

Managing organizational paradoxes: a case in the financial industry

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Abstract

Purpose – The purpose of this article is to contribute to studies on organizational ambidexterity by analyzing how an incumbent company is managing its innovation structures and balancing exploitation and exploration activities to generate value in a digital economy context.

Design/methodology/approach – The research was designed in a qualitative format through a single case study in a Brazilian financial institution, with semi-structured interviews conducted with internal and external players.

Findings – Based on the case study, two possible contributions emerged as results, to fill the research gap: the need to develop more complex innovation structures, which act in a way that is integrated to the ecosystem; and the establishment of an organizational function, with a specific mandate to seek innovation in new business platforms.

Originality/value – Although the theory gives evidence about the potential that ambidexterity represents for companies, 'how' to orchestrate the trade-offs to achieve it is not clear, particularly in regards to first steps toward ambidexterity. This work aims to contribute to fill this gap through an empirical study in a large Brazilian company, analyzing its trajectory toward ambidexterity.

Keywords Innovation, Ambidexterity, Exploitation, Exploration, Innovation function (IF)

Paper type Research paper

1. Introduction

Large corporations typically have organized processes, own renowned brands and work with massive client bases. Conversely, they face difficulties when going through changes that take them out of their comfort zones, that is, they almost always seek innovation that enhances operation costs, and sometimes leave out the search for different alternatives that can be associated to higher risk and uncertainty.

In an environment with markets increasingly focused in digital businesses, incorporating new technologies has enabled activities such as client value proposition redesign and operations transformation. Regardless of the industry, there is a growing pressure for organizations to rethink the way they deliver client value while supporting themselves with more efficient operations at the same time. They start to face different kinds of competition, from major technology companies beginning to offer services beyond their core businesses, to start-ups: companies seeking a profitable and scalable business model, backed by technology and working in extreme uncertain conditions.

While considering innovation as a driving force for maintaining competitive advantage, [Tidd and Bessant \(2018\)](#) claim that, although organizations considered successful in managing the innovation process outperform their competition in terms of growth, financial



performance, and quantity and quality of jobs generated, the work of managing innovation is not something simple to do. The means through which innovation is managed within companies consists in a complex, interdisciplinary process, which encompasses many of the organization's functional facets and activities (Silva, Bagno, & Salerno, 2014). Innovation process management involves risks and uncertainties, and consequently stumbles in resistance from people who may not understand potential benefits or feel they might be harmed by radical innovations. By radical innovations we mean those that, in the view of Salerno and Gomes (2018), create new business platforms, develop competitive differential and help to rewrite the game rules. Therefore, the balance between improving knowledge that exists, and that is currently applied within the organization, and the discovery and development of new opportunities and their consequent new businesses, becomes a fundamental requirement for keeping competitive advantage. Organizations are, ergo, compelled to seek innovations other than incremental ones, that is, those mostly focused on cost optimization.

Within this framework, this work aims at investigating how an incumbent company, playing in a highly regulated and commoditized industry, organizes its structure to systematically promote radical innovation.

Based on studies like Jugend, Araujo, Pimenta, Gobbo, and Hilletoft (2018), Sheng and Chien (2016) and Le, Lei, Le, Gong, and Há (2020), it is noticeable that little is known on how to develop structures that favor both incremental and radical innovation. The discussion about how companies should organize themselves to innovate in a more radical way is not recent and has already gone through issues around the adequacy of the classic organizational project concept, as well as through questioning the relevance of using separate management tools for conducting radical and incremental innovation processes. Prevailing understanding is that classic organizational structure concepts do not fit into the current hostile competition companies have been facing and, therefore, further analysis is required.

To answer the research question, a single case study was carried out at a major Brazilian bank. To that aim, we sought to understand the company's innovation history, its organizational structure, as well as the possible outcomes from organizational changes performed.

2. Theoretical framework

2.1 Innovation

A broader understanding of the innovation concept sends us to Schumpeter's work in the first half of the 20th century, particularly in the 1930s, which approaches the matter as a foundation for economic dynamics comprehension.

Moving onto the 1950s, there is an emergence of researchers looking for answers to questions not addressed by Schumpeter, such as innovation sources, continuous improvement and innovative companies' characteristics (Figueiredo, 2005). Bagno (2014) traces an interesting line cruising through different aspects in the innovation concept evolution:

“(1) Highlighting it as organizations' competitive foundation (Hansen and Birkinshaw, 2007; Tidd *et al.*, 2008); (2) discussing its information flows and organizational processes (Rothwell, 1992; Utterback, 1970); (3) adjusting organizational structures (Wheelwright; Clark, 1992; Salerno, 2009), (4) raising implications on portfolio management and project valuation (Mcgrath, 1997; Terwiesch and Ulrich, 2008); (5) discussing culture, creativity and motivation issues (Amabile, 1983; Perry-Smith, 2006); (6) introducing ways to manage risk and uncertainty in innovation projects (Loch *et al.*, 2008; Rice *et al.*, 2008); (7) permitting the innovation process to external contributions (Chesborough, 2003); (8) acknowledging technological trajectories' influence (Abernathy and Utterback, 1975; Figueiredo, 2009); (9) defining the very innovation concept (Schumpeter, 1934; Tidd *et al.*, 2008); among many other important aspects (apud Bagno, 2014, p. 10).

The act of innovating has become an important corporate life feature. Nevertheless, the consensus on its relevance does not preclude the realization that virtually nobody agrees on what innovation actually is, and there is not even one unambiguous definition of the concept. In the dictionary, innovation definition is “to introduce something new”, which may mask the fact that innovation can also consist in changing existing ideas (Goffin & Mitchell, 2005). Garcia & Calantone (2002) understand innovation as an iterative process, triggered by the awareness of a new market and/or a new service opportunity, leading to a technology-based invention and integrating development, production and marketing tasks, aiming at the invention’s commercial success.

There are many conceptual nuances on the theme, and this work’s objective is not to exhaust the discussion: the focus here is presenting key notions to the reader, as well as providing the idea that innovation is a manageable process (demystifying the thought that it is something that emerges with no explanation whatsoever), which involves several elements, from basic research to new products/services commercialization.

