

Negotiations of accounting figures and the individualizing effects of hierarchical accountability

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ABSTRACT

This paper explores the struggles taking place in the backstage of a decision-making committee to offer a typology of the actions that actors develop to influence a project they work on, but for which they are not the decision makers. Instead of looking on the process of decision-making, we concentrate on people constructing and gathering the information that are latter use by decisions makers. We try to understand how those people are able to influence a decision on which they are not invited to take part of. We take the specific example of an affordable phone to connect rural areas and of two groups of employees who work on the development of the project. The first group wants to stop the project while the second want one to pursue it. We study the actions of each group to influence the production of accounting numbers, which serve as key variable for the decision makers. First, by highlighting the importance of the variety of hierarchical layers within the process of decision making. Second, we show three different categories of actions, all of which related to a different moment of the production of an accounting result, serving as the main indicator to make the decision

Key words: decision making, negotiated order, symbolism interactionism, struggle

INTRODUCTION

Sociological approaches to accounting research have frequently examined interactions around accounting tools (Colignon & Covalleski, 1988) and the use of accounting as a resource for structuring organizations (Macintosh & Scapens, 1990). This literature has therefore studied the role of accounting in the relationship between an organization and individuals (Miller & O'Leary, 1987, 1994a; Roberts, 1991, 2009; Roberts & Scapens, 1985) or groups of individuals (Berry et al., 1985; Colignon & Covalleski, 1988; Dent, 1991; Jorgensen & Messner, 2010; Scapens & Roberts, 1993). Critical accounting researchers within this larger body of literature have demonstrated the individualizing and disciplinary effects of accounting (Graham, 2010; Miller & O'Leary, 1987, 1994a, 1994b), focussing largely on what Roberts (1991) called hierarchical forms of accountability. This has led researchers to question how people understand organizational expectations of them, formulated through accounting objectives (Roberts, 1990; Roberts & Scapens, 1985), both at the level of individual employees (Miller & O'Leary, 1987) and at the managerial level to control the decision making process (Burchell, Clubb, Hopwood, Hughes, & Nahapiet, 1980). These accounting studies have shown that

accounting mediates the distance between the organizational hierarchy and the individual employee, requiring the employee to (re)interpret accountability expectations within his or her own context (Ahrens & Chapman, 2002; Roberts & Scapens, 1985). Accounting tools thus govern employee's behaviours in complex and interactive ways that are quite removed from simple hierarchical domination (Ahrens & Chapman, 2002; Macintosh & Scapens, 1990; Roberts, 1990; Roberts & Scapens, 1985). Prior studies have tended to focus on direct interactions between providers of accounts and accounting devices, studying how accounting systems shape people (Graham, 2010; Miller & O'Leary, 1987, 1994a, 1994b) and, conversely, how people shape accounting systems (Ahrens & Chapman, 2002; Ahrens & Chapman, 2007; Colignon & Covaleski, 1988; Preston, Cooper, & Coombs, 1992; Roberts, 1990; Roberts & Scapens, 1985). In giving attention to hierarchical forms of accountability, researchers have neglected interactions between providers of accounts and others within and without the organization, whose actions might affect the construction of hierarchical accounts. Specifically, prior research has given little attention to the horizontal influence of peers in accountability relationships and to the interactional forms of power in peer relationships that might alter the achievement of accounting objectives by those being held to account. While Roberts (1991) insists on the importance of social forms of accountability, defined as solidarity accounts exchanged between peers to render hierarchical forms of accountability bearable and therefore possible, social forms of accountability are rarely examined within accounting literature. Moreover, with Roberts (1991) portraying social forms of accountability as a kind of solidarity, researchers following in his footsteps have neglected to consider the how *disagreements* between actors influence accountability. They have not, we argue, given sufficient consideration to how conflicts between peers might influence the reinterpretation of accounting tools and information, including how hierarchical expectations are interpreted by employees and how accounts are provided by employees to the organizational hierarchy.

In this article, we explore a specific project management case, taking place in the Malian office of a French multinational, where the decision making process depends on accounting tools and information. We show how social interaction amongst persons with conflicting interests impacts the realization of hierarchical forms of accountability for the actors directly responsible for the production of accounting results. We focus

on interactional and conflicting relationships between groups and individuals who must all work together to produce accounting results that will drive decision making for a specific consumer technology project. Some of the employees are directly accountable to senior management through the accounting devices we examine, but others involved in the project have different objectives. The realization of their own hierarchical accountability is not dependent on these specific accounting results, leading to conflict around accounting objectives and affecting the production of accounting results for the project. We thus seek to provide a more complete understanding of how hierarchical forms of accountability are realized in the social context of organizational life.

To do this, we adopt a symbolic interactionist perspective (Blumer, 1969; Morales & Lambert, 2013), drawing on the concept of negotiated order developed by Strauss (1964, 1993). Strauss argued that the realization of a social order is not simply due to the application of rules imposed by dominant individuals and groups, but is the result of constant interactional negotiation between various actors, more or less powerful in relation to each other. Accordingly, we argue that the production of accounting results through formal accounting systems used to make decisions is influenced by not just by power relations between management and employees, but between actors working at relatively similar positions in the organizational hierarchy, who defend positions and objectives that differ from the “official” ones assigned by senior management.

To explore the influence of these lateral power relations on the production of hierarchical accounts, we conducted a participant observation (Whyte, 1943) in the Malian Business Unit of a French multinational telecommunications company. Our particular focus was the decision making process used during the development phase of a product that was intended to improve the lives of the rural poor in Mali while earning a profit for the company. This product was challenged by managers working in various departments because they disagreed with the idea that a profit-oriented company should implement socially-oriented business programs.

