

## **BUSINESS PROCESS MANAGEMENT AND SOCIAL NETWORKS: A CASE STUDY IN AN AIRLINE ORGANIZATION**

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### **Abstract:**

Business Process Management (BPM) is not a new concept as Social Networks and Social BPM that are starting to get as much attention as previous, both on academic contexts and in organizations. Social Networks are evolving and, although there is recognition of the importance that they have in people's life, there isn't much information or analysis that seek to interpreting and showing reality about SNs in organizations' life. There is also a gap in relating Social BPM with what, for us, should be its main source of information, Social Networks. Organizations are discovering that Social BPM can also help organizations to achieve competitive advantage. So, relating these three subjects is relevant, since it can help organizations understand how they can use the knowledge from its stakeholders to improve their business processes. We conducted a qualitative case study on a Portuguese airline and were able to show that they not only interfere and interact with each other as they can be used (and were) to improve results, reduce costs and achieve competitive advantage.

*Keywords: Business Process Management, Social Networks, Social BPM*

## 1. INTRODUCTION

The world is facing a growing interest towards social networks and social interactions inside and outside organizational boundaries which can represent an opportunity for organizations. This was the basis for the emerging of a new discipline called Social BPM, which merges BPM with social software (Brambilla, 2012, p.1) and as Schmidt (2009, p. 625) highlights helps overcoming deficiencies of classic BPM approaches.

Social Networks are evolving and although there is the recognition about the importance that they have in people's life there isn't much information or analysis that seek to interpret and show reality about SNs in organizations life. There is also a gap in relating Social BPM with what, for us, should be its main source of information, Social Networks.

At present, Facebook is the most important SN widely and organizations understand its potential, as they understood in the past the importance of BPM. Yet, organizations are discovering that Social BPM can also help organizations achieve competitive advantage. So, relating these three subjects is relevant, since it can fill the above mentioned gap and help organizations understand how they can use the knowledge from its stakeholders to improve Organizational Business Processes (BP).

It is also assumed that social software tools and web applications, support communication with stakeholders, when used in business processes, will change the processes themselves (Erol, 2010, p. 453) and, in today's fast changing business, organizations need to directly deal with stakeholders and adapt the results quickly in the daily business. Yet, for this author despite the potential that social BPM has already demonstrated, enterprises are still struggling with the challenge of how to benefit from social software in practice (Op cit) and the majority still did not understand how they can benefit from and with social BPM.

In this context we conducted a study on a public Portuguese organization – TAP Portugal - that uses Social Networks and from the interviews, documents analysis and observation we were able to conclude that TAP benefits from its employees and business associates collaboration to change business processes and demonstrate that this was only possible because this organization changed its organizational culture in the last 13 years, fostering trust with its stakeholders.

This paper is structured in 5 parts; in the next section we will do a literature review and present some definitions on the main constructs. Then we disclose the methodology and organization object of this study and finally we describe some findings and conclusions.

## 2. LITERATURE REVIEW

Business Process Management (BPM) is a management approach that applies concepts of both radical and incremental change and of which there are many different definitions; however there is a common denominator since many of them include words like support, help, continuous improving, strategic alignment and add value. For instance Lee (1998, p.219) defend that BPM is a managerial approach that helps organizations to measure their core processes, analyse what works and what doesn't and improve them or in simple terms helps eliminate waste and add value, while on Rohloff (2011, p. 383) vision BPM is a "management practice that encompasses all activities of identification, definition, analysis, design, execution, monitoring & measurement, and continuous improvement of BP."

By now it is clearly assumed that BPM enables companies to gain from efficiency enhancements and to adapt quickly and flexibly to a changing world (Petzmann, 2007, p. 104), since BPM is a strategy for managing and improving the performance of the business through continuous optimization of BP.

The concept of a network emphasizes the fact that individuals are linked by ties to other individuals, each of whom in turn is linked to a few, some, or many others, and so on, and the term social network refers to the set of actors and the relations they have (Favre, 2011, p. 11). Social Networks (SN) can link organizations, groups and individuals throughout the world and, as such, it has become an important capability in many organizations. It can also been used to reveal hidden dynamics that shape social, organizational and economic life (Sozen, 2012, p. 488).

