

# **Commitment in the unknown: An innovative use of the Profit-with-Purpose corporate framework to ensure responsible innovation**

**Levillain, Kevin**

**Segrestin, Blanche**

**Centre de Gestion Scientifique, i3 UMR CNRS 9217  
MINES ParisTech, PSL University  
kevin.levillain@mines-paristech.fr**

## **Résumé :**

---

On attend de plus en plus des entreprises qu'elles mobilisent leur pouvoir d'action et leur capacité d'innovation pour faire face aux « grands défis » sociaux, environnementaux et économiques actuels. Cependant, on manque encore de cadres de « gouvernance responsable » permettant de s'assurer que les entreprises protègent leurs capacités d'innovation et les utilisent de manière responsable. A cet effet, de nouveaux outils juridiques sont régulièrement expérimentés. Récemment, des formes d'entreprise dites « Profit-with-Purpose » ou « à mission » telles que la *Benefit Corporation* aux États-Unis ont été introduites dans le droit des sociétés de plusieurs pays dans l'espoir de fournir un dispositif de gouvernance favorisant les comportements responsables des entreprises. Il reste cependant à étudier dans quelle mesure ces nouvelles formes juridiques peuvent effectivement contribuer à une « innovation responsable ». Cet article vise à explorer les mécanismes de gouvernance originaux déployés par une entreprise à mission pour faire face aux défis de l'innovation responsable. Il s'appuie sur une étude de cas longitudinale d'une entreprise française qui a expérimenté ce statut depuis 2015. Nous montrons que les entreprises à mission fournissent un cadre utile pour l'innovation responsable si certains outils spécifiques sont ajoutées aux exigences juridiques telles que la formulation de la mission sous la forme d'un « engagement dans l'inconnu », qui vise à protéger les capacités d'innovation de l'entreprise et à susciter un avenir souhaitable auquel l'entreprise s'engage dans son développement; et la création d'un comité de gouvernance chargé non seulement d'évaluer cet objectif, mais aussi d'évaluer la qualité de l'exploration par l'entreprise de diverses stratégies novatrices pour assumer ses responsabilités futures. Nous discutons enfin de certaines implications pour le management et les législateurs.

**Mots-clés :** Corporate governance, Purpose, Corporate Social Responsibility, Responsible Innovation

---

# **Commitment in the unknown: An innovative use of the Profit-with-Purpose corporate framework to ensure responsible innovation**

## **1. INTRODUCTION**

As awareness is growing that the social, environmental and economic challenges of the century will require major transitions in the way most societies function, it becomes clearer and clearer that the engagement of business companies will play a pivotal role. Large companies are more and more expected to direct their strong capacity for action toward these transitions (Aguilera, Rupp, Williams, & Ganapathi, 2007) and their innovation capabilities increasingly appear as crucial to address “grand societal challenges” (George, Howard-Grenville, Joshi, & Tihanyi, 2016; Voegtlin & Scherer, 2017). The expansion of social responsibility frameworks during the past decades (ISO 26000, CSR tools such as materiality matrices, labels and certifications such as B Corp., UN Sustainable Development Goals...) is symptomatic of this social expectation. However, at the same time, suspicion and distrust towards business companies are growing (Edelman, 2018) and corporate governance practices are criticized for their social and environmental impact (Banerjee, 2008; Fleming & Jones, 2013; Margolis & Walsh, 2003) while scandals are recurrent (Deepwater Horizon, Rana Plaza, Dieselgate...). As a result, there is limited confidence that business companies will indeed engage their innovation capabilities in the direction of a sustainable future.

For management research, this paradox raises the following question. “Responsible innovation”, defined as “a framework to evaluate innovations regarding potential harmful consequences and potential positive contribution to societal challenges” (Voegtlin & Scherer, 2017), appears as crucial to face current societal challenges. Then how can one “force” business companies to innovate in a responsible way? What actual devices can be invented to foster innovation oriented towards addressing grand challenges, promoting sustainability, and serving the public interest? And how to evaluate the reliability of such devices over the long term?

This question is particularly tricky when considering that the efficiency of traditional regulatory mechanisms, such as legislative action (reporting obligation, environmental law, etc.), is debatable in situation of radical innovation (Aggeri, 1999; Dewick & Miozzo, 2002). Indeed,

how to assess the responsibility of organizations when some future impacts of their current innovative activities are still uncertain or even unknown? How to legislate on “responsible” innovation, and what discretion should be given to managers regarding uncertain but necessary innovation activities?

One of the avenues towards facilitating responsible innovation is the development at the international level of “profit-with-purpose” corporate forms (Prior, Cohen, & Fox, 2014), hereafter “PPCs”, as a framework for responsible governance (Scherer & Voegtlin, 2018). These new corporate forms (*Benefit Corporations* or *Social Purpose Corporations* in the US, *Società Benefit* in Italy, *Société à Mission* in France) aim to provide a legal structure and governance means to protect social and environmental objectives from the pressure of shareholders’ financial interests (Levillain et al., 2018). To date, these new forms have mostly been studied with the traditional theoretical frameworks of Corporate Social Responsibility, i.e. whether they indeed support sustainable business practices or not (see e.g. André, 2012; Hiller, 2013; Koehn, 2016; Reiser, 2011). However, their capacity to support *actual innovation*, for instance through the invention of new products, services or processes to concretely address social or environmental challenges in new ways, has not been investigated. Are thus PPCs good candidates for a “responsible governance” framework? This question is important because such innovation could neutralize classical accountability mechanisms and therefore make it impossible to guarantee their responsibility – for instance, on which criteria should one assess the impacts of an innovation which transforms the way social issues are seen? Conversely, powerful governance mechanisms created to ensure that companies “do no harm and do good” (Stahl & Sully de Luque, 2014) could well stifle innovation capability and disadvantage companies in a highly competitive and turbulent environment.

In this paper, we aim at shedding light on an innovative use of the PPC legal framework to conduct and control responsible innovation. We conducted a longitudinal (2011-2018) case study of a French “*Entreprise à Mission*”, which changed its governance during this period of time (2014-2015) to make sure that its activities will remain dedicated to responsible innovation. We analyse several governance innovations they introduced to do so: specific writing of the purpose in the companies article, accountability devices and mechanisms, including the way they actually functioned, specific governance committees, as well as innovative practices that aim at fostering, protecting and evaluating responsible innovation.