We studied the process of product development, through various phases of the institutionalized process of decision-making in the company. Each phase in this process ends with a decision based on accounting results. These accounting results are used to evaluate individual performances of the team

members developing the project. Our empirical focus in this paper is on the efforts of various actors to construct or obstruct the accounting evidence required in the decision-making process, in order to help or hinder the project. We examine how their actions affect the fulfillment of hierarchical accountability by the managers responsible for achieving the accounting objectives. We show that the actions take place on three levels: the practical process of selling the product (that is, attempts to influence the work of the AntennaPhone team), the way the accounting results were calculated (that is, attempts to influence which revenue components would be included in the accounting results), and the presentation of the accounting results (that is, possibly fraudulent attempts to change the results).

By reintegrating power relations between actors working at a similar hierarchical level into the realization of hierarchical accountability, we first show that hierarchical accountability is negotiated (Strauss, 1993) not only between the hierarchy and the group or individual held accountable, but also through the actions of others in the organization who affect the achievement of their colleagues' objectives. Second, we extend Robert's (1991) theorization of accountability by showing that social accountability within organizations is not only about solidarity, but also about conflict. We show how conflict can exacerbate the individualizing effects of hierarchical accountability, noted by Roberts, through two specific mechanisms: the social exclusion of employees held accountable for specific accounting objectives by their peers who seek to defend their own interests, and the rendering of the achievement of accounting objectives more complex, which can push accountable individuals to try to conform even more to hierarchical expectations. Finally, at a more general level, we show how situational forms of power, emerging from lateral agency exercised by actors in their interactions with peers, combine with more structural forms of power, shaping the actions of the person held accountable.

THEORETICAL FRAMEWORK

In order to explore how individuals working at a similar hierarchical level act on the realization of accounting objectives and thereby shape their colleague's hierarchical accountability towards the organization, we rely on Strauss's (1964, 1993) theory of action and his concept of negotiated order. Our aim is to

contribute to the understanding of hierarchical forms of accountability by integrating a theoretical layer, at the micro-level, to the examination of distant relations, mediated by accounting devices, between hierarchical superiors and those they call to account. To do so, we study interactions between actors in an organizational setting to understand how they negotiate decisions made within the organization and the impact of these negotiations on the provision of hierarchical accounts.

The concept of negotiated order has already been employed in empirical accounting studies (Lapsley, Midwinter, Nambiar, & Steccolini, 2011; Rahaman & Lawrence, 2001). However, in contradistinction to these studies, we aim not just to understand empirical situations of negotiation, but to use a symbolic interactionist ontology to enrich the understanding of accountability in relation to decision making. Strauss's theoretical roots are in symbolic interactionism (Blumer, 1969; Strauss, 1964, 1993), where actions of individuals and interactions between individuals are the unit of analysis (Morales & Lambert, 2013; Strauss, 1993). This approach enables micro-level analysis of organizational processes and thus renders possible the narration of various actors' interactional influences. Interactions are understood as the site where social meaning emerges (Blumer, 1969; Strauss, 1993). Individuals with differing backgrounds and experiences have different perceptions of any given situation (Goffman, 1959). Interaction with others will inform each individual's specific understanding of the situation (Blumer, 1969). When the individuals encounter each other, they will question and adjust again and again the understanding of the situation that they share. The production of meaning is therefore constantly challenged through time and through new encounters (Blumer, 1969). Because social situations and their meanings are constantly redefined, change is constant (Dewey, 1903; Strauss, 1993). Social stability, as it appears at a broader level, is just an impression emerging from this ongoing process of action and negotiation, a process that can only be captured at the micro level.

This interactionist perspective helps to increase our understanding of the formation of hierarchical accounts and accountability, through the study of interactions between various actors involved in the production of accounting results,¹ simultaneously fulfilling hierarchical objectives and shaping individuals

¹ Accounting literature has frequently drawn on Giddens (1993), who himself draws on symbolic interactionism and especially on Goffman. What interests these accounting scholars seems primarily to be the relationship between structure

(Miller & O'Leary, 1987; Roberts, 1991). The literature examines not only the relationship between the individual and the organizational hierarchy (Roberts & Scapens, 1985), but the role of colleagues who interact with the person who is held to account. The concept of negotiated order helps us to understand how individuals working together might influence each other and therefore exercise power through their interactions.

Within the negotiated order perspective, structural forms of power are not ignored (Dokko, Nigam, & Rosenkopf, 2012; Walker, 2008), but are considered to be embedded within and enacted through social interactions (Strauss, 1993). Reciprocally, social interactions are understood to be shaped by structural forms of power (Goffman, 1961; Strauss, 1993; Walker, 2008). Looking at interactions between individuals thus enables us to study the mobilisation of structural power, including hierarchical forms of accountability (Roberts, 1991). For example, management, by assigning specific missions and expecting specific results of individuals and teams, will determine the accounting objectives of a team. By determining these objectives, the organizational hierarchy seeks to constrain, albeit in diverse and diffuse ways, the actions of the employees. Interactions between employees will reflect the coercion attempted by the hierarchy, since each of them interacts not completely freely, but governed by various hierarchical requirements. The interactions will, conversely, change the interpretation employees give to hierarchical requirements. The context in which these interactions take place is thus persistent, and therefore structural.

Strauss (1993) argues that actors working together belong to numerous and different social worlds. They therefore develop differing interests that influence their ways of acting and interacting. Thus, each individual working within a company is influenced by other authorities than the organizational hierarchy, and participates in interactions with other people in various other contexts to fix and refix the meaning of those contexts. All of this will uniquely shape his actions in the organizational context, and his interactions with his colleagues (Arrington & Francis, 1993; Messner, 2009). Despite their differences, people must coordinate their behaviours in order to work together, whatever their interests and their individual understandings of the situation. Working together therefore requires constant negotiation to enable each actor to adapt his

(represented by accounting tools) and agency, through which people act on the structures. Interactions between actors are seldom explicitly considered, even if they are implicit in structuration theory.

understanding and his interests to those of the people he works with. Strauss calls this social process the negotiated order, arguing that the visible order at a more macro level results from these micro level social interactional negotiations.