2.2 Ambidexterity

Organizational ambidexterity concept’s seminal references come from Dunca’s (1976) and March’s (1991) texts. Primary research on the theme focused on organizational learning, and over time has expanded into strategic management, organizational design, organizational adaptation and innovation.

The present work adopts Raisch and Birkinshaw’s (2008) definition, which classifies as ambidextrous companies able to align and efficiently manage current business demands, while being adaptable to changes in the environment at the same time. They simultaneously seek incremental and radical innovation, they embody stability and adaptability to organizational change, they induce autonomous strategic processes and they are efficient and flexible in operational design.

Matos, Silva, Lasmar, and Dias (2017) point out that in the almost three decades since March’s (1991) work, there were a lot of periods in which the ambidexterity topic was either not discussed or approached in a shy scale with no relevant contributions. The authors detect that only after 2008 there was a real growth in the number of publications around the theme. Nonetheless, classic authors mentioned in this work keep constituting the foundation of recent literature on the subject (as examples, we can mention Wan, Cenamor, Parker, and Alstyne (2017), Mom *et al.* (2019) and Brix (2019)).

In a broad view, March’s (1991) work focuses on proposing that two types of activities compete for attention and resources within organizations: *exploitation* and *exploration*; and that both should be aligned. *Exploitation* aims to meet current organization’s needs and involves: (1) depuration, (2) choice, (3) production, (4) efficiency, (5) selection, (6) implementation and (7) execution of organization’s core activities, which are the critical factors for short term performance. However, *exploitation* inherently deals with the risk of not accompanying competitive landscape changes: it is about incremental innovations, which seek to meet needs of existing markets or consumers through strengthening knowledge, abilities, processes and structures already in place within the organization. *Exploration*, on the other hand, is associated to new knowledge, acquired from the external environment and favors the drive for: (1) research, (2) variability, (3) risk-taking, (4) experimenting, (5) flexibility, (6) discovery and (7) radical innovation. *Exploration* generates new knowledge that challenges traditional approaches toward markets’ and consumers’ unmet needs, but under the shade of uncertain return on investment.

Incremental and radical innovation require different organizational models and demand proper balance among resource limitations all organizations have, like financial means, human resources and time. The organizational ambidexterity concept analyzes the inter-

relations and the distinctions between incremental improvements and radical innovation initiatives, whether from a strategic, structural, metric or organizational point of view (Bessant, Lamming, Noke, & Phillips, 2005).

Karrer and Fleck (2015) qualify *exploitation* and *exploration* as equally relevant poles of the organization ambidexterity, being opposed and complementary, and demanding different ways of thinking. For those authors, there is also an organic complementarity between the two activities, as *exploitation* may generate sure and steady profit, which might then be applied as investment in exploratory and risky efforts (*exploration*), that is, those related to radical innovation. Conversely, *exploration* is a necessary condition for an organization to engender new profit sources, which may increase chances of success in the long run.

The literature brings indication that ambidexterity may be exercised not in one only fashion, that is, organizations aspire to be ambidextrous based on various starting points. As for ambidexterity types, the literature is dispersed and even contradictory sometimes. For this work we took a broad view, considering that there are four types of ambidexterity: contextual, structural, behavioral and temporal. Although some authors, as Raisch, Birkinshaw, Probst, and Tushman (2009), adopt the three-type classification (sequential, structural and contextual), we will concentrate on two generic classes: structural and contextual. Behavioral and temporal are included as contextual sub-types, as seen in Table 1.

Although the literature brings consensus on the need of balancing *exploitation* and *exploration*, even mentioning this balance as paramount factor for organization's survival and future success, the "how" to achieve such balance is not clear, particularly in regards to first steps toward ambidexterity (Karrer & Fleck, 2015; Gupta, Smith, & Shalley, 2006). Works such as McGrath's (2001) call out these challenges and deem that rules considered basic in organizational management – such as establishing clear objectives –, may not produce similar effects throughout the *exploration* process. Such works then recognize *exploration* level as an important factor influencing the decision on how to manage projects in different forms.

2.3 Innovation function

Despite being long handled by organizational theory, the concept of organizational function has no formal definition so far. In the words of Salerno and Gomes (2018), "[...]an organizational

Ambidexterity type	Postition/function	Theoretical foundation
1. Structural	Use of separate business structures to manage innovation different aspects, avoiding conflicts between radical and incremental innovation. The separation involves the whole management system	Duncan (1976), March (1991), Tushman and O'Reilly (1996), Raisch <i>et al.</i> (2009)
2. Contextual	Based on behavioral mechanisms to overcome conflict and make both <i>exploitation</i> and <i>exploration</i> possible within a single business unit and organizational structure	Gibson & Birkinshaw (2004)
2.1. Temporal	Resources are allotted to different activities depending on momentary needs, alternately dedicating time to <i>exploitation</i> and <i>exploration</i>	Gupta <i>et al.</i> (2006); Simsek, Heavey, Veiga, & Souder (2009); Markides & Chu (2009)
2.2. Behavioral	Within a given business unit, individuals may adapt to both <i>exploitation</i> and <i>exploration</i> activities	Gibson & Birkinshaw (2004); Jansen, Tempelaar, Van deBosch, & Volverda (2009); Karrer & Fleck (2015)

Table 1.
Ambidexterity types

Source(s): Prepared by the authors

function may be described as a primitive notion, that is, it is widely mentioned, it is widely understood, yet it is not formal [...]. An organizational function has a specific mandate and, therefore, consolidates knowledge, articulates with other players to access resources to comply with such mandate and performs as a reference for the company when it comes to subjects related to its field. O'Connor, in writing the preface to the book (Salerno & Gomes, 2018), highlights that the position occupied by one function within the organizational hierarchy is a sign of the function's relevance and, as a consequence, of the priority given to it. This translates into resources dedicated to that function. While a processual approach may well serve the needs of mature processes, which demand incremental changes to products widely available, functions are still considered the suitable organizational mechanism for those situations in which knowledge – either explicit or tacit – building is required and become a company reference for matters related to such knowledge field.