Yet, with the advent of internet a new dimension was added to the concept of social network; this is called Online Social Network (OSN) and can be defined as web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system (Boyd, 2007, p. 211). Online social networks are networks extracted from e-mail logs, blogs and other web pages or social software, such as Facebook, LinkedIn or Twitter which can also be used to extract communication social networks (Zehetner, 2010, p. 10) and that can have tremendous potential that organizations shouldn't ignore (Waters, 2009, p. 102). The increasing number of users has led enterprises to consider it as the most preferred marketing driver among business environment, particularly due to its cost reducing effects (Kirtiř, 2011, p. 261).

For Llewellyn (2000, p. 225), one of the goals of BPM is to remove barriers among functional groups, by creating a community of employees linked by membership of a process, which can be made through collaborative tools that support a group of people working together, sharing the ownership of or involvement in that process or project or through social tools (Haber, 2012). But BPM is further characterized by its orientation on processes, customers, values, services, employees, competencies and learning (Neubauer, 2009, p.167) and can also take advantage of the capabilities provided by social software (Erol, 2010, p. 453).

And so, a new discipline that fuses BPM with social software has emerged. This is Social BPM, whose main purpose, according to Brambilla (2012, p. 1), is to enhance organizational performance through a controlled participation of external stakeholders, in order to process design and execution. Lee (2012, p. 378) considers Social BPM a promising tool to improve the performance of an organization, by providing extensible communication tools, informal data handling functions and knowledge based decisions supports. Yet, according to Gottanka (2012, p. 91), Social BPM leverages social networking tools and techniques to extend the reach and impact of the efforts of a process improvement in two key areas – collaborative process modelling and the collaboration during the execution of a process, with the goal of having a lot of different perspectives, such as end users, business analyst and IT involved in modelling processes.

According to Bruno (2011, p. 300), combining a multitude of experiences leads to the best results and to collaboration among stakeholders. Allowing them to communicate, using their own perspectives and languages is a way to achieve organizational integration. Stakeholder's experiences can be a valuable resource for organizations and Social Software can help with the collection of this knowledge, but, according to Erol (2010, p. 466)] organizations have found it difficult to use social software in such a manner that it 1) achieves its objectives, 2) adds value and is attractive to the members and 3) avoids unintended consequences.

Duipmans (2012, p. 35), also highlights that offering BPM as social software, has been identified as a promising approach in which improvement of communication and collection of knowledge have been identified as its main benefits, since it allows multiple users to work on the design, operation and improvement of a business process simultaneously.

### **3. METHODOLOGY**

First we gather data via internet and establishing contacts, which resulted in a meeting with Communication & Public Relations Department of TAP. We also have defined that this work would include a case study and, according to Yin (2003, p. 5) to be considered as a Case Study, the investigation should meet three conditions:

1. the research questions are "how" and "why";
2. the investigator has no control over the events and therefore do not run the risk of the handle;
3. the focus – Facebook – of the present investigation is a contemporary phenomenon.

The use of multiple sources of data is a characteristic feature of case studies, since it allows to ensure the different perspectives of the participants in the study and to obtain various "measures" of the same phenomenon, creating conditions for a triangulation of data during the analysis (Gomes, 2003, p. 2088).

In this study, data were collected through the use of the three methods that, according to Patton (2002, p. 4), fits better in qualitative research:

Direct observation - We did direct observation in TAP Contact Center for 30 minutes, aiming to capture the communication process, through the use of phone and FB, and by identifying the resources used and the differences in the communication process. The meeting took place on a usual working day, where a normal team of 40 phone persons and 1 in Facebook was operating. During the interviews, we also did some observation.

Documents - Documentation were mostly collected from TAP website and TAP archives. It consisted of Annual Reports, TAP Code of Ethics, TAP history, TAP Mission & Principles and Group TAP Structure. We also had access to TAP (internal) newspaper and to some presentations that TAP Communication & Public Relations Department provided. Finally, the Contact Center also provided quantitative data on the number of requests / interventions of Contact Center. Some documents were sent to us by the interviewed persons.