Strauss (1964) studied psychiatric hospital services. He explained that even if every group within a hospital shares a common goal – making the patient feels better – everyone in some extent has a different definition of what “feeling better” means and how to achieve it. Similarly, in a profit-oriented organization, everyone knows that they have been hired to contribute more and less directly to the realization of the financial objectives of the company. However, both this common goal and the path to it are interpreted differently by each actor, depending on his position, his background and past experiences, his objectives, and his personal interests (Crozier & Friedberg, 1977). Nonetheless, all actors have to combine their different understandings and interests in order to work together, developing shared meaning through their interactions over time (Strauss, 1993). Each actor therefore follows his own convictions and interests on the one hand, but on the other hand manages his work in relation to the actions of others actors. Actors will try to influence the behaviours of others through their actions, in order to defend their understanding of the shared goal and to defend their personal interests, and will be influenced by the actions of others in return. This ongoing negotiation, leading to the production of an order that is acceptable or at least tolerable to each actor, is more or less chaotic. The process depends on the degree of variation in interests and the proximity of past experiences of the different actors involved.

In order to direct behaviours within organizations and reduce the chaotic aspects of the ordering process, hierarchical authorities implement processes and rules (Strauss, 1964, 1993), such as management accounting systems that both smooth and objectify the organization’s decision making processes. Such accounting devices have been described as hierarchical tools that not only discipline employees’ actions but also individualize them, in order to limited collective action (Miller & O’Leary, 1994a). However, social interaction scholars have demonstrated that even within totalitarian institutions that focus on producing disciplined subjects, individuals are able to negotiate personal spaces of privacy where they can regain some freedom and organize themselves collectively (Goffman, 1961; Strauss, 1993; Walker, 2008).

For Strauss (1993), the determination of the meaning of rules and their integration into the daily work of actors is all part of the negotiation of the social order. Rules will be reinterpreted individually, but also collectively through interactions and negotiations, and thus be influenced and perhaps manipulated by various actors. By interacting with each other, arguing, even coercing each other, actors will act to define a negotiated way of being and understanding together, operated through situational power emerging from the actions of the various actors. Each individual's ability to negotiate is therefore conditioned in two ways: by structural power (e.g., embedded within accounting devices) and by other actors who will try to influence the individual in order to achieve their aims.

With these insights, Strauss helps us to grasp the influence of situational power, emerging from interactions intended, for instance, to do or undo accounting results that are used to drive decision making and assess individual performances. Examining social interactions leading to negotiated order therefore helps us to reintegrate collective and interpersonal effects into our understanding of the production of hierarchical accountability (Roberts, 1991).

Pursuing these lines of thought, the aim of this article is to study interactions between individuals, mainly those who work together, and the influences of these interactions over time on hierarchical forms of accountability, and to understand how social interactions come together with hierarchical accountability to achieve a negotiated social order. Taking accounting devices, systems and objectives as given to individual employees for the purposes of establishing hierarchical order (that is, setting aside a broader discussion of how these accounting tools were determined within the organization), we will study chains of actions and interactions of actors around the production of accounting results. We will examine how actors influence, act on, and manipulate the production of accounting results by others within the organization, in order to reach their own goals.

METHODOLOGY

Choice of empirical case

In order to study how people act and interact around the realization of accounting objectives, we looked for a situation through which the process of negotiation of the social order was observable. While collecting data in Malian Business Unit of Firm H, a French multinational company, we discovered a situation (Becker, 1998; Morales & Lambert, 2013) that was highly contentious among local managers, leading them to develop various and visible actions of negotiation, manipulation and coercion. A subunit of the Malian Business Unit was starting a new program targeted at the rural consumer market. We refer to this project as AntennaPhone, because it allowed rural consumers to connect to the distant cellular phone network through a single shared phone attached to a high powered antenna. The phone and antenna were operated by a local entrepreneur in each village. Although this program was profit oriented and was evaluated on traditional business criteria, it was identified as a development programs because of its social purpose of bringing communication to poor remote regions. Because of this association with “nonprofit” work, some managers working for the Malian Business Unit considered the project inappropriate. Two opposing groups of managers therefore formed. The one developing the project sought to demonstrate that the project was profitable. The other sought to establish that it was not. Demonstrating the profitability of the project was necessary for the first group, if they were to fulfill their accountability to the organizational hierarchy. This is the situation that appeared to us as a good empirical case for studying how interactions between actors holding conflicting goals and opinions can shape the production of accountability.

Although this situation can be understood at a broader level as a situation of resistance to change related to the introduction of a new project, what interests us here is the chain of actions by members of the two opposing groups in order to pursue or thwart the achievement of accounting objectives. We specifically want to see how these interactions influenced the production of hierarchical accountability. Consequently, we will not discuss how this chaotic situation is grounded in particular cultural, historical and political contexts. That is, while these contextual features would be of interest in understanding other implications of this case, they are not relevant to our specific inquiry.

Presentation of the empirical case

Firm H is a large, publicly traded, multinational corporation specializing in telecommunication services. It operates mainly in Europe, Africa and the Middle East. An agreement was reached between the CSR department of Firm H at the corporate level and the lead author whereby she was asked to help the company better understand the impact of its poverty-reduction business programs on the poor, and to develop a reporting tool for highlighting the impact of the company on poverty reduction. That is why she was sent twice to the Malian Business Unit to study AntennaPhone, a product that has been identified by the CSR team as fitting the study criteria. Firm H was planning to develop other products targeting poor consumers, but at the time of the study, AntennaPhone was the only one already under development. Each of the two trips to Mali was two weeks long. They took place in May and November 2011. In exchange for producing the required deliverables, the researcher was permitted to investigate other topics during her trips, as her investigations led her. The trips took place during the product development phase for AntennaPhone, which lasted from May 2011 to July 2012.