Salerno & Gomes (2018) understand that the organizational function “that undertakes the mandate of developing and commercializing goods and services based on new business platforms, emerging from more radical innovation” is called innovation function (IF). It is a function that focuses on the organization's future and, as such, considers issues beyond current ones. The IF faces challenges to endure, which frequently is exhibited by the difficulty in showing results achieved. This group has its specificities on responsibilities, metrics, processes, resources and governance. For O'Connor, Leifer, Paulson, and Peters (2008) this is an emerging function and has gained momentum through the last few years, with a growing number of formal jobs related to innovation management. Salerno & Gomes (2018) inform this function was created in the US at the millennium turn, and first examples in Brazil began to occur after 2005.

It is important to emphasize that this function has not all necessary resources to fully fulfill its role; therefore, it is considered a network function. That is, although it bears a mandate, it does not detain all resources to complete such mandate: the function depends on other organizational functions' activities to actually perform (Salerno & Gomes, 2018). This need for articulation is reinforced by O'Connor *et al.* (2008), who point IF's network character as one of its gaps, making it more fragile than long-established and traditional organizational functions such as marketing, finance and HR. This is indeed more distinguishable when one considers that IF can drive initiatives that may render current businesses irrelevant, even revenue-generating products with good profit margins. To Salerno & Gomes (2018), “no matter how enduring a function may be while leading a project, there is no absolute endurance. Innovation Function tends to go through persistent crises, with its existence being implicitly or explicitly questioned, especially when it comes to budget resources allocation and its reasoning. After all, except if luck takes a hand, IF will not bring short term results”.

Bagno (2014) points out that “Innovation Function rises from the need to systematize radical innovations, but support to incremental innovations or even to organizational regimen may play an important role in its amalgamation process”. While incremental innovation is associated to traits like process standardizing, high volume and process linearity, radical innovation is connected to products that convey larger process uncertainty. That being said, it is possible to attach IF to the ambidexterity concept which, as per previously stated, packs in itself the importance of a given company performs well in both kinds of activity: those related to incremental innovation and those related to radical innovation. Nonetheless, converting radical innovation into something systematic and enduring is not easy and requires distinct competences and structures. In O'Connor *et al.*'s (2008) vision, this is embodied in the establishment of a radical innovation unit. In case that is not the approach, the result might be what Salerno & Gomes (2018) call organization by project: although enjoying its own resources and management, this organization is not perennial; at the end of the project, this organization is demobilized and any acquired knowledge is not gathered in one locus, but along with each individual. Still in these authors'

perspective, radical innovation is hard to do; therefore, acquired knowledge should be gathered and not spread; this is what justifies the existence of an “organizational unit with the exclusive and specific mandate toward radical innovation”.

3. Methodology

The method employed in this work was qualitative research, with predominantly inductive character, through a single case study. According to the traditional qualitative literature, the single case study approach may be justifiable when it involves one example that allows deeper exploration of issues about “how do things happen?”, versus questions like “what?” or “how much?” (Yin, 2003).

Langley (1999) starts from the notion that there are two underlying thinking types in qualitative research: variance and process approaches. Furthermore, she highlights the importance of looking at the latter as something that involves a different comprehension on how things evolve with time, based on the flow of activities and events. According to the author, one of the principles in the process approach is the need for studying phenomena over time, which requires advanced longitudinal data, adjusted to the period under consideration. As an example, when using interviews as means for data collection, it is important to talk to people about specific events in the past; on the other hand, if the interest is around people’s interpretations or thoughts and their evolution, real time interviews are required and shall be conducted as processes happen. Process researchers seek to understand and explain the world as interconnected events, activity, temporality and flow; they do not concentrate on variance or relationship among dependent or independent variables (Langley, Smallman, Tsoukas, & Van de Ven, 2013). Of note, “process” in this context refers to events over time.

Eleven interviews were conducted to support the case study, between December, 2019 and February, 2020. The interviews script was semi-structured, inspired on and adapted from Salerno and Gomes (2018) to guide a conversation on different approaches to incremental and radical innovation, as seen on Tables 2 and 3. Secondary data from public sources were also used, like interviews published on open press vehicles and observation (author as insider). The research was conducted by the author, who is also a researcher in the subject company’s R&D Department. To Vickers (2019), in a process he calls *at-home ethnography (AHE)*, an insider is potentially more efficient than an outsider to investigate and interpret events, as the insider’s knowledge becomes an addition to the results. This privileged participation is one of the differences between AHE and traditionally known ethnography, and Vickers (2019) mentions a metaphor to illustrate it: he sees the “researcher as a canoeist who sees the scene in a different way, compared to an observer standing in the river bank”. Nonetheless, the author stresses that this approach demands a critical, analytical and self-conscious awareness. That aligns the insider observation approach to Eisenhardt (1989), who points out the need for some caution on data collection – e.g. multiple data collection procedures to allow for more sturdy results, which, according to the author, is an inherent trait of qualitative research.

Interviewees were people either currently or formerly involved in the company’s innovation initiatives in recent years, therefore cognizant of the organization’s strategic drivers’ recent history. An additional interview with an “external observer” was conducted, aiming to mitigate any eventual interview bias, according to Eisenhardt and Graebner’s (2007) recommendation. This “external observer” has been acting as a consultant for the company since the innovation management process transformation has started.

Interviews started with R&D department leaders, then managers and analysts responsible for innovation initiatives, both in R&D and in business units related to those initiatives, were approached. *Snowball* samples were also considered to identify additional potential interviewees, resulting on three interviews.

