceived attitude toward this examined ISPI is passionate and dominant for Interviewee (A), passive and weak for Interviewee (C), and facilitator and strong for Interviewee (B). These indications can be labelled differently and surely necessitate a theoretical background, possibly, innovation behavior (Åmo & Kolvereid, 2005), bricolage (Duymedjian, & Rüling, 2010)) to justify their existence.

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