We find that companies can indeed make use of the PPC framework to ensure responsible innovation provided that they respect certain conditions. First, the most original feature is use of the purpose as a legal *commitment in the unknown*, i.e. a commitment to innovate in order to design new solutions to fulfil a purpose that was unattainable with initial knowledge and products. This is very original in the sense that legal contracts are usually built on what is known, rather than an objective to create something still unknown. Second, the firm created original governance mechanisms to ensure simultaneously an efficient coverage of the risks and potential impacts due to innovative activities both internally (which we call a “foresight” norm) and to external stakeholders (which we call a “vigilance” norm), as well as a commitment to innovate.

In the last section, we discuss the generalisability of these findings. In order for public actors and civil society to require firms to conduct responsible innovation, the PPC framework provides interesting avenues, but which depend on efficiency boundary conditions. These conditions lay further avenues to develop new responsible governance devices, as well as to develop research in this area.

## **2. LITERATURE REVIEW: THE ISSUE OF RESPONSIBLE GOVERNANCE**

### **2.1. RESPONSIBLE INNOVATION AND RESPONSIBLE GOVERNANCE**

The topic of business social responsibility and its interaction with regulatory frameworks such as corporate governance legal and rules and codes of conducts is certainly not a new one. Recent crises and scandals have however rekindled streams of research to demonstrate both conceptually and empirically that the responsibility of business cannot be thought separately from the societal well-being (Scherer & Palazzo, 2007) as well as from the governance setting in which its activities takes place (Aguilera & Jackson, 2003; Hart & Zingales, 2017). Results such as the fragility of firms engagement in responsible initiatives within the dominant governance doctrine (Fleming & Jones, 2013; Sandberg, 2011) or legal framework (Segrestin & Hatchuel, 2011) have stressed the need to rethink the lines of corporate governance.

A new perspective however is brought by the recent acknowledgment that firm’s action is not only expected to mitigate the negative impacts of their activities – what could be called the “avoid harm” perspective (Voegtlin & Scherer, 2017) – but also to contribute positively to the considerable social and environmental challenges of our time, which require innovation capabilities that few socioeconomic actors can be deemed to possess aside business companies

– a perspective that was called “do good” (Stahl & Sully de Luque, 2014). At the same time, “innovation” and “creativity” became less prone to naturally positive imaginaries, with increasing research studying the “dark side” of innovation, be it because of increased complexity to conceal actual risks such as in finance innovation (Henderson & Pearson, 2011), of “malevolent” innovation or uncalculated risks linked to good intentions (Cropley, Cropley, Kaufman, & Runco, 2010), or of inventions aiming at increasing profitability at the expense of user’s health or environmental impact such as the case of planned obsolescence (Gravier & Swartz, 2009).

In this perspective, the concept of “Responsible Innovation” (Voegtlin & Scherer, 2017) was developed to acknowledge the need to assess more systematically the potential harmful effects as well as the potential positive contribution of all types of innovations. It extends a notion previously coined as RRI for “Responsible Research and Innovation”, defined notably by the European Union as the necessity to “work together during the whole research and innovation process in order to better align both the process and its outcomes with the values, needs and expectations of society”<sup>1</sup>. This definition specifically encompassed the impacts of scientific and technological inventions, notably those produced thanks to public funding, which already raised thorny issues of responsibility (see e.g. Owen, Bessant, & Heintz, 2013; Owen, Macnaghten, & Stilgoe, 2012).

In the broader definition suggested by Voegtlin and Scherer, Responsible Innovation should include three components: “(1) innovations avoid harming people and the planet, (2) innovations ‘do good’ by offering new products, services or technologies that foster sustainable development, and (3) global governance schemes are in place that facilitate innovations that avoid harm and ‘do good’” (Voegtlin & Scherer, 2017).

The concept of responsible innovation is therefore directly linked with the one of responsible governance, because it is necessary to ensure that processes are effectively put in place to systematically assess innovations. Responsible governance is therefore defined as the set of systems at numerous levels (global, national policy and corporate governance) which will ensure, protect and facilitate responsible innovation.

## 2.2. THE CHALLENGE OF REGULATING RESPONSIBLE INNOVATION

---

<sup>1</sup> See “responsible research and innovation” for the Horizon 2020 projects at <https://ec.europa.eu/programmes/horizon2020/en/h2020-section/responsible-research-innovation>.

As appealing as the concept of responsible governance might be, it raises intrinsic challenges for several reasons that existing management research has already well described.

First, *how to ensure that inventors will innovate responsibly?* If classical regulatory mechanisms such as sector agreements and conventions, legal liability, financial penalties, reporting obligations, bans or evaluation criteria are well used in contexts where knowledge is sufficient to grasp the potential impacts of a companies' activities, all of these mechanisms fall short when radical innovation implies unknown and undocumented consequences, blurring of sector boundaries and legal categories, soaring complexity of the causality chain, and disagreement over the perception of the values of partly unknown objects (Aggeri, 1999; Beck, 1992; Blok & Lemmens, 2015; Lee & Petts, 2013; Muniesa & Lenglet, 2013).

The very nature of design activities implies that “innovators will always exceed the grasp of regulators” (Owen et al., 2013), and it is even one of the consequences of radical innovation processes to make new values emerge that could become central to the definition of what is responsible even though it was not conceptualized at the beginning of the process (Gillier, Hooge, & Piat, 2015). Furthermore, “innovative companies even have an incentive to increase information asymmetries” when their products or services that are still to be designed cannot be entirely assessed with existing frameworks (Blok & Lemmens, 2015). In the end, “this makes it difficult to control every innovation in due time and strains the limited resources of governmental authorities that enact and enforce hard-law regulations” (Voegtlin & Scherer, 2017).

Because of these limitations, authors have suggested that an “adaptive” “soft law” approach based on “deliberative” and “reflexive” features is inevitable in the field of responsible innovation (Lee & Petts, 2013; Voegtlin & Scherer, 2017). However, soft law has already extensively criticized for its difficulties to ensure a sufficient level of trust in the accountability mechanisms. This is further complicated by the fact that effective soft law requires the involvement of numerous stakeholders to ensure reflexive and participative control (Bessant, 2013; Voegtlin & Scherer, 2017), which becomes difficult when the nature of innovation is increasingly oriented towards involving more and more participants of diverse nature and diverse opinions and values (Blok & Lemmens, 2015; Muniesa & Lenglet, 2013; Ntsondé & Aggeri, 2017).