Description of the AntennaPhone project

AntennaPhone is a community phone for connecting villages located outside, but not further than 60 km away from, the boundaries of the cell phone network. The target market is therefore the rural population in remote villages, who are usually poorer than the urban population. The product features a desk-top phone containing a SIM card. The SIM card is blocked within the phone in such a way that no one is supposed to remove it. The phone is connected to an antenna up to 5 meters high, which links the phone to the distant cellular network. The phone is operated by a micro-entrepreneur who buys cell phone time from Firm H and resells it at a higher price to the individual villagers who come in to use the phone.

<< Insert Figures 1 & 2 about here >>

The product is considered as participating in the development of the poor population, first by bringing communication to the village and second by bringing employment to micro-entrepreneurs. It is the first project aimed at poor rural consumers developed by the Malian Business Unit.

A manager in the strategic marketing department at corporate headquarters, Jeanne, came up with the AntennaPhone concept in her free time, and the Malian Business Unit decided to take it on. The development of AntennaPhone in Mali was entrusted to Aya, one of the managers responsible for developing new marketing projects. For the market launch, the third phase in the process, four coordinators were recruited to promote AntennaPhone and guide micro-entrepreneurs after they purchased it. Their time was split between rural areas, where they “hit the road” to meet villagers and sell the product, and their office in Bamako, where they followed up with the micro-entrepreneurs via phone.

Aya and the four coordinators were accountable for the success of AntennaPhone. Aya was a fulltime project manager, accountable for other projects besides AntennaPhone. The coordinators were temporary workers whose contracts would be renewed only if AntennaPhone met expectations. Thus, the achievement of the financial objectives for AntennaPhone would determine their employment situation. Aya was their superior only during the project development phase. After the product launch, they were moved to the commercial department, under the supervision of Bintou. At that point, as a project manager, Aya was supposed to withdraw from the project.

The development of AntennaPhone involved the support of three other teams. The research division of the marketing department was supposed to help identify the rural areas where the product could be sold. The commercial department was supposed to provide logistical support by organizing sales trips, and by providing offices, computers and phones to people working on the project. The technical department was supposed to bring its technical expertise to the project and among other things solve any technical issues arising during the sales coordinators’ trips to rural areas. The research division of the marketing department and the sales division of the commercial department were largely opposed to the development of AntennaPhone and constitute the focus of this study.

The diagram below provides a picture of the hierarchical links connecting the various actors after the launch of the product. Blue (darker) backgrounds represent actors who worked for the Malian Business Unit, while green (lighter) ones worked in the corporate headquarters in Paris.

<< Insert Figure 3 about here >>

Data collection

Following the principles of pragmatic sociology (Blumer, 1969), we adopted an inductive approach in the field (Becker, 1998; Morales & Lambert, 2013). Before the first trip to Mali, the main topic of the research was no more defined than “any interesting topic involving management accounting related to for-profit programs serving the poor.” Accordingly, it was decided that the lead researcher would conduct on behalf of the CSR department a series of interviews with AntennaPhone users in rural villages to try to understand how the product impacts their daily lives. However, information collected for this purpose does not serve as data for the present paper. During the trip, the researcher also conducted a series of interviews with employees of the Malian Business Unit, to understand the product and how it was managed. It is these interviews that informs the present paper, supplemented by observations collected by the researcher in a logbook. From the beginning of this series of interviews, conducted in May 2011, a conflict between various groups of managers appeared. During this first trip to Mali, therefore, it was decided to pursue an understanding of this conflict. Further data was collected during the second trip to Mali, and in follow-up interviews after the second trip. Characteristics of all the data are provided in the following section.

Data characteristics

Each interview conducted during the first mission was directed conversationally in order to let the interviewee feel free to express whatever was puzzling him or her (Alvesson, 2003). Specific attention was given to make sure the interviewees would have space to articulate his memory of the story, in order to make the course of actions more apparent to the researcher. The interviews were later transcribed by a professional. Details of these interviews are provided in Table 1.

<< Insert Table 1 about here >>

During both trips to Mali, the lead author collected information informally when she was working in the open office space of the marketing department, as well as during lunches and car journeys. Notes, including verbatim copies of notable parts of conversations, were recorded by the researcher in a logbook.

After each trip to Mali, the lead author continued to exchange information with local Malian managers working on the AntennaPhone project, via emails and social networks.

A concluding series of interviews was conducted nine months after the second trip, to understand the transition to the production phase of AntennaPhone. These interviews involved managers working on the development of AntennaPhone both in Paris and in Bamako, since teams in both locations were working closely together. Details of these interviews are provided in Table 2.

<< Insert Table 2 about here >>

Finally, documents from Firm H explaining the official decision-making process for projects such as AntennaPhone were obtained from managers working at corporate headquarters in Paris. These documents helped situate specific actions within the Business Unit in relation to Firm H's project development expectations.

Influences on data collection

Tension was observed between the team developing AntennaPhone and the rest of the managers working in the Malian Business Unit. When the lead author was at the local Malian headquarters, she noticed that Aya and the four AntennaPhone coordinators were much more friendly with her than other employees. They seemed also to be more open to interviews. After spending some time in the Malian Business Unit, the researcher noticed that when she encountered managers working on other projects, they acted more distant towards her. She suspected that those managers might be thinking she would take the side of the AntennaPhone team in the work she was doing for the corporate office, because of the time she spent with AntennaPhone employees. She eventually learned that Jeanne, the originator of AntennaPhone who worked at corporate headquarters, had presented the visit of the researcher to Mali as a way for corporate headquarters to learn about what appeared to be a problematic and unfair situation for AntennaPhone employees. It was therefore in the interest of employees working on AntennaPhone to provide their side of the story openly to the researcher.