Interviews - We have conducted focused, open-ended interviews. The first interviewee in the company (contact person) – Mr. André Serpa Soares from Communication & Public Relations Department (Interview A), described TAP organizational structure and helped the author of this study identify and get in touch with the people to be interviewed in the company – Mr. Gil Trigo, Advisor to the Board of Directors and responsible for Cost Reduction Program (Interview B) and Mr. João Santos, Contact Center General Manager (Interview C). As already mentioned above, the interview with Mr. Luiz Mór, TAP Vice President, resulted from FB contact and its main goal was to understand his vision about FB process and to get to know the organizational changes that have occurred at TAP, since the arrival of this administration (Interview D). Interviews were face-to-face and allowed the accumulation of evidence and of current experiences, due to the fact that people being interviewed deal with FB introduction and daily life (Interview A and C) and with process change through information got from employees and suppliers (Interview B). Due to the person interviewed, the interview D also included questions about changes operated in TAP.

#### **4. SOCIAL BPM IN TAP**

TAP Portugal is the national airline owned 100% by the Portuguese State; it is now a business group which controls 12 organizations operating in several areas and employing almost 13.200 people in distinct points of the globe. In 2005, TAP launched the company new image and new designation as TAP Portugal and in the summer of 2009, Facebook and Twitter official profiles were created and, in 2010, TAP Portugal was the first company in the tourism sector with official channel on Youtube. TAP FB profile was created by the Marketing Department. But due to the circumstances, it is now managed, under the supervision of one Executive Vice President (Luiz Mór), by three different departments and, although there are no specific written rules, each department knows what its roles are and where is the limit of its powers. In this context:

- Marketing Department has the role of stimulation and of launching promotions and entertainment, according to FB best practices of at least two posts a day.
- Communication & Public Relations Department their task is crisis management and institutional communication.
- Facebook Team and Contact Center are responsible for the customer service.

According to Luiz Mór – TAP Executive Vice President (TAP, 2011, p.5) – Facebook is TAP main project, because it synthesizes a series of principles that the company has to observe, in order to compete in such a demanding market. It is also assumed that Facebook has exerted some pressure on the company, since it has made the company change the way it deals with customers. It allows TAP to better monitor what concerns customers and, therefore, serving them better and faster. To achieve the established deadline of a 30 minutes' reply on Facebook, TAP decided to put Facebook interlocutors in all departments.

Thus, TAP is a project that involves the entire organization and is understood as a process itself. Despite its (heavy) organizational structure, the transversality of FB process fits the beginning of a process centric approach and reveals that the changes operated in the organization are paying off. Public sector (organizations) has some particularities, which make renovation projects considerably different (Stemberger, 2007, p. 221) and over the years, and despite the many changes and modernization programs launched at TAP, nothing really changed much. However, in the past 12 years, TAP changed a lot. In 2001, TAP started changing its organizational culture, strategy and focus in five key areas: Income increase, costs reduction, increases in the quality of services, change in

procedures and improvement of the organizations and valorisation and development of human resources (TAP, 2001, p. 31).

The changes have been slowly implemented but have become a reality and, although public opinion is often not in favour of public organizations, in these 12 years, Portuguese public opinion has also changed about TAP. Yet, this wouldn't have been possible if TAP hadn't made some major changes in the recent years. TAP was (and still is) a public sector company and, according to Stemberger (2007, p. 222), organizational changes, in public sector organizations, are achievable only up to a certain limit. So, in 2000, when a new Administration arrived at TAP and decided that one of the first and of crucial importance changes to be operated in organization, would be the changing of TAP mission and of its organizational culture, many people doubted.

However, this was a success. Furthermore, customer satisfaction has become the focus of the organization, as employee satisfaction also has. In 2009, TAP was in the list of the best company to work in Portugal. Thus, despite the controversy surrounding the appointment of the new Administration, over these thirteen years, all stakeholders (including public opinion) have surrendered to its measures and now they recognize the change "for better" that the company has operated.