Second, *how to protect the firms' innovation capability?* And how to “force” or urge them to innovate? Several recent studies have shown that current dominant governance frameworks do not only tend to promote “irresponsible” innovation, they also stifle companies' innovation

capabilities by promoting short-term returns that are incompatible with the risk-taking associated to radical innovation. These include promoting shares buybacks over R&D investment (Lazonick, 2007, 2014), disengaging in fundamental research (Arora, Belenzon, & Pataconi, 2015) or outsourcing R&D (Gleadle, Parris, Shipman, & Simonetti, 2014; Sharma & Lacey, 2004). In the end, responsible governance will therefore also need to protect firms' innovation capabilities and to promote their engagement in research whose return is not foreseeable in the short term.

Finally, and more fundamentally, *how to conceptualize responsibility over an unknown future?* As theorized by Beck, innovation is consubstantial with risk (Beck, 1992; Hellström, 2003) and it is an epistemic issue to consider how to manage uncertain impacts when innovating (Blok & Lemmens, 2015). As put by Voegtlin and Scherer, “innovation is directed toward the future, which poses difficulties, considering that it is hard to foresee all possible negative consequences for people and the planet (especially during the initial phase of creation or invention) and incorporate sufficient provisions in codified hard-law regulations, which are relatively inflexible.” In this case how to theorize and legislate responsibility for the “future [innovation] helps to create” (Grinbaum & Groves, 2013)? And what should be the appropriate discretion for the management in regard to its direction of innovation capabilities?

### **2.3. PROFIT-WITH-PURPOSE CORPORATIONS: A GOOD CANDIDATE FOR RESPONSIBLE GOVERNANCE?**

Face with the discontent of public opinion over the consequences of dominant corporate governance practice, as well as increasing demands on the part of responsible entrepreneurs and business leaders, several countries have recently introduced legal innovations that aim at renewing governance for more sustainable business conducts. Called “profit-with-purpose corporations” or PPCs (Prior et al., 2014), these innovations consist in new legal forms available as an option for all business corporations, and require introducing a social or environmental purpose into the articles of incorporation, as well as several governance mechanisms designed to ensure a form of control over the respect of this purpose (Levillain et al., 2018). Several forms have been or are in the process of being adopted in various countries : for instance *benefit* and *social purpose corporations* in the United States, *Società Benefit* in Italy, *Société à Mission* in France.

This innovation is potentially interesting in the current search for responsible governance. It was designed first as a means to curb the pressure of shareholders' interest in financial returns when it jeopardizes responsible initiatives engaged by the management (Clark & Babson, 2012; Mac Cormac & Haney, 2012). By defining a purpose in the articles of incorporation, PPCs create a commitment from shareholders as well as directors over an objective that is not limited to profitability, and that has a juridical nature, which creates several consequences: shareholders cannot anymore sue directors for not maximizing their financial interest as long as directors' decisions were taken to advance the purpose; any modification of this purpose requires the approval of two thirds of each class of shares, which entails a certain sustainability of this purpose over time; any takeover requires that the acquirer approves the purpose unless they gather two thirds of the shares; and this purpose is publicly available for every interested person, including customers, employees and the civil society (Hiller, 2013; Mickels, 2009; Reiser, 2011).

Because of these interesting properties, management and legal scholars have started to study these corporate forms under the angle of the Corporate Social Responsibility with the following questions: do they renew the classical approaches of CSR (André, 2012; Hiller, 2013; Levillain et al., 2018; Reiser, 2011)? Do they provide credible means of accountability against greenwashing (Ebrahim, Battilana, & Mair, 2014; Kurland, 2017)? Why do entrepreneurs chose them, and were they necessary in the first place within the then existing legal framework (Grant, 2013; Koehn, 2016; Rawhouser, Cummings, & Crane, 2015)?

These papers overall maintain a form of suspicion and debate over the actual effects that these new corporate forms will have on the actual behaviour of the companies that will choose them. Without entering too much in detail here, debates include whether these new forms will be properly understood by entrepreneurs and not create more confusion over the purposes of other forms of corporations (Rawhouser et al., 2015), and whether the accountability mechanisms that are demanded to ascertain that the management is indeed respecting the stated purpose are credible enough (Ebrahim et al., 2014; Kurland, 2017). In particular, Ebrahim et al. suggest that the requirement of a self-assessment against a third-party standard and of an annual report, which do not involve the stakeholders that are directly affected by the stated purpose, raise a question of "downward accountability", i.e. the fact that these stakeholders remain ill-informed about the actual practices of the company and cannot help it improve. Overall, however, we still lack of thorough empirical studies to see the new governance mechanisms proposed by



PPCs in action, which remains necessary to ascertain whether promises will be met by these new statutes.

In any case, these papers do not seek to investigate whether these new corporate forms are appropriate for actual responsible *innovation* beyond social responsibility. Yet, a number of these companies display particularly innovative purposes: “to design the next generation of artificial intelligence” for Vicarious in California, “to enable clean and safe access to space” for D-Orbit in Italy, or “to increase productivity in life science R&D while also reducing its impact on living systems and the environment” for BioCellion in the state of Washington. In other words, is this new governance model capable of overcoming some of the specific challenges that we raised in the previous section? The aim of this paper is to investigate this question.

### **3. RESEARCH SETTING: A LONGITUDINAL CASE STUDY**

#### **3.1. CHOICE OF THE CASE**

To investigate this question, we conducted a longitudinal case study (Eisenhardt & Graebner, 2007; Yin, 2009) with a French firm which has adopted the new Profit-with-Purpose corporate form during the observation period and pursues the innovative purpose of providing new efficient solutions to fight malnutrition in Southern countries.

France is a great context to study the question of inventions of corporate governance for responsible innovation because it is one of the countries which has recently launched a reflection at the governmental level on the adoption of a PPC legal form within corporate law. This reflection follows a period of experimentation during which several firms have changed their articles of incorporation to test the purpose-driven statute, without being constrained by specific legal prescription. As such, this firm cannot be deemed as having adopted a legal purpose-driven form as French corporate law had not changed by the time, but formally, it has undergone all the necessary changes associated with this legal form, in addition to several innovations that exceed the currently existing statutes. It is this capacity for governance innovation that makes of this company an appropriate case for this research.