The interviews started with personal questions around academic background, career path within the company and current job. Whenever answers were too concise, or new narratives

Question
1 Could you tell me how the innovation process / projects are structured in the company? Are methodologies, such as stage-gates and agile management, adopted?
2 Is that the way it always happens or there are specific situations in which this might change? (Could you mention an example?)
3 Does the company have a formal definition on incremental and radical innovation? (If not: what is your definition?)
4 What is your perception on the weight/relevance the company places on incremental and radical innovation?
5 Are there any radical projects in place? Give an example. If so, tell me this project's pathway: Where did it come from, how long it took to be implemented, the difficulties it faced. (In case it has not been concluded, what was the reason?)
6 If not, why does the company pursue only incremental innovation?
7 Are the teams for incremental and radical innovation projects the same, or they work as different groups?
8 How does the innovation projects evaluation happen? Which parameters are used?
9 How is the innovation projects' budget managed?
10 Who are the people participating on those projects? How are they evaluated?
11 In your opinion, has the bank been committed to encouraging people to seek to radically innovate? Would you be able to mention initiatives that illustrate your view?
12 What do you consider the main hurdle or difficulty for the company to innovate in a radical way?
13 What process does the company use to identify new technologies, behaviors, business models?
14 How do articulations with external players (universities and research institutes) to create value work?

Source(s): Adapted from Salerno & Gomes (2018)

Table 2. Interview script

Interviewee	Job title	Department	Years in company	Interview time
ENTR-1	Senior manager	Innovation	7 years	23 min
ENTR-2	Director	Innovation	12 years	16 min
ENTR-3	Manager	Business	4 years	32 min
ENTR-4	Manager	Innovation	4 years	40 min
ENTR-5	Manager	Innovation	10 years	44 min
ENTR-6	Director	Business	12 years	58 min
ENTR-7	Analyst	Business	14 years	45 min
ENTR-8	Senior manager	Business	11 years	50 min
ENTR-9	External consultant	External	6 years*	45 min
ENTR-10	Director	Business	14 years	45 min
ENTR-11	Manager	Business	6 years	37 min

Note(s): *Time working along with the company

Source(s): Prepared by the authors

Table 3. Interviewees' profile

came up, more details were requested aiming to obtain complete information. All interviews were recorded and transcribed in full by the author. Following Langley's (1999) recommendation on single case theory construction, focus was placed on the way sequential events inter-relate over time to then develop the process theory.

After the primary data organization, a detailed case narrative was developed, by connecting the evidences to the theoretical assumptions discussed in Section 2: Theoretical Framework, which laid out the different organizational configurations for incremental and radical innovation. In this phase, the theoretical concept related to IF has emerged, and therefore, a topic on the subject was included a posteriori in said section. This approach is aligned to process case study methods (Langley, 1999).

4. Case analysis

Classic financial institutions have loomed in a world where broad and spread physical presence represented competitive advantage. Nowadays they work to adapt to a digital environment through major transformation projects or through the development of new institutions founded on a completely new platform, with a digital-native business model. Regulatory bodies' activity has been also playing a consistent role in generating innovation within the financial sector. A atuação dos órgãos reguladores também é um fator que ano a ano vem gerando inovação no setor. In Brazil, financial industry is highly concentrated, and the Brazilian Central Bank (BACEN), ultimate regulatory organization, has been strongly acting on guidance to encourage innovation. The regulatory *sandbox*, a controlled environment for financial product innovation tests, is a good example. The project allows companies like *fintechs* to test their innovations (products, services or business models) with actual customers in an environment that is controlled by BACEN.

The case selection traces basically to the adequacy to the defined research construct: analyzing how a company has been managing its innovation structure, in a way to develop a project portfolio that systematically seeks radical innovation, on top of the routine incremental innovation projects. Another influence on the choice was the relatively easy access to the group of people responsible for fostering the “walk-the-talk-attitude” within the surveyed organization, like analysts, senior managers and directors.

4.1 Organizational structure and management

In 2011, the company started a process to change the innovation structure, working to make it something belonging to the whole organization, and not only to a specific group represented by the R&D department. The change's first step formally took place by the end of 2012, through an initiative that involved groups from various strategic areas, aiming at fostering business opportunities generation and acting as innovation culture multipliers throughout the company. This brought up an innovation agenda within the institution, in a corporate and structured manner, ultimately generating a series of movements, such as a governance body and an executive innovation committee establishment. This committee meets on a monthly basis, gathering the main company executives, to discuss and deliberate on innovation projects. The business unit directors' involvement caused, according to many of the interviewees, a sense of responsibility and commitment to the innovation projects which, up to that moment, was mostly concentrated on the R&D department.

Before 2013 [the process] was kind of loose: each department, if they considered having an innovation area made sense, created their own, and there was no corporate policy on the matter, a policy on having, I mean, when I say innovation, I mean holistically. Because what was there was a big eye on technological innovation, which the Innovation Department has always handled very well. So from 2013 on, what the Innovation Department has been doing [...] is setting the tone of the corporate path we want to take, but each business unit, or the other departments, has the autonomy to work within that strategic driver (Business Unit Senior Manager).

As for the projects' character, it is clear that there is no definition on resources allocation (financial, infrastructure and human resources) coming from the institution toward incremental and/or radical innovation projects. So far, the understanding is that leadership, at first sight, keeps the final result in mind.

I think the Organization currently does not see the importance, the difference between the two [innovation characters]; what matters is the business result. So, the company is much more focused on this “result” driver, and much less like, [...] if the results come from an incremental innovation or not, significant, disruptive, it does not really matter to the Organization. (Innovation Department Manager)

4.2 Beginning of open innovation activities and partnering with universities

After this first step, in 2015, the organization fathomed it was time to leave what Chesbrough (2003) describes as self-sufficiency model and inaugurate an open innovation strategy. The company has done that through a joint program with start-ups, particularly fintechs, officially starting its integration into the country's entrepreneurship and innovation ecosystem in a broader way.

We realized that this ability to "think innovation", it was restricted to the creative idleness, and to the potential of people already involved in that process. Than the need for an open innovation strategy has emerged: practically speaking, it comes down to bring more people around the bank to think innovation. (Innovation Manager Senior Manager)

The program focus is enabling partnerships between the bank and start-ups to find solutions for organization's demands. What is in it for the start-ups is the opportunity to access a large customer base, to test its solutions in a state-of-the-art IT environment, to use the different distribution channels and therefore, to gain scale. The program's relevance is internally recognized, as it has made possible to discuss, on an executive level – previously hardly accessed –, themes like emerging technologies and business models.