According to TAP (2011, p. 2), simplifying processes and circulation of information are characteristics that today's companies with ambition cannot ignore and TAP change focuses on a culture of information and transparency. Improved information, quantitatively and qualitatively, is especially useful for all, because it provides organization conditions for the disposal of a greater and deeper knowledge of their activity. The simplification of forms of communication, which had a huge increase with the arrival on the scene of social networks, is also an enormous challenge, because it creates new responsibilities, both individual and collective, since anything that is said, even at a restricted level or "private", can earn a dimension not planned, which advises some caution, so that the image of TAP cannot be affected, even if inadvertently (TAP, 2011, p.3).

TAP Administration commitment was also important in two directions: first because changing organizational cultures is only possible when it is implemented from top to down and secondly, because this commitment avoided a hard approach in organizational culture change. TAP implemented a "soft approach", which allowed TAP to implement a cost reduction project that was launched in 2010 with a top-down approach. Rather than having an Administration that says "I want to reduce 10% of costs and that blindly or with a gauge that may not even be realistic to achieve", the Administration launched a challenge to all departments and organizations and asked each area to analyse and see what they could do to reduce costs, and they became responsible for that costs reduction." (Interview B, personal communication, 25/07/2012)

So the change operated in TAP was reflected not only in customers but also in employees, and a trust, motivation and commitment environment flourished in organization. This is highlighted by the following statement: "The gains are evident here. In fact this transparency and openness, both inside and outside, is a great contribution for people to feel they are involved in society and they have to interact with it." (Interview A, personal communication, 16/07/2012)

Although there is no formal knowledge management area or a Chief Knowledge Officer (CKO)<sup>1</sup> in the organization, the internal cost-reduction process that the organization has, consists of mechanisms for identifying and sharing employee's tacit knowledge. The ideas provided by employees are gathered by immediate superiors, present at higher levels (Steering Committee) and after analysis, if the idea is considered feasible it is implemented. As mentioned with this program, TAP already had a cost-reduction of 178,7 million Euros.

Knowledge is an important issue at TAP and they assume that individual and organizational learning are very important. The company, as a whole, tries to learn from the experience of each one. For instance, in 2009 annual report is mentioned: "(TAP) continued its efforts towards improving the process of strategic management of the company, with the development of various initiatives, and the intensification of technological innovation, stemming from this action: Concentration of skilled

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<sup>1</sup> A chief knowledge officer (CKO) is an organizational leader, responsible for ensuring that the organization maximizes the value it achieves through knowledge. The CKO is responsible for managing intellectual capital and the custodian of Knowledge Management practices in an organization (Wikipedia, 2012b).

resources; Faster and reasoned decision-making; Effective management of available resources; Sharing and exchange of knowledge; Focusing on core business; Better alignment of resources with the mission” (TAP, 2009, p. 71).

With organizational culture change on the way and the introduction of internet, much has changed at TAP. First, TAP started changing its proximity to customer. In 2002, TAP launched FALE CONNOSCO, designed for the customer relationship with TAP, which includes the processing of suggestions, compliments, criticisms or complaints, operated both by phone or internet that can also foster internal learning networks, by establishing and enhancing the quality of communications.

The first TAP approach to SN was in 2009 when TAP Marketing Department created official profiles on Facebook and Twitter, mainly to launch promotions and “to get the feeling” of Social Networks. They reintroduced TAP auctions exclusively on their official page on Facebook, making the company a national pioneer in auctions in this social network. However, the profile and the number of fans were modest, as shown in interview A:

“At that time FB served purposes which were not exactly those to which FB was intended. TAP FB served only to promote campaigns. It was a publicity thing rather than a relationship. But FB is not about that; social networks are not for that. In our opinion, after having already studied a bit about it, SN are to talk, to engage, to establish relationships with diverse stakeholders, including customers and public opinion.” (Interview A, personal communication, 16/07/2012).