In addition, this company is renowned in its field (humanitarian action against malnutrition) for having provided radical innovations which have changed the way the main actors of the sector exert their activities. Because of these major innovations, which mostly occurred between 1993 and 2005, the company had in 2011 a market share of around 95% with a total revenue of about 100 million euros and about 150 employees. Its recurring and main customers include non-

governmental and international organizations which are good clues that the innovations provided by the company indeed respected the criteria of “responsible” innovations, if not more specifically of social innovations. It should however be noted that the company is not a social business in the sense that profit distribution was not capped, and governance did not include features such as stakeholder representation or democracy.

Past innovations not being a consistent indicator of present capacity for invention, the company’s executives and chairman were confronted in 2011 with the issue of ensuring its future innovation capability and began taking specific measures to increase the chance that the company ever generates similar radical innovations to provide again significant advances in the field of action against malnutrition. This is why a reflection on the governance means that would foster the firm’s innovation was launched at that time.

### **3.2. CONTEXT OF THE RESEARCH AND DATA COLLECTION**

This longitudinal study covers a period of time from October 2011 to May 2018. The company was founded in 1986 and its founder had from the beginning imprinted a social orientation by formulating what was called a “mandate” that was taught to every new company employee. However, this orientation had never been implemented in a formal way in the company’s documents and was therefore not a legal commitment.

The collaboration with researchers was launched in 2011, first to investigate the difficulties associated to the recent launch of new products, which the firm’s top management believed had strong innovative potential, but partially failed. Several data collections in the form of archival documents analysis, access to the set of products, field notes on the occasion of visits and workshops organized in the company, and about fifteen open-ended interviews with the firm’s executives and researchers as well as with one external partner, enabled the researchers to gain a fine-grained understanding of the company’s environment, products, innovations and governance. Although it was a family-owned company, issues arose at that time around a potential opening of the shareholding structure to external capital, the possibility to transmit the company to a non-family CEO, as well as the credibility of the firm’s commitment against malnutrition for its main humanitarian partners. All of these potential issues strongly interacted with the increasing doubt casted on the firm’s innovation capability by the looming departure of its founder, who had been credited with most of the past company’s innovations.

In 2013, the family decided to launch a reflection on the change of the corporate governance structure, to tackle these issues, i.e. protect the firm's innovation capabilities and create a long-term commitment towards its purpose – or “mandate” – to maintain credibility with its main partners as well as the internal motivation of employees. The process of change took one and a half year, during which several versions of the new company bylaws, introducing its purpose as well as several governance innovations, were drafted. The authors have had privileged access to this design phase through the organization of regular meetings (three formal meetings in the first two months of the period, followed by regular informal discussions in the two following years) to review the advancement of the shareholders' reflection and help them model the intended consequences of these changes on the company's functioning.

In 2015, the bylaws were changed to integrate the formal purpose of the company, in the form a one-page list of commitments, as well as the creation of a new governance committee dedicated to follow the appropriate fulfilment of this purpose by the company, which was set to meet at least once a year before the shareholders' general meeting. From 2015 to 2018, one of the authors participated to each of the meetings of this newly created governance committee, which gave direct access to the main challenges of governance raised by these changes, and to the ways these challenges were progressively resolved. The material was therefore composed of field notes during these meetings, annual reports written and sent to shareholders after each of these meetings, as well as informal talks and lunches with the company's shareholders, top executives and the other members of this governance committee.

### **3.3. DATA ANALYSIS**

As the proximity to the firm's executives and shareholders during a long period of time (about 7 years) raises the risk of judgment bias as well as “death by data asphyxiation” (Pettigrew 1990), we chose to focus for this paper on a rather short list of factual governance innovative features which can be found either in the company's bylaws or in the annual reports, and around which detailed narratives can be provided by the authors to highlight the innovative character, the specific challenges, and the practical functioning of these features. These mechanisms were then assessed against the main recommendations of existing literature for the governance of responsible innovations, namely adaptive, deliberative and reflexive nature, as well as the main expectations for an efficient responsible governance framework highlighted in the literature

review: protection of firm's innovation capability, responsible character of effective innovations and appropriate accountability mechanisms.

#### **4. FINDINGS OF THE CASE STUDY**

##### **4.1. FORMULATION OF THE PURPOSE: ENGAGEMENTS TO STAKEHOLDERS AND COMMITMENT IN THE UNKNOWN**

The main distinctive characteristic of Profit-with-Purpose corporations is the introduction of a purpose different from profit maximization into the bylaws of the company. Our case does not make exception to this rule and it changed its bylaws in 2015 to include a specific formulation of this purpose. For the most diffused form of PPC, the *benefit corporation*, the suggested writing is very broad: directors should pay attention to the interests of a broad number of stakeholders, including employees, customers, the community and the environment. The first surprising feature of our case study is the time that was taken by shareholders to converge on an appropriate formulation, as well as the length of this writing.

Although the “mandate” (expressed in very broad manner as “to feed children”) was known by a large part of the employees, as confirmed by our interviews with at least 15 of them in 2013, and had been stabilized for almost 25 years, it surprisingly took more than one and a half year for the founding family to choose the final formulation of the purpose. Instead of three simple words, the final form introduced in the statutes takes the form of a one-pager (22 lines) composed of a one-sentence main objective followed by 9 specific “commitments”.

The main objective is expressed as “providing efficient propositions to issues of nutrition and malnutrition”. As such, it sums up very shortly the same idea as the initial “mandate” although in a more precise way. It was decided rather quickly. However, to make sure that this represents a true and credible commitment, it was deemed necessary to go beyond the usual “mission statement” form, and to specify how “efficiency” should be understood and to whom this commitment was made. Therefore, some of the 9 commitments explicitly addresses internal or external stakeholders: humanitarian actors, providers and distributors, employees, creditors, or the civil society for instance. Each time, the sentence starts with “the company commits to”, in order to engage its responsibility in fulfilling the corresponding purposes. The mentioned stakeholders were chosen as particularly representative and at the core of the company's sector and main purpose.

The main intriguing feature, however, is the formulation of commitments towards innovative activities, that aim at going beyond what is already known to fulfil the purpose at a given time. This takes several forms. First, some of the nine commitments are explicitly directed towards innovation capabilities, for instance: “developing [the company’s] activities by commercializing products or services which provide improvements and stem from the company’s research carried out by its own or in collaboration”. The importance of carrying out independent research is recalled in a following commitment. Other ones insist on following “pioneering strategies”, exploring “knowledge and competencies beyond those existing in the company”, encouraging “risk-taking”, etc. Second, it should be noted that the main objective does not mention “products or services” but “efficient propositions”, which also calls to a very broad innovation field in which the company’s activity could take various forms – one could imagine for instance lobbying or political action, consultancy and training, federation of collective action at the innovation ecosystem level, etc.