During this period, the organization has also intensified partnerships with Brazilian and foreign universities, aiming at jointly developing innovation projects and knowledge transfer. These partnerships permeate all organization levels, from executive to tactic, through technological projects, business model projects, on top of lectures and workshops with the intent to bring best innovation management practices to all groups' knowledge.

Academy also helps to bring methodology, to systematize and even to bring new methods, what is going on. . . the Academy pulls [the company] (Director).

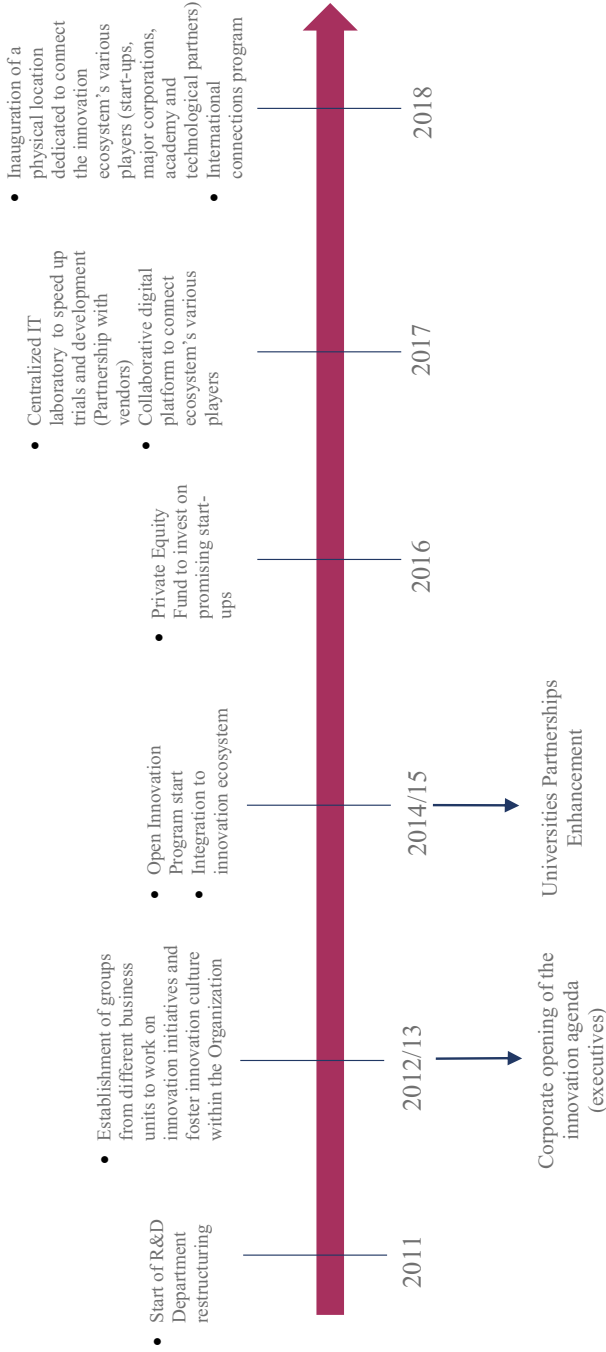
Since the establishment of these two movements, the organization has been evolving to opening an innovation initiatives "umbrella", illustrated by Figure 1. The figure brings the company's innovation management model evolution in the past ten years. Currently, the model works on every aspect, from the internal processes adjustment to reinforce innovation culture, to the participation in global innovation hubs, seeking best practices and opportunities.

I think that, wrapping it all up, the most important thing in any major organization like the bank is the need for continuity: we cannot think it will bring short term results, but if we understand that innovation is a strategic pillar for survival – and not only survival, but also for winning – with that long term view, similar to what a VC fund has. Out of ten, a hundred companies a VC fund invests on, one actually takes off. It works that way in innovation; here in the bank we think that way, we think that it has to be a long journey and not necessarily with all instruments ready to play. Or, with not all that worked in the past still working. But the most important thing is that we have continuity in thinking innovation must be systematized (Director).

5. Discussion

The company subject to this case study showcases a peculiar innovation structure, not usually described in the topic literature. It simultaneously works on several fronts in an interconnected way, developing initiatives covering the whole innovation ecosystem: internal programs for idea generation, cooperated programs with start-ups, investment on promising companies through a venture capital fund, partnerships with major technology companies to speed up development, participation in international innovation hubs and a dedicated physical location aiming to integrate all the innovation ecosystem's players.

Such structure has been enabling the company to explore well-defined expertise, directly related to incremental innovation projects, while at the same time devoting great effort to



Source(s): Prepared by the authors

Figure 1.
Timeline of innovation management programs

acquiring new expertise, closer to digital business' needs, and more likely to generate radical innovation initiatives. The structure has developed a portfolio planted primarily on incremental innovation projects, but it also strives to seek new business solutions to bring revenue through nontraditional avenues. This search for more radical initiatives is especially portrayed by a research focused team, generally with an academic profile, responsible for the partnerships with universities and research institutions.

As for the challenges the company faces while harmonizing different approaches to innovation, it is important to bear in mind that for a financial institution it is not trivial embody some of the attitudes associated to *exploration*. The reason is understandable: this is a highly regulated, controlled industry, mostly driven toward risk reduction. To deal with that challenge, interviewee 2, who has a leadership role, underlines that the company has been working in two ways. First, strongly investing in internal communication, talking about digital business related topics, such as “platform” and “ecosystem” concepts; by doing so, the company sows in people’s minds the idea that it is necessary to have a balanced innovation portfolio, covering both current business needs and anticipated requirements to remain competitive in a different scenario. Second, the company is contemplating the creation of a separate structure, focused on studying and proposing new business models with potential to bring new revenue streams.

Based on those observations, it is possible to interpret that the company has been striving to develop not only incremental innovation – something expected from an institution that brings in its history relevant innovations within the industry – but also to develop structures which will enable the company to compete in a different arena, through projects distinguished by higher uncertainty in the search for new business models.