We regard the data collected from AntennaPhone employees as much more useful than data collected from the other employees, since it was provided with much more openness and attention to detail, but we acknowledge that the story they provided represents mainly their own point of view. This is particularly so with the data from Aya, who as the project manager participated in all stages of the AntennaPhone

development. We tried to take these biases into account as best we could, noting that the AntennaPhone employees felt themselves to be “victims” and that they therefore might present a romanticized view of their actions. In order to minimize the effects of the bias, a process of internal triangulation was developed. When one employee was relating a series of actions involving co-optation or manipulation, the lead researcher would question at least one other employee about that story to crosscheck information.

Data analysis

The data analysis comprises inductive coding of all interviews and participant observation data, plus reflective writing to draw upon theory (Alvesson & Sandberg, 2013). The analysis was performed in three distinct phases.

In the first phase, at the end of each day during the trips to Mali, the lead researcher tried to make sense of her observations (Becker, 1998). By the end of the first trip, three elements emerged. First, AntennaPhone was described as providing positive benefits for its users and seemed profitable. Second, managers, who were not directly responsible for AntennaPhone were quite dubious about the product. Third, employees working on AntennaPhone mentioned actions from their colleagues trying to hamper the development of AntennaPhone by interfering with the achievement of accounting objectives, as will be described below. Transcripts and logbook observations were then encoded following this three-part encoding scheme. Later, reflective memos were written describing each of these items and synthesizing the relevant observations.

Second, through reflection on this memo, it appeared that AntennaPhone managers were having difficulty achieving their objectives because of negative actions by the support teams. We therefore located within transcripts and logbook observations as many actions as possible that sought either to constrain or enable the realization of hierarchical accountability by the AntennaPhone team. Consequently, for each phase of the project “milestone” process (see Figure 4), we tried to identify what were the objectives that must be reached, what were the actions by AntennaPhone employees to fulfill hierarchical expectations, what were the actions by support teams in relation to first set of actions, and finally, what were the actions, if any, taken by AntennaPhone managers to counter their colleagues’ actions. We also tried to identify for each phase in the

project development process who the actors were and how they were related to each other. Finally, we produced a reflective memo recounting actions and interactions leading to the fulfillment and obstruction of the accounting objectives for the AntennaPhone project.

Finally, once we had established the above chain of actions, we tried to locate within all transcripts how each action might impact the managers who were personally accountable for AntennaPhone and its financial results. We thus established two final encoding categories. First, we identified information blaming the AntennaPhone managers for personally failing in their accountability. Second, we identified actions by the AntennaPhone managers to reestablish the conditions necessary for fulfillment of their hierarchical accountability.

EMPIRICAL ANALYSIS

Our empirical analysis explore how groups of individuals, whose interests differ from one person to another, act on the achievement of accounting results that will be used to inform high level decision-making, and through this, affect the hierarchical accountability of those who are held personally responsible for these accounting results. First, we present the tool developed by Firm H to control and objectify the decision making process for projects such as AntennaPhone. Second, we describe the series of actions and interactions taken by various actors around the realization of the AntennaPhone accounting results, which took place within this specific structuring frame of power. Our analysis reveals attempts to influence the final decision on the AntennaPhone project by hampering the achievement of accounting objectives. As noted above, we show that these attempts took place on three levels: the practical process of selling AntennaPhone, the way the accounting results were calculated, and the presentation of the accounting results. In a final part of our analysis, we discuss the consequences of the negotiations around accounting indicators, for the managers who were accountable for achieving the accounting objectives. We show how actions from rival teams intensified the individualizing effects of hierarchical forms of accountability.

The formal decision making process and main accounting indicators

In the following sections, we present the general principles behind the institutionalized tool for project development at Firm H, which served as a structural frame for controlling and objectifying the development of projects such as AntennaPhone. We then explain how profit serves as the main indicator within this tool, and discuss how it is calculate. Finally, we describe how, through each phase of the development process, the AntennaPhone project was supposed to be evaluated.

General principles of the project development tool

At Firm H, any new project taken on by a Business Unit follows an institutionalized “milestone” process, a management tool that lays out the various steps that must be followed in order to move “from idea to profit,” as corporate presentations about the tool put it. The tool encompasses the steps to be followed between the initial conceptual design of a product and the beginning of its full production run. It is intended to objectify the process of decision making in order to limit bias during product development. The process to is composed of four different phases, as shown in the following slide, which was extracted from a general PowerPoint presentation describing the tool. Once a potential product has been conceived and is ready to be tested in the marketplace, the project team must conduct an opportunity study to determine if a market exists. This is followed by the development phase, where the team must construct a detailed business plan. Then comes the market launch, when the product is introduced into the market in a controlled manner to see how it is received. If reception is positive, the product enters the deployment phase, during which production volumes are built up. When deployment has been completed, the product is in full production.

<< Insert Figure 4 about here >>

Each phase of the prescribed process covers marketing, technical and financial aspects. At the end of each phase, the project is evaluated by the Business Unit’s Management Committee, composed of all the Department Directors and the Business Unit Chairman. An assessment is made using a series of indicators of the project’s potential contribution to the global profits of Firm H. These indicators are therefore accounting related. They are compiled from data gathered during the phase being evaluated. On the slide shown in Figure 4, these evaluation moments are represented by an orange “T” and a digit from 0 to 4, signifying a sequential

decision point that must be passed in order to proceed to the next phase. Three possible decisions can be made at each of these moments: pursue the project to the next phase, pursue the project to the next phase subject to certain conditions, or terminate the project.