This feature epitomizes a category of purposes that can be found in some PPCs that target innovative action to fulfil their ambition. Consistently with the stakes of responsible innovation, it does not only provide usual contracts on known activities or targeted return (carbon footprint, employees’ welfare...), but also what we suggest to a *commitment in the unknown*, i.e. a commitment to develop new knowledge and new concepts that require innovation capabilities, research and development and risk-taking, to invent solutions that have the potential to disrupt the ways one usually thinks about when considering fulfilling the stated purpose.

#### **4.2. GOVERNANCE COMMITTEE: ACCOUNTABILITY AND EXPERTISE FOR RISK ASSESSMENT**

The shareholders then paid careful attention to the governance means to be developed to ensure that this purpose indeed shaped the company’s activities and was regularly accounted for, especially by the top executives. To do so, the main mechanism was the creation of a special governance committee, different from existing boards, and dedicated to evaluating if the company was indeed following its purpose. This committee was set up in the bylaws with the requirement to meet at least once a year, and to provide a report which would serve as a base for the annual ordinary shareholders’ general assembly.

To be able to address significant and sensitive issues, the committee had to be composed of people having enough knowledge of the sector, as well as having access to the potential

responsibility issues that could emerge from the firm's activity. To do so, it was decided that the accumulated expertise of the members represented a significant part of the topics covered by the company's commitments: for instance, humanitarian action, represented in the first years by a former president of an international NGO, political and financial support to local development, employees' welfare and development, innovation capabilities, and local entrepreneurship and link with local communities. The members of the committee had to respect both a condition of independence (inexistence of conflicts of interest with the company) and a good enough knowledge of the company. It was considered the responsibility of the top executives to provide accurate and truthful information in advance of the scheduled meetings for the committee to work, but of the committee's members to ask for any additional information, including by their own means, to be able to assess the company's activity and strategy.

To lead the assessment, the main objective followed by the nine commitments written in the bylaws were systematically used as a grid, which gave rise to recurring exchanges about the appropriate qualitative and quantitative indicators used to control for mission drift or responsibility issues. Over the years, it was considered that diversity of lenses was preferable to a short selection of indicators to be able to address the wide variety of potential risks that could threaten the company's ability to fulfil its purpose. Most importantly, and consistently with the innovative ambition, it was considered that the role of the committee was less to assess the *ex post* impacts of the firm's activity during the year (executives had for instance already been following for years the number of children that had got out of life threatening conditions thanks to their products) than to consider the *ex-ante* appropriateness of strategic choices (relevance of research partnerships and topics, production capacity, populations targeted...) in regard to the foreseen ability of the company to face potential risks and drifts or to be able to keep the pace of scientific and political stakes in the malnutrition sector. This is also very original, in the sense that it requires a very high level of varied expertise from the committee members as well as a very high degree of confidentiality of the exchanges, while decreasing the ability to "objectivate" the evaluation (compared with fixed indicators). It was decided that the goal to develop and protect the firm's innovation capabilities justified this original orientation.

#### **4.3. COMMITTEE DELIBERATIONS: FORESIGHT, VIGILANCE, AND EXPLORATION**

In practice, from 2015 to 2018, the committee met once a year, for about 4 hours each time. The meetings were informed with a report sent in advance by the CEO, which led most of the committee members to send some additional questions to be tackled during the meeting. Typical meetings were composed of a substantiated presentation of the top executives on topics chosen by the committee members, followed by exchanges between members and with these executives on emerging sensitive topics which were thought to be relevant as potential risks for the company's ability to fulfil its purpose.

The confidentiality of exchanges prevents the authors from illustrating the deliberations with precise examples. We however suggest a classification of the recurring topics found in the annual reports. A first category of issues discussed during the committee's deliberations is the risks associated with external partnerships (providers, distributors, competitors, universities, local authorities, ...). In these issues, both opposite relational risks are considered: the risk to work with partners that could jeopardize the company's engagement towards its purpose, for instance because providers or distributors have negative impacts against which the firm has an engagement; and the risk to create direct negative impacts on external stakeholders, for instance because of collateral consequences of chosen strategies on public action, beneficiaries' health, etc. The recurrence of the reasoning used, which amounts to evaluate the risks of potential impacts of current strategies on external parties, suggests that committee's members refer to an implicit norm of good business behaviour, which we suggest calling a "*vigilance*" norm.

A second category of issues relate to the consequences of the firm's activity on the internal organization, capabilities and stakeholders (employees mostly). These issues might range from how to pass on the commitments in the bylaws to strategic areas and prescriptive goals for managers and employees, to the potential risks or structural benefits on employees' welfare raised by innovative strategies to fulfil the purpose. Here, the reasoning used, which is to assess the potential consequences of the firm's innovative strategies on internal stakeholders, leads us to suggest a "*foresight*" norm.

Finally, a third category of issues directly relate to the innovation capability of the firms, as well as the radical or exploratory character of considered projects during the year and for the next months. The reasoning used is definitely conceptive here, meaning that what is at stake is the quality of exploration proposed by the executives to consider the potential positive impacts that the firm could target when fulfilling its purpose. The question is therefore not "what are the foreseeable impacts of chosen strategies" but "what alternative strategies could have been chosen and what is the quality of the firm's exploration of these potential alternatives". The

committee therefore debates of the scientific models used to frame research and development, the collaborations with universities and NGOs on research, the methods used by the innovation department, etc. Here again, high expertise is necessary to complement the firm's exploration, but what is original is that the objective targeted by this part is not only an assessment of past choices, but an enrichment of potential futures, based on the committee's expertise. As such the committee's role is not limited to evaluation, but extends to exploration, knowledge expansion, and strategic suggestion. In any case, however, does the committee substitute to the role of the board or the management, and the committee does not have the legitimacy to make strategic decisions. However, interviews with the shareholders confirmed that his exploration role is very appreciated to help put the strategic choices in a broader context which open new potential alternatives. We suggest calling this category an "*exploration*" norm.