Taking into account the organizational structure developed over the past few years, as well as the direct observation by one of the authors, and finally the evidence collected during the interviews, the conclusion is that the company adheres to the main requirements of an organization aspiring to be ambidextrous: leadership concern in acquiring new knowledge/competences, while renovating and improving existent knowledge and skills; constant pursuit of process improvement and efficiency; incentive to R&D department to execute projects with more uncertainty and high investment on emerging technologies, particularly in partnerships with Universities.

According to [Raisch et al. \(2009\)](#), the requirements to become an ambidextrous company are apparently contradictory; therefore, the formulation of strategies, structures and processes demands a fine balance. In the organization hereby observed, the understanding of the need to develop different competences to face that challenge is evident. It is apparent in the interviewees’ speech, especially those working in R&D Department (Interviewees 1, 2, 4 and 5). On the other hand, mindset changing is precisely the main factor hindering the *exploration* dimension development.

[Heracleous, Yniguez, and Gonzalez \(2019\)](#) comment that prescriptions to achieve ambidexterity are also useful for broader approaches, but they do not offer a detailed reasoning behind “why” an organization reaches or not the ambidexterity goal. Historical and institutional factors cast these broader level prescriptions’ viability and, at this point, some aspects of the research deserve to be highlighted. First, the subject company plays in the financial sector, historically risk averse, with great focus on short-term results initiatives and great bias toward operation efficiency. According to many of the interviewees, especially those leading the innovation initiatives, the incentive for organizational mindset change and the involvement with higher uncertainty initiatives need to be top-down. In the eyes of one of the authors – the insider – participating in innovation projects could previously be seen as additional work; however, this participation has acquired some status in recent years, attracting interest from professionals in many levels. Furthermore, innovation is considered a noble area, despite lacking a specific career plan for its members, as pointed out by

interviewee 6. Professionals in that area are currently evaluated by the same measures than their colleagues on day-by-day projects, which have shorter and more defined delivery cycles when it comes to result evaluation.

Another important point to consider is the development and advancement of the partnerships with universities. This relationship is increasingly extended throughout several teams, not only the one directly involved in academic activities. This has been constituting an efficient mechanism to foster mindset change. Also noteworthy is the effort to disseminate concepts directly related to innovation management, emerging technologies and digital economy product development, among other topics. These themes are important for the systematic maintenance of the structure built over recent years. These initiatives are totally aligned to the mindset change needed and aim at building a sturdy framework for innovation management.

Nonetheless, authors' observation reveals that the challenge of finding proper balance between *exploration* and *exploitation* seems not to be completely figured out. When evaluating the timeline of the organizational changes milestones, it is possible to sense an increasingly mature understanding of the need for working in an ambidextrous fashion. However, mechanisms to do so are not yet clearly fit into the day-to-day operation: sometimes due to lack of effective communication, due to a shortfall in understanding different roles and due to the absence of a risk taking mindset. That paradox has made the company consider the possibility of having a separate structure to foster radical innovation. The company has not yet defined the path to be taken, but the advancing line of thought is that opting for a separate structure would promote radical innovation. Criteria for that separation, though, are not clearly defined.

In general, the case shows a clear effort to find balance between *exploitation* and *exploration* traits. One of the strategies used to reach that goal, according to authors' observation, was the innovation culture "institutionalization". People from different organizational areas and levels have gradually become involved in innovation activities, essentially *exploitation* ones, as they are exposed to stimuli about new business models out of their routine. This instigation, coupled to the consistent concern on sending the message that innovation is everyone's commitment, has been having the effect of raising the theme to a spotlight. As a consequence, more and more people from different areas and levels have been grasping the need to think businesses in a holistic view, and with a keen eye to medium-to-long-term competitive advantage.

The analysis of company's steps toward ambidexterity has also brought the authors to the identification of another organizational phenomenon: an IF development, despite that not being the explicit objective when changes started, and also despite the R&D department upcoming path not being clear to everyone. Some progress has been made: one, advancement is the realization that innovation in the company shall not be treated as something casual, but as something perennial, as emphasized by interviewee 10. Even in crisis periods innovation did not submerge: on the contrary, the new programs' genesis shows a growing trend, has overcome the country's economic recession in 2015–2016 and has been well-funded by a significant corporate budget. All these demonstrate a clear effort to develop and keep a formal structure for fostering permanent innovation initiatives.

Another company's advancement toward IF development is the weaving of internal and external networks starting in the R&D department leadership. As for internal networks, the effort to involve business units is patent, and those have increasingly participated in projects, echoing the concept that IF articulates with others to exercise its mandate (Salerno & Gomes, 2018). R&D department teams themselves have been acting as spreaders of radical innovation concepts throughout the company, while at the same time seeking to develop external networks, particularly through partnerships with major universities, both in Brazil and abroad. In addition, the company has established programs involving different players

from the innovation ecosystem: a special highlight goes to the initiative with large technology companies and the physical location coordination, to foster innovation within the Brazilian ecosystem.

An important point to highlight in this context is the focus on supporting new businesses creation. If a new unit is indeed created to face that challenge, R&D department will gradually deviate from applying elements that can be systematized by other functions to concentrate on what is really new to the company. Innovation management in the company has been advancing to become an organizational function with a specific mandate. Nonetheless, it is necessary to report that, although the company moves toward an IF, authors could observe that there is still a long way to go until it is actually built. Even with a team fully dedicated to innovation projects, there is a clear division about innovation nature, that is, the situation is what O'Connor describes as "working on radical innovation in the morning and on incremental projects in the afternoon". Innovation initiatives management also need adaptation, incremental and radical innovation projects are evaluated in the same way – stage gates, as an example – and this is not consistent with innovation theory. Even with the company being aware of such inconsistency, it is not a trivial change to be implemented in a large organization with well-established traditional project analysis criteria. That constitutes a major challenge.

The assessment is that, over the last decade, the company has made progress toward the construction of an organizational function with the mandate of conducting radical innovation projects, with some important advancements. Perpetuity and a sturdy budget are two of them, but elements like differentiated initiative management for projects of high uncertainty and people management still need to be developed and matured.