Two different events (in nature and time) projected TAP FB and considerably increased the number of fans on the page. The first one occurred in December 2009, when TAP did a Flash mob, at Lisbon Airport and launched a video on TAP YouTube channel, which was watched by over 2 million people and spread throughout SN, bringing many fans to TAP Facebook. However, it was with the second event that TAP FB has grown to incredible numbers.

In May 2010, Eyjafjallajökull volcano erupted and, because of its ashes, the airspace was closed in North Atlantic and Europe. With millions of passengers stranded and delayed at European airports, the chaos was launched at the airports and on the traditional channels of customer contact - Contact Center and counters. By that time, the contact center answered, on average, 8000 calls per day, reaching a peak of 12 000 calls (TAP, 2011, p. 3). With overloaded call center, desperate passengers turned to FB to question TAP. What seemed to be a disaster resulted in a challenge for the airline and a big opportunity to learn how to deal with such situations, which they later called “on job training” for social media.

TAP also learned about the potentialities of social media and FB potential, as a communication channel between the company and its customers, which made TAP change their vision of FB. And what was initially just a marketing platform to promote products or services, has suddenly changed and become a way to communicate with customers (TAP, 2011, p. 3) and according to TAP Vice-President a huge op because suddenly the person who has the power to solve knows the problem and knows of it today.

## 5. FINDINGS AND CONCLUSIONS

Regarding SN in general and FB in particular, this study allowed us to conclude that TAP has changed its communication process, both in its internal and external aspects. Internally, FB visibility has changed sensibilities and employees have started caring more about customers. Furthermore, FB has also brought together different departments in two different ways: Firstly, FB itself is managed by three different departments with different communication roles and language styles: the Marketing, whose concern is to promote TAP services; the Communication & Public Relations Department, which focuses on institutional communication and sensitive cases, and the Contact Center, which is responsible for customer service. This configures a process centric approach and it is amazing that, although there aren't any written rules concerning the distribution of the above mentioned tasks, every department knows their rules and their limits. Secondly, TAP has set up an internal social network with people from all departments, aiming at giving responses to customers' complaints on FB within an established period of 30 minutes.

TAP has changed a lot in recent years and, even though there isn't a formal BPM structure at TAP (or, at least, the people we have interviewed couldn't identify its existence at TAP), from this study, we

were able to conclude that TAP is aware of BP importance. From the literature review, we could also conclude that TAP would have benefited more, if it had changed its business processes by means of study, design and mapping, instead of having changed them in an ad-hoc mode. Results might have been even better, if TAP had had a formal BPM area, since it is widely proved that BPM allows companies to achieve a competitive advantage, optimizing resources and maximizing cost savings.

We were also able to conclude that TAP innovation process is based on internal and external collaboration. Internally, TAP has challenged its employees to join a cost reduction program that relies on their knowledge (tacit and explicit), by their suggesting of changes to processes aiming at cost reduction. Externally, TAP uses working groups and forums, which can also be taken as Social BPM. To achieve these changes TAP used its “internal knowledge” instead of using the knowledge from consultants, but also changed its organizational culture to a more transparent and collaborative one. Finally TAP focus on change management, since there is evidence that one of the main reasons why business processes changes fail is because organizations do not promote effective change management and, in most cases, do not have an organizational culture that serves as facilitator of change.

There is little literature and few studies concerning the main thematic of this work - Social BPM and Facebook – so, it would be worthwhile replicating this study for other industries, organizations and even countries. It would also be useful to study organizational FB use, advantages and disadvantages resulting from its use, both in Portugal and other countries.

TAP was pioneer in the FB customer service, in airline companies, but today there are more airline companies doing the same. It would be interesting to understand if the other airlines have a BPM area and if they make use of SN tools to improve their business processes. This can also be applicable to other industries and organizations.

At the end of this work, we could conclude that social BPM can contribute to business process redesign, since it uses social network collaborative tools, such as forums, blogs, wikis, twitter and Facebook, to facilitate access to different sorts of knowledge embedded in different stakeholders, such as employees, users, customers, suppliers and business partners, bringing together voices that, without such tools, would hardly be together.

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