## **5. DISCUSSION: PPC AS A MODEL FOR RESPONSIBLE GOVERNANCE**

Our case study features interesting properties for developing responsible governance practices in front of the specific challenges of responsible innovation. It confirms that a Profit-with-Purpose corporate form can offer a useful vehicle, although numerous adaptations and inventions seem to be necessary to efficiently deal with radically innovative activities compared to the usual CSR approach.

### **5.1. COMBINING LEGAL COMMITMENT WITH DELIBERATIVE GOVERNANCE**

Numerous literature streams have demonstrated the difficulties to ensure proper accountability in governance frameworks that do not aim at maximizing a simple objective function: e.g. agency and stakeholder theories (Hart & Zingales, 2017; Mitchell, Weaver, Agle, Bailey, & Carlson, 2016; Sundaram & Inkpen, 2004) debating about the costs of management monitoring; corporate social responsibility (Karnani, 2011; Laufer, 2003; Stecker, 2016) where the fear of "greenwashing" mirrors the difficulty to escape shareholders' demands; or hybrid organizations (André, 2012; Ebrahim et al., 2014; Kurland, 2017) casting doubt on the efficiency of standard assessment mechanisms in situations of potential mission drifts.

The case of responsible innovation is particularly tricky because neither strict hard law regulation nor voluntary soft law seem to combine the rigor needed for accountability to ensure that companies act indeed in a responsible way and the flexibility required for innovative



situations which regularly escape existing regulatory frameworks (Lee & Petts, 2013; Voegtlin & Scherer, 2017).

Profit-with-Purpose corporate forms with dedicated governance committees provide an innovative answer to this issue. First, it ensures a protection against potential activist shareholders' pressure and mission drift through the legal inscription of the purpose into the bylaws of the company. This way, the existing judicial system is able to protect the necessary directors' and managers' discretion to make responsible decisions even if they locally contradict shareholders' interests. At the same time, by leaving the freedom of defining its own purpose to the corporation, it is a self-commitment, and therefore does not rely on fixed external standards but on the transparent discourse of the corporation itself regarding the responsibility it acknowledges. To do so, it is necessary to go beyond the usual "tagline" used as a mission statement in most companies and requires the definition of precise commitments.

This, however, does not ensure that managers will use their discretion to act in the direction of the purpose, especially when in innovative situations, this direction is uneasy to identify. This is why the literature on responsible governance recommends the use of deliberative, reflexive and participative mechanisms (Dryzek & Pickering, 2017; Lee & Petts, 2013; Scherer & Voegtlin, 2018; Voegtlin & Scherer, 2017) which would ensure flexible reconfigurations of performance expectations, and the variety of expertise that is needed to face unforeseen dilemmas. Our case features such use of a deliberative mechanism through the creation of a governance committee dedicated to assessing whether the company indeed respects the stated purpose. This body indeed enables reflexivity because it involves the top executives in the discussion, which facilitates knowledge exchange on the constraints and stakes of the activity, as well as on new exploratory avenues that could lead to reinterpret the company's strategy. In this way, this deliberative approach overcomes accountability issues related to self-reporting obligations or the use of third-party assessment standards (Ebrahim et al., 2014).

What is original, however, is first that the deliberations are framed by the legally written purpose, which gives a stable and protective framework within which a certain definition of the firm's responsibility is shared or discussed. And second, that this committee is not designed to be representative of the most critical stakeholders which would advocate for their own private interests. Most of the committee members are not "representatives" but experts – for instance the member concerned with employees' welfare is not an employee himself, but a researcher recognised for its knowledge on the topic. This way, expertise is used to explore the different possible consequences of the common purpose rather than to organize an arena of conflicting

interests. Beyond accountability, this committee is therefore also used as a reflexive chamber on the responsibility of possible strategies to be designed.

## **5.2. INNOVATION AS AN ANSWER TO RESPONSIBILITY IN AN UNKNOWN FUTURE**

Most original, however, is not the creation of a governance committee, but the role that is given to innovation in this context. The case suggests an original way to conceptualize the responsibility associated to partly unknown impacts of innovative today's strategies: to protect the capacity of the company and its governance committee to explore a variety of possible futures and preserve the desirability of the chosen strategy while addressing most of the foreseeable risks.

In this model, responsible innovation is protected against the risks of stifling associated to some detrimental governance practices (Kohn, 1999; Lazonick, 2014). Innovation is constitutive in the company's purpose, through the commitment to further research, development, exploration, etc. It is therefore part of the shareholders' and directors' engagement. But it also explicit in the role of the governance committee, through what we identified as an "innovation" norm to follow expansions, explorations and mission changes, as well as the translation of the state purpose in the governance documents into the actual strategic plan of the company.

The use of a "commitment in the unknown" is also very original in the way it enables to reflect regularly not only on the responsibility caused by potential negative impacts but also on the desirability of positive future impacts (Stahl & Sully de Luque, 2014) created by the company's activities. It serves as a guide to review the different designable consequences for various stakeholders both internally and externally. Internally, this functioning resembles what was theorized as a "foresight" norm by Henri Fayol in the 1910s (Hatchuel, 2016), which is to preserve the unity of the collective through sufficient care given to the distribution of positive and negative impacts of innovative strategies. Externally, it resembles the "vigilance" demanded of multinational enterprises by the French law, which requires regular exploration and learning of the value chain beyond the activities of the company itself to prevent negative impacts that could be created by the repercussion of pressures along the supply chain for instance.

Interestingly enough, responsibility in an unknown future would therefore shift from the classical liability associated to measured negative impacts to the requirement of dedicating

enough resources to promote the exploration of various possible futures and of building conceptual purposes that aim at reconciling previously opposite interests through innovation.

### **5.3. BOUNDARY CONDITIONS: IMPLICATIONS FOR MANAGEMENT AND POLICY MAKING**

These original mechanisms are consistent with the history of Profit-with-Purpose Corporate forms, which were for instance supported by the “cleantech” sector in California to promote social and environmental innovation in the context of current challenges (Mac Cormac & Haney, 2012). They however complete the set of rules and devices required by most of the US corporate forms which do not require the creation of a governance committee. This avenue is however considered in the French reflection around the creation of a purpose-driven statute for voluntary companies. As such, our case study has practical implications both for managers and for policy-makers.