6. Conclusion

By the end of the 1990s, [Salerno \(1999\)](#) and other authors were discussing about the organizational design that would be most suitable for manufacturing processes aimed at instable environments and markets. By that time, there was a consensus that the classical organizational design would not fit, but there was no prescription on how a company should organize itself. Much of the innovation research is focused in product development and not services. In the current scenario, however, developed economies are often steered toward services, and questions related to an innovative organizational design are yet to be answered. This work analyzes the "ecosystem" development strategy as one of the possible avenues for innovation, exploring different approaches on open innovation, investments and exchanges with different players. The scope of the studied company's innovation management structure provides an interesting perspective to contribute to organizational design knowledge area: reason is the structure has been moving to the development of an area (function) that will integrate the innovation system, connecting large technology companies, star-ups and large corporations, while fostering corporate mindset change to promote radical innovation.

Even though theory provides clear evidence of the potential ambidexterity may represent in a company, the way to orchestrate trade-offs to reach it is relatively under-explored. The aforementioned gap in ambidexterity theory was addressed through the presentation of a model developed with focus on integration among different innovation ecosystem players, both internal and external to the company. This work aims at contributing mostly with empiric data about "how" a company is advancing in developing its innovation structure. This contribution happens through the description and analysis of what is being implemented, and which steps are being taken toward ambidexterity, showing an innovation ecosystem development strategy and the company's role in orchestrating such ecosystem. The study has identified that the company's chosen path has been the constitution of something close to the IF, while at the same time "institutionalizing"

innovation in the company. In other words, the company is increasingly imprinting in its culture that “innovation is everyone’s responsibility”.

This work, therefore, contributes with a broader perspective approach to an innovation management case, by analyzing the environment forged to foster an efficient organizational design, aimed at generating both incremental and radical innovation within a services company. Said organizational design bears the pledge of adapting itself to new challenges introduced by the market, increasingly demanding a digital mindset from corporations.

In this case, it is observable that the dilemmas faced by large corporations which need to radically innovate persist: Is a separate structure paramount for radical innovation? Can the same team perform in both types of project? What is the leadership’s role in the organization’s mindset change? How important is the relationship with external players (suppliers, academia)? Which activities should be carried out by which of the players? This gap still remains in the topic literature and surely more in-depth qualitative studies and field observations are vital. For that reason, this case study is considered one more contribution to the field.

References

- Abernathy, W.J., & Utterback, J.M. (1975). Dynamic model of process and product innovation. *Omega-International Journal of Management Science*, 3(6), 639-656.
- Amabile, T.M. (1983). How to kill creativity. *Harvard Business Review*, 76(5), 76-87.
- Bagno, R.B. (2014). *Inovação como uma função organizacional: Caracterização a partir da experiência de empresas industriais de grande porte no Brasil (Tese de Doutorado)*, São Paulo: Universidade de São Paulo.
- Bessant, J., Lamming, R., Noke, H., & Phillips, W. (2005). Managing innovation beyond the steady state. *Technovation*, 25(12), 1366-1376.
- Brix, J. (2019). Ambidexterity and organizational learning: revisiting and reconnecting the literatures. *The Learning Organization*, 26(4), 337-351.
- Chesbrough, H. (2003). *Open Innovation: The New Imperative for Creating and Profiting from Technology*. Boston: Harvard Business School Press.
- Duncan, R. (1976). The ambidextrous organization: designing dual structures for innovation. *The Management of Organization*, 1, 167-188.
- Eisenhardt, K. (1989). Building theory from case study research. *The Academy of Management Review*, 14(4), 532-550.
- Eisenhardt, K., & Graebner, M. (2007). Theory building from cases: opportunities and challenges. *Academy of Management Journal*, 50(1), 25-32.
- Figueiredo, P.N. (2005). AcumulBação tecnológica e inovação industrial: conceitos, mensuração e evidências no Brasil. *São Paulo em Perspectiva*, 19(1), 54-69.
- Figueiredo, P.N. (2009). *Gestão da Inovação: conceitos, métricas e experiências de empresas no Brasil*. Rio de Janeiro: LTC.
- Garcia, R., Calantone, R. (2002). A critical look at technological innovation typology and innovativeness terminology: a literature review. *The Journal of Product Innovation Management*, 19, 110-132.
- Gibson, C.B., Birkinshaw, J. (2004). The antecedents, consequences, and mediating role of organizational ambidexterity. *Academy of Management Journal*, 47(2), 209-226.
- Goffin, K., & Mitchell, R. (2005). *Innovation Management, Strategy and Implementation using the Pentathlon Framework*: Londres Palgrave Macmillan, NY.
- Gupta, A.K., Smith, K.G., & Shalley, C.E. (2006). The interplay between exploration and exploitation. *Academy of Management Journal*, 49(4).