Estimation of the main indicator to evaluate AntennaPhone: Profit

As explained by two project coordinators in the following logbook extract, during the milestones process, decisions related to projects such as AntennaPhone are based only on “business” criteria. The coordinators explain, with regret, that the social impact of the project on the population is excluded from the assessment:

In the car, Fofana and Ignace grumble against managers working for the Malian Business Unit. Fofana says: ‘They only look at numbers. They only care about that!’ (Field researcher’s logbook, second fieldwork trip, November 2011)

The contribution of AntennaPhone to the overall profit of Firm H is thus the main indicator used to assess the project, both in formal decisions and in informal discussions about the merits of a project.

Project revenue is calculated from two different sources. The first is the sales of AntennaPhone itself. The product is priced at 75,000 FCFA (112€), with a contribution margin for the company of 10,000 FCFA (40€). This low price was justified by the Business Unit due to the fact that micro-entrepreneurs had a very low capacity for investing. The intention was to generate more profits for the company on AntennaPhone voice traffic.

The second source of revenue was the amount of phone credit that micro-entrepreneurs would buy from the company to run their businesses. The consumption of phone credit was broken down into more components than employees working on AntennaPhone had predicted, because micro-entrepreneurs innovated new ways to use the product. These innovations influenced the revenue of AntennaPhone and rendered more complex the calculation of revenue arising from voice traffic.

These innovations can be classified into two different categories. First, there are two different ways to measure the global phone credit consumption of an AntennaPhone. One either assesses roaming charges for the phone using a connector attached to the antenna, which measures the exchange between the relay mast and the antenna, or one assesses data usage for the phone number of the SIM card that was sold with the

phone, and thereby calculates the roaming exchange indirectly. Theoretically, both ways of calculating are supposed to provide the same result. However, according to Aya, they do not, because she observed that villagers had found a way to unblock the original SIM card in the phone, remove it, and plug regular SIM cards into the phone. This would be of interest to the micro-entrepreneur because by doing so, he could use a SIM card with promotional offers (e.g. 50 minutes free) while still charging his clients for the use of the phone. The original SIM cards of AntennaPhone never had promotional offers.

They put a normal SIM card to get promotion like ‘100% additional free credit’ [...] At the level of the Management Committee, we agreed that even if they are not the original SIM card from AntennaPhone, their consumption should be added to the revenue of AntennaPhone. Without an AntennaPhone, this revenue [from the regular SIM Card] would not be realized. (Field researcher’s logbook, conversation with Aya through Phone, January 2012)

If the Business Unit had chosen to assess the roaming via the original SIM card, all voice traffic through the AntennaPhone using regular SIM cards would not have been counted, while an assessment made using the connector on the antenna would count that revenue.

Second, AntennaPhone employees observed that outgoing calls were not the only way for a micro-entrepreneur to realize a profit. In fact, when a micro-entrepreneur ordered some phone credit, he could sell it either to someone using the AntennaPhone or to people who own their own cell phones, and who would use the credit on their own devices whenever they were within range of the cell phone network. In order to assess this part of the revenue, the roaming calculation should be made on recharge orders by the micro-entrepreneurs to the Business Unit, and not on outgoing and incoming calls operated through the product.

From Aya’s perspective, both of these sources of revenue should be allocated to AntennaPhone because it is thanks to AntennaPhone that the Business Unit can sell extra phone credit in these remote zones.

The milestone process applied to AntennaPhone

The milestone process applied to the development of AntennaPhone comprises the four phases described earlier. Each phase aims to provide, one after the other, a more precise picture of the potential contribution of the product to the global profits of Firm H.

First came the opportunity study. It evaluated whether AntennaPhone had sufficient potential to warrant starting the project, based on a profit projection. The profit projection was estimated in terms of the

potential consumption per village, multiplied by the number of village thought to meet the criteria for benefiting from an AntennaPhone. These criteria were having a large base of potential consumers and being located in the zone that could be connected to the cellular network by the antenna. As explained by Jeanne, this profit projection was intended to support the decision of whether to allocate resources to the project or abandon it.

We decide to run the opportunity study and then we go and see what that looks like for the Business Profit to justify resources for the project. (Jeanne, initiator of the AntennaPhone project, Paris, May 2012)

Second was the development phase, which defined the business plan, which included a strategic and financial business model. The components of the model, listed in the following quote, are the criteria that every project manager must submit to the Business Unit for evaluation in order to receive approval to launch a project into the market:

Description of the business model, pricing range, final business plan, accounting impacts, budget (extracted from a Firm H corporate PowerPoint presentation, 2009)

The development phase presented a problem for the AntennaPhone team, because the project targeted poor rural consumers, a potential client base that was unfamiliar to Malian Business Unit employees. In order to collect the information required to produce the accounting estimates, a pilot study was implemented within a sample set of villages to observe the consumption patterns for roaming cell phone traffic. To complete this study, Aya hired an intern, Fofana. The information was gathered and presented in a computer-based “dashboard” that permitted managers to review the data:

We needed to get organized. Since we did not have any idea how villagers consumed, how it was going to happen, we decided to run a pilot study in 20 villages. [...] So we set up a dashboard, which helped us to follow each micro-entrepreneur. (Aya, Project Marketing Director of the Business Unit, May 2011)

To fill in the dashboard, Aya asked the technical department to provide the incoming calls, the outgoing calls, and the length of time it took for the micro-entrepreneur to order a new phone credit package. Knowing the outgoing calls helped predict the potential revenue for the micro-entrepreneurs and assess if the activity would be viable in the long run. It was also used to predict the profit for the Business Unit as a whole, by calculating how much phone credit each micro-entrepreneur would buy, which he would later sell to villagers. These accounting estimations served as primary indicators.