First, we must acknowledge that this single case study does not provide a representative view of the functioning of these original governance mechanisms, in different contexts, with different shareholding structures, or with different purposes. In particular, the specificity of the humanitarian sector must be acknowledged. Some of these features are however more and more consistently used in classical corporations, which do not dedicate to philanthropic or humanitarian activities: creation of scientific committees, confidential circles of “critical friends” to advise the CEOs, definition of “purposes” in official documents... all of these features are slowly entering the codes of corporate governance, which illustrate their interest for the issue of responsible innovation beyond social enterprises only.

On the one hand, entrepreneurs and corporate leaders concerned with responsible innovation should therefore take the PPC framework as an adaptive framework which could be completed with supplementary mechanisms ensuring that innovation challenges and deliberative issues are better taken into account. On the other hand, policy makers that are still in the process of considering introducing reforms to facilitate responsible innovation might be interested in these governance innovations, and therefore add requirements regarding the proper formulation of a purpose, as well as the role of a deliberative committee and its strategic impacts.

Proper use of the mechanisms however relies on boundary conditions which are not entirely known for the moment: composition and remuneration of the governance committee, transparency of the evaluation process and its results, quality of access to information and reliability of internal sources, etc. These issues are as many further avenues for researchers,

both for conceptual and empirical research, to build better corporate governance devices based on legal forms which will delineate the responsible governance frameworks of tomorrow.

## 6. REFERENCES

- Aggeri, F. (1999). Environmental policies and innovation: a knowledge-based perspective on cooperative approaches. *Research Policy*, 28(7), 699–717.
- Aguilera, R. V., & Jackson, G. (2003). THE CROSS-NATIONAL DIVERSITY OF CORPORATE GOVERNANCE: DIMENSIONS AND DETERMINANTS. *Academy of Management Review*, 28(3), 447-465 %L 10196772.
- Aguilera, R. V., Rupp, D. E., Williams, C. A., & Ganapathi, J. (2007). Putting the S back in corporate social responsibility: A multilevel theory of social change in organizations. *The Academy of Management Review ARCHIVE*, 32(3), 836–863.
- André, R. (2012). Assessing the Accountability of the Benefit Corporation: Will This New Gray Sector Organization Enhance Corporate Social Responsibility? *Journal of Business Ethics*, 110(1), 133–150. <https://doi.org/10.1007/s10551-012-1254-1>
- Arora, A., Belenzon, S., & Pataconi, A. (2015). *Killing the golden goose? The decline of science in corporate R&D*. National Bureau of Economic Research.
- Banerjee, S. B. (2008). Corporate Social Responsibility: The Good, the Bad and the Ugly. *Critical Sociology*, 34(1), 51–79. <https://doi.org/10.1177/0896920507084623>
- Beck, U. (1992). *Risk society: Towards a new modernity* (Vol. 17). Sage.
- Bessant, J. (2013). Innovation in the twenty-first century. *Responsible Innovation: Managing the Responsible Emergence of Science and Innovation in Society*, 1–25.
- Blok, V., & Lemmens, P. (2015). The emerging concept of responsible innovation. Three reasons why it is questionable and calls for a radical transformation of the concept of innovation. In *Responsible Innovation 2* (pp. 19–35). Springer.
- Clark, W. H. J., & Babson, E. K. (2012). How Benefit Corporations are redefining the purpose of business corporations. *Wm. Mitchell L. Rev.*, 38(2), 817.
- Cropley, D. H., Cropley, A. J., Kaufman, J. C., & Runco, M. A. (2010). *The dark side of creativity*. Cambridge University Press.
- Dewick, P., & Miozzo, M. (2002). Sustainable technologies and the innovation–regulation paradox. *Futures*, 34(9), 823–840. [https://doi.org/10.1016/S0016-3287\(02\)00029-0](https://doi.org/10.1016/S0016-3287(02)00029-0)
- Dryzek, J. S., & Pickering, J. (2017). Deliberation as a catalyst for reflexive environmental governance. *Ecological Economics*, 131, 353–360.
- Ebrahim, A., Battilana, J., & Mair, J. (2014). The governance of social enterprises: Mission drift and accountability challenges in hybrid organizations. *Research in Organizational Behavior*, 34, 81–100.
- Edelman. (2018). *2018 Edelman Trust Barometer*. Retrieved from <https://www.edelman.com/trust-barometer>
- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: opportunities and challenges. *Academy of Management Journal*, 50(1), 25–32.
- Fleming, P., & Jones, M. (2013). *The end of corporate social responsibility: Crisis and critique*. Sage.
- George, G., Howard-Grenville, J., Joshi, A., & Tihanyi, L. (2016). Understanding and tackling societal grand challenges through management research. *Academy of Management Journal*, 59(6), 1880.