- Hansen, M.T., & Birkinshaw, J. (2007). The innovation value chain. *Harvard Business Review*, 85(6), 121-130.
- Heracleous, L., Yniguez, C., & Gonzalez, S.A. (2019). Ambidexterity as historically embedded process: evidence from NASA, 1958–2016. *The Journal of Applied Behavioral Science*, 55(2), 161–189.
- Jansen, J.J.P., Tempelaar, M.P., Van de Bosch, F.A.J., & Volverda, H.W. (2009). Structural differentiation and ambidexterity: the mediating role of integration mechanisms. *Organization Science*, 20(4), 797–811.
- Jugend, D., Araujo, T.R., Pimenta, M.L., Gobbo, J.A. & Hilletoft, P. (2018). The role of cross-functional integration in new product development: differences between incremental and radical innovation projects. *Organization & Management*, 20(1), 42–60.
- Karrer, D., & Fleck, D. (2015). Organizing for ambidexterity: a paradox-based typology of ambidexterity-related organizational states. *Brazilian Administration Review*, 12(4).
- Langley, A. (1999). Strategies for theorizing from process data. *Academy of Management Review*, 24(4), 691–710.
- Langley, A.N.N., Smallman, C., Tsoukas, H., & Van de Ven, A.H. (2013). Process studies of change in organization and management: Unveiling temporality, activity, and flow. *Academy of Management Journal*, 56(1), 1–13.
- Le, P.B., Lei, H., Le, T.T., Gong, J., & Há, A.T. (2020). Developing a collaborative culture for radical and incremental innovation: The mediating roles of tacit and explicit knowledge sharing. *Chinese Management Studies*, 14(4), 957-975.
- Loch, C.H., Solt, M.E., & Bailey, E.M. (2008). Diagnosing unforeseeable uncertainty in a new venture. *Journal of Product Innovation Management*, 25(1), 28-46.
- March, J. (1991). Exploration and Exploitation in organizational learning. *Organization Science*, 2(1), 71-87.
- Markides, C. & Chu, W. (2009). *Innovation through ambidexterity: How to Achieve the Ambidextrous Organization. Handbook of Research on Strategy and Foresight*. Elgar online, Cheltenham.
- Matos, H.H., Silva, F.G., Lasmar, T.O., & Dias, A.V.C. (2017). Ambidestria organizacional: uma análise do estado-da-arte na literatura nacional e internacional. *In Anais do 11º Congresso Brasileiro de Inovação e Gestão de Desenvolvimento de Produto*, São Paulo.
- McGrath R.G. (2001). Exploratory learning, innovative capacity, and managerial oversight. *Academy of Management Journal*, 44(1), 118–131.
- Mcgrath, R.G. (1997). A real options logic for initiating technology positioning investments. *Academy of Management Review*, 22(4), 974-996.
- Mom, T.J.M., Chang, Y.Y., Cholakova, M., & Jansen, J.J.P. (2019). A multilevel integrated framework of firm HR practices, individual ambidexterity, and organizational ambidexterity. *Journal of Management*, 45(7), 3009–3034.
- O'Connor, G.C., Leifer Ri., Paulson, A.S., & Peters, L.S. (2008). *Grabbing Lightning: Building a Capability for Breakthrough Innovation*. John Wiley & Sons.
- Perry-Smith, J. (2006). Social yet creative: the role of social relationships in facilitating individual creativity. *Academy of Management Journal*, 49(1), 85-101.
- Raisch, S., & Birkinshaw, J. (2008). Organizational ambidexterity: antecedents, outcomes and moderators. *Journal of Management*, 34(3), 517-554.
- Raisch, S., Birkinshaw, J., Probst, G., & Tushman, M.L. (2009). Organizational ambidexterity: balancing exploitation and exploration for sustained performance. *Organization Science*, 20(4), 685–695.
- Rice, M.P., O'Connor, G.C., & Pierantozzi, R. (2008). Implementing a learning plan to conter Project uncertainty. *MIT Sloan Management Review*, 49(2), 53-62.
- Rothwell, R. (1992). Successful industrial innovation: critical factors for the 1990s. *R&D Management*, 22(3), 221-239.

- Salerno, M.S. (1999). *Projeto de organizações integradas e flexíveis: Processos, grupos e gestão democrática via espaço de comunicação-negociação*. São Paulo: Atlas.
- Salerno, M. (2009). Reconfigurable organisation to cope with unpredictable goals. *International Journal of Production Economics*, 122(1), 419-428.
- Salerno, M.S., & Gomes, L.A.V. (2018). *Gestão da inovação (mais) radical*. Rio de Janeiro: Elsevier.
- Schumpeter, J. (1934). *The Theory of Economic Development*. Cambridge: Harvard University Press.
- Sheng, M.L., Chien, I. (2016). Rethinking organizational learning orientation on radical and incremental innovation in high-tech firms. *Journal of Business Research*, 69(6), 2302–2308.
- Silva, D.O., Bagno, R.B., & SALERNO, M.S. (2014). Modelos para a gestão da inovação: revisão e análise da literatura. *Production*, 24(2), 477-490.
- Simsek, Z., Heavey, C., Veiga, J.F., & Souder, D. (2009) A typology for aligning organizational ambidexterity's conceptualizations, antecedents, and outcomes. *Journal of Management Studies*, 46(5), 864–894.
- Terwiesch, C., & Ulrich, K. (2008). Managing the opportunity portfolio. *Research-Technology Management*, 51(5), 27-38.
- Tidd, J., & Bessant, J. (2018). Innovation management challenges: from fads to fundamentals. *International Journal of Innovation Management*, 22(5), 1–13.
- Tidd, J., Bessant, J., & Pavitt, K. (2008). *Gestão da Inovação*. Porto Alegre: Bookman.
- Tushman, M., & O'Reilly, C. (1996). The ambidextrous organizations: managing evolutionary and revolutionary change. *California Management Review*, 38(4), 8–30.
- Utterback, J.M. (1970). Process of innovation - a study of origination and development of ideas for new scientific instruments. *IEEE Transactions on Aerospace and Electronic Systems*, 6(5), 462-470.
- Vickers, D.A. (2019). At-home ethnography: a method for practitioners. *Qualitative Research in Organizations and Management: an International Journal*, 14(1), 10–26.
- Wan, X., Cenamor, J., Parker, G., & Alstyne, M.V. (2017). Unraveling platform strategies: a review from an organizational ambidexterity perspective. *Sustainability*, 9(5), 734.
- Yin, R.K. (2003). *Case study Research: Design and Methods*. Sage Publications, Thousand Oaks.

Further reading

- Mello, A.M., & Marx, R. (2013). Contribuição aos critérios de projeto organizacional para inovação na indústria petroquímica brasileira. *Gestão e Produção*, 20(2), 373–386.
- Mello, R.B., Fleury, M.T.L., Aveline, C.E.S., & Gama, M.A.B. (2016). Unpacking the ambidexterity implementation process in the internationalization of emerging market multinationals. *Journal of Business Research*, 69(6), 2005–2017.
- O'Reilly, C.A., & Tushman, M.L. (2013). Organizational ambidexterity: past, presente and future. *The Academy of Management*, 27(4), 324–338.

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