This phase of observations was completed with qualitative studies. Talking regularly to micro-entrepreneurs either by phone or by making visits enabled Aya and Fofana to determine how people used the product. It was in this phase, for example that Aya and Fofana determined that micro-entrepreneurs were switching the original SIM cards with regular ones, during promotional periods, and were selling AntennaPhone recharge credits to individual cellphone owners.

Third was the market launch, wherein the product was rolled out to selected regions of the country, to prove that villagers were willing to buy and use the product. Four coordinators were hired for this task. They were supposed to “hit the road” for three to four weeks, promoting, selling, and installing AntennaPhone. Each of them covered a different region of Mali. During their market launch trip, they were accountable to Aya, as the project had not been moved over to the sales division. The coordinators left with a stock of products and were told to sell them all. The profitability of the project was then evaluated in terms of the first component of revenue, that is, the money made directly by selling the product. This indicator served to evaluate the coordinators’ personal performances, too. If they reached their selling objectives and the project moved to the next phase, they would keep their jobs. Thus, the realization of this objective enabled the realization of hierarchical accountability for the project as a whole as well as for the team members.

Finally came the deployment phase, the last of the process, when production and sales were ramped up to full volume. Its purpose was to demonstrate through multiple trips into the field that the product could be produced and sold in quantity. Accordingly, the coordinators must sell 1000 AntennaPhones by December 2011, over multiple sales trips, to complete the deployment. In addition to the total product sales indicator, additional revenue from the sale of phone credits was included, in order to evaluate the profitability of the project as a whole. For the deployment phase, the coordinators were officially integrated into the sales division. From this point on, their manager was Bintou.

Actions and interactions to support or obstruct the achievement of AntennaPhone accounting objectives

This second empirical section traces the linkages among the actions and interactions of various actors seeking to determine the future of the AntennaPhone project by influencing its accounting results. Our

presentation follows the phases of the milestones process, in order to demonstrate that although the bureaucratic attempts to control the decision-making process through this institutionalized tool, at the same time the negotiations between actors occurred explicitly within this frame imposed by the corporate hierarchy to act on, shape and therefore negotiate the decision beyond institutionalized business criteria.

Opportunity study

The project began in Mali in the fall of 2008, after Jeanne convinced Grégoire, the Marketing Director of the Malian Business Unit, to develop the project. She made a presentation of her proposed project in front of all the marketing directors of African Business Unit, but only Grégoire agreed to develop the AntennaPhone project. Together, Jeanne and Grégoire conducted the opportunity study with the help of a consultancy firm specialising in the poor consumer market. The results of the opportunity study were quite convincing, as reported by Jeanne:

And it is what happened. We ran the study. We got a strong Business Profit, well even super profitable! (Jeanne, initiator of the AntennaPhone project, Paris, May 2012)

Jeanne and Gregoire's next action was to hire someone capable of developing the project. They selected Aya. When she arrived, one of her first jobs was to convince the Management Committee to move the project on to the next phase, passing the gate from the opportunity study to the development phase. She inherited of strong data set from the opportunity study, and among other things a very good estimated profit, which was supposed to convince the committee to give its approval. The presentation went well enough and Aya got the decision she expected, but she felt a lack of enthusiasm from her colleagues on the committee:

I did the presentation and so on, but my feeling was that people were quite sleepy. [...] You know? Everything related to rural, people is, well ... there is not much business to do there ... I remember they even said they were not interested. (Aya, Project Marketing Director of the Business Unit, May 2011)

At this point, actions by Jeanne and Grégoire and later Aya, to conduct the opportunity study and pass the gate to the development phase, seemed not reveal any significant opposition. The numbers constructed through Jeanne and Grégoire's work would normally have convinced the Management Committee to move the project forward, and they did. No particular actions from other employees in the firm had been noticed by employees working on AntennaPhone at this stage in the process.

Development

The development phase started with a study of the villagers' phone consumption habits. As for any other project, Aya asked for the support of the research division, managed by Alphonsine, in finding 20 villages to sample:

Then, we asked the research division to select villages for us. I guess all our problems started from here. (Aya, Project Marketing Director of the Business Unit, May 2011)

As noted by Aya, her request for help was not followed by the expected actions of the research division. Alphonsine and the rest of the research division did provide a list of villages, but the villages did not fit the criteria provided by Aya. As explained below, they were too small to gather enough outgoing or incoming calls:

We had presented the project to them before to enable them to find villages. They found some villages, indeed, but, [...] when we started to implement them, they were villages that had not potential. They were hamlets, [...] there were not enough people in these villages. (Aya, Project Marketing Director of the Business Unit, May 2011)

Because the villages were too small, AntennaPhone would not be able to collect the appropriate information to inform the required sales projections. The action of not providing an appropriate list of villages momentarily blocked the AntennaPhone development, by hampering the AntennaPhone team's ability to collect information to construct the accounting results required to move to the next phase.

To cope with this situation, Aya decided to use her own resources to move on. At the beginning of the development phase, she had visited rural Mali several times and had noticed several villages that appeared suitable for the study. She sent Fofana to each of these villages to find a micro-entrepreneur willing to operate the product. AntennaPhones were installed in these villages free of charge and were operated as a pilot project to help gather information for the required revenue projection.

Once she had this information, Aya once again presented her project in front of the Management Committee. However, because the AntennaPhones had been given to the micro-entrepreneurs in the pilot project without charging for them, various Malian managers on the Management Committee said they were not convinced that the project was financially viable. They doubted villagers would have the money to buy AntennaPhone. They called for the project to be terminated without being launched into the market.