- Gillier, T., Hooge, S., & Piat, G. (2015). Framing value management for creative projects: An expansive perspective. *International Journal of Project Management*, 33(4), 947–960.
- Gleadle, P., Parris, S., Shipman, A., & Simonetti, R. (2014). Restructuring and innovation in pharmaceuticals and biotechs: The impact of financialisation. *Critical Perspectives on Accounting*, 25(1), 67–77. <https://doi.org/10.1016/j.cpa.2012.10.003>
- Grant, J. K. (2013). When making money and making a sustainable and societal difference collide: will Benefit Corporations succeed or fail. *Ind. L. Rev.*, 46, 581.
- Gravier, M. J., & Swartz, S. M. (2009). The dark side of innovation: Exploring obsolescence and supply chain evolution for sustainment-dominated systems. *The Journal of High Technology Management Research*, 20(2), 87–102.
- Grinbaum, A., & Groves, C. (2013). What is “responsible” about responsible innovation? Understanding the ethical issues. *Responsible Innovation: Managing the Responsible Emergence of Science and Innovation in Society*, 119–142.
- Hart, O., & Zingales, L. (2017). Companies Should Maximize Shareholder Welfare Not Market Value. *Journal of Law*, 2, 247–274.
- Hatchuel, A. (2016). Henri Fayol et la théorie du chef d’entreprise: une nouvelle figure de l’autorité au tournant du XXe siècle. *Entreprises et Histoire*, (2), 108–120.
- Hellström, T. (2003). Systemic innovation and risk: technology assessment and the challenge of responsible innovation. *Technology in Society*, 25(3), 369–384. [https://doi.org/10.1016/S0160-791X\(03\)00041-1](https://doi.org/10.1016/S0160-791X(03)00041-1)
- Henderson, B. J., & Pearson, N. D. (2011). The dark side of financial innovation: A case study of the pricing of a retail financial product. *Journal of Financial Economics*, 100(2), 227–247.
- Hiller, J. S. (2013). The Benefit Corporation and Corporate Social Responsibility. *Journal of Business Ethics*, 118(2), 287–301. <https://doi.org/10.1007/s10551-012-1580-3>
- Karnani, A. (2011). CSR Stuck in a Logical Trap. *California Management Review*, 53(2), 105–111. Retrieved from bsh.
- Koehn, D. (2016). Why the New Benefit Corporations May Not Prove to Be Truly Socially Beneficial. *Business and Professional Ethics Journal*.
- Kohn, A. (1999). *Punished by rewards: The trouble with gold stars, incentive plans, A’s, praise, and other bribes*. Houghton Mifflin Harcourt.
- Kurland, N. B. (2017). Accountability and the public benefit corporation. *Business Horizons*, 60(4), 519–528. <https://doi.org/10.1016/j.bushor.2017.03.009>
- Laufer, W. S. (2003). Social Accountability and Corporate Greenwashing. *Journal of Business Ethics*, 43(3), 253–261. <https://doi.org/10.1023/A:1022962719299>
- Lazonick, W. (2007). The US stock market and the governance of innovative enterprise. *Industrial and Corporate Change*, 16(6), 983–1035.
- Lazonick, W. (2014). Profits without Prosperity. *Harvard Business Review*, 92(9), 46–55. Retrieved from bsh. (97508288)
- Lee, R. G., & Petts, J. (2013). Adaptive governance for responsible innovation. *Responsible Innovation: Managing the Responsible Emergence of Science and Innovation in Society*, 143–164.
- Levillain, K., Parker, S., Ridley-Duff, R., Segrestin, B., Veldman, J., & Willmott, H. (2018). Protecting long-term commitment: legal and organizational means. In *The Future of Corporate Governance* (Oxford University Press). Driver C. & Thomson G.
- Mac Cormac, S., & Haney, H. (2012). New Corporate Forms : One Viable Solution to Advancing Environmental Sustainability. *Journal of Applied Corporate Finance*, 24(2).
- Margolis, J. D., & Walsh, J. P. (2003). Misery loves companies: Rethinking social initiatives by business. *Administrative Science Quarterly*, 48(2), 268–305.

- Mickels, A. (2009). Beyond corporate social responsibility: Reconciling the ideals of a for-profit corporation with director fiduciary duties in the US and Europe. *Hastings Int'l & Comp. L. Rev.*, 32, 271.
- Mitchell, R. K., Weaver, G. R., Agle, B. R., Bailey, A. D., & Carlson, J. (2016). Stakeholder Agency and Social Welfare: Pluralism and Decision Making in the Multi-Objective Corporation. *Academy of Management Review*, 41(2), 252–275. <https://doi.org/10.5465/amr.2013.0486>
- Muniesa, F., & Lenglet, M. (2013). Responsible innovation in finance: directions and implications. *Responsible Innovation: Managing the Responsible Emergence of Science and Innovation in Society*. Wiley, London, 185–198.
- Ntsondé, J., & Aggeri, F. (2017). Building Responsible Innovation Ecosystem, a new approach for inter-organizational cooperation. *EURAM 2017*.
- Owen, R., Bessant, J., & Heintz, M. (2013). *Responsible innovation: Managing the responsible emergence of science and innovation in society*. John Wiley & Sons.
- Owen, R., Macnaghten, P., & Stilgoe, J. (2012). Responsible research and innovation: From science in society to science for society, with society. *Science and Public Policy*, 39(6), 751–760.
- Prior, C., Cohen, S. R., & Fox, T. (2014). *Profit-with-Purpose Businesses - Subject paper of the Mission Alignment Working Group*. Retrieved from Social Impact Investment Taskforce, G8 website: <http://www.socialimpactinvestment.org/reports/Mission%20Alignment%20WG%20paper%20FINAL.pdf>
- Rawhouser, H., Cummings, M. E., & Crane, A. (2015). Benefit Corporation Legislation and the Emergence of a Social Hybrid Category. *California Management Review*.
- Reiser, D. B. (2011). Benefit Corporations-A Sustainable Form of Organization? *Wake Forest L. Rev.*, 46, 591–867.
- Sandberg, J. (2011). Socially Responsible Investment and Fiduciary Duty: Putting the Freshfields Report into Perspective. *Journal of Business Ethics*, 101(1), 143–162. <https://doi.org/10.1007/s10551-010-0714-8>
- Scherer, A. G., & Palazzo, G. (2007). Toward a political conception of corporate responsibility: business and society seen from a Habermasian perspective. *Academy of Management Review*, 32(4), 1096–1120. Retrieved from bsh.
- Scherer, A. G., & Voegtlin, C. (2018). Corporate Governance for Responsible Innovation: Approaches to Corporate Governance and Their Implications for Sustainable Development. *Academy of Management Perspectives*, (ja).
- Segrestin, B., & Hatchuel, A. (2011). Beyond Agency Theory, a Post-crisis View of Corporate Law. *British Journal of Management*, 22(3), 484–499.
- Sharma, A., & Lacey, N. (2004). Linking Product Development Outcomes to Market Valuation of the Firm: The Case of the U.S. Pharmaceutical Industry. *Journal of Product Innovation Management*, 21(5), 297-308 %U <http://onlinelibrary.wiley.com/doi/10.1111/j.0737-6782.2004.00084.x/abstract>.
- Stahl, G. K., & Sully de Luque, M. (2014). Antecedents of Responsible Leader Behavior: A Research Synthesis, Conceptual Framework, and Agenda for Future Research. *Academy of Management Perspectives*, 28(3), 235–254. <https://doi.org/10.5465/amp.2013.0126>
- Stecker, M. J. (2016). Awash in a Sea of Confusion: Benefit Corporations, Social Enterprise, and the Fear of “Greenwashing.” *Journal of Economic Issues*, 50, 373–381. <https://doi.org/10.1080/00213624.2016.1176481>
- Sundaram, A. K., & Inkpen, A. C. (2004). The Corporate Objective Revisited. *Organization Science*, 15(3), 350–363. <https://doi.org/10.1287/orsc.1040.0068>

Voegtlin, C., & Scherer, A. G. (2017). Responsible innovation and the innovation of responsibility: Governing sustainable development in a globalized world. *Journal of Business Ethics*, 143(2), 227–243.

Yin, R. K. (2009). *Case study research: Design and methods* (Vol. 5). Sage publications, INC.