Following this meeting, Jeanne intervened by suggesting to Aya and Grégoire that they conduct a pre-launch of the product. This would allow the AntennaPhone team to gather sales data without an official market launch, effectively bypassing the next decision point. The team therefore decided to try to convince the Management Committee to move straight to the deployment phase by providing it with indicators that would normally be called for at the end of the market launch phase. By this action, they manipulated the institutionalized decision making process:

At some point, I called Aya and Grégoire and I told them: “Well, we didn’t meet any success passing to the next phase. We will play a kind of dirty trick.” So we sold some products while the offer was not completely ready. We showed it was working. In three weeks, Fofana sold 200 AntennaPhones. And we went to launch of the development phase with that. (Jeanne, initiator of the AntennaPhone project, Paris, May 2012)

Thus, they sent Fofana into the field for three weeks to sell as many AntennaPhones as possible. He came back to Bamako after having sold and installed 200 phones, connecting 200 villages to the cell phone network. This additional number was compiled with the other data forecasting the potential profit of the project, and was presented to the Management Committee. The committee decided to approve an official market launch, and moved the project on to the next phase.

Market launch

The first step of the market launch phase was to plan the launch trips. The team began by listing all the villages big enough to warrant an AntennaPhone. For this task, the support of the research division was again needed. Aya met with Alphonsine and presented her very precise vision of how villages should be assessed and listed, in order to ensure none were missed. According to Aya, the meeting went well. She felt that her message got through, and that Alphonsine had agreed to provide her with the information. Aya was expecting that the process would go smoothly:

I wanted them to select villages region by region, and then for each region to dissect circle by circle [“circle” being the administrative division below the region level]. Well this was simple for me [...] and then we would have all eligible villages for each region. And we would do that for the 4th region. And then we could develop a deployment plan. For me, it was the most rigorous way to work. [...]. I had a meeting with Alphonsine, in which I remember... It was the end of the year. We took stock on [the project]. They said, “Yes, okay.” They said, “You will have everything for January.” (Aya, Project Marketing Director of the Business Unit, May 2011)

Nevertheless, the requested information never came through, even though Aya reported that she was asking for it every week. At the beginning, Alphonsine would tell her that it would be delivered. Later,

according to Aya, Alphonsine would act like she did not know about the request, asking Aya to verify that she had sent an official request via email. Because of what was presented by Aya as inactions on the part of the research division, with initial promises and subsequent denials, the project development was momentarily blocked. Aya decided to call upon the support of the corporate hierarchy, and asked Grégoire to intervene in order to obtain the information she needed. Grégoire did intervene, and Alphonsine finally provided a list. However, the number of villages on her list seemed to be very low, as the research division said they had located only 200 villages, while the opportunity study had estimated the potential market at 18,000 villages. This action by the research division was interpreted by Aya as an attempt to delay the project. As reported in the following quote, when Aya asked for explanations, Alphonsine told she had understood, but she did not believe in the potential of this project and consequently she would not spend time on Aya's demand:

I called a meeting. I said: 'I do not understand, there are only 200 [suitable] villages for whole Mali? I think you did not understand the request, so I would like to explain one more time.' Alphonsine answered: 'We gave you only 200? But you should make do with 200 villages, because you have to understand that we have other stuff to do. [...] and when you are done with these 200 villages, which I am doubting, you can come to see me, and if we have time, we will give you more.' (Aya, Project Marketing Director of the Business Unit, May 2011)

Thus, it seems that Alphonsine's refusal to provide the information needed for the project, because she herself considered that the project had very few potential and therefore was not worth the efforts of her team, rendered the achievement of the AntennaPhone team's accounting objectives more difficult. In doing so, Alphonsine did not respect the decision-making process of the firm nor the will of her superior, Grégoire. Her actions were dictated by her own impressions of the project, not by the hierarchical process she was to follow.

It is important to note that in order to conduct a market launch, product managers needed the agreement of the head of the sales division, Hyacinthe. He had the authority to provide the necessary logistical support, including trucks and drivers for any launch trips out into the field:

Hyacinthe, he decides when we go to do the field trips. (Ignace, coordinators, May 2011)

Unfortunately, Hyacinthe did not give priority to the AntennaPhone trips. Aya made several requests for logistical support, but all were delayed because, according to Hyacinthe, no trucks were available. The development of AntennaPhone was thus slowed down by an apparent lack of logistical resources. Thus, at

this juncture, the ability of the AntennaPhone team to move forward with the project was severely limited by Hyacinthe's power to allocate resources.

During the rainy season, the level of regular business activity decreases because violent rains make traveling conditions difficult. Once the rainy season arrived, therefore, Hyacinthe authorised the first AntennaPhone field trips, because then vehicles were available.

However, at this time, Aya was not in favour of conducting any launch trips because she knew that rural villagers would want to hold onto their money to buy seeds for planting, and that they would not therefore be willing to buy AntennaPhones. She also considered that driving conditions would be difficult for any AntennaPhone launch trip, because, in contrast to sales trips to more urbanized areas, where all the driving would be on asphalt, the AntennaPhone coordinators would have to drive on rural tracks damaged by torrential rains. In addition, Aya was not satisfied with the list of villages. Nevertheless, she followed Grégoire's advice, which was that the product should be launched regardless of circumstances, because the project could not be delayed any longer.

The sales division's actions to ensure the product was launched during the rainy season, together with the actions of the research division, which provided a very limited list of villages, influenced the success of the launch trip and hampered the achievement of the AntennaPhone sales objectives, which were needed to help pass the gate to the next phase. Because rural tracks were destroyed by pouring rain and cut off by floods, sometime coordinators were prevented from completing their launch trips:

It was during rainy season. We have been blocked by the rise of a river. The driver told me, "We will get bogged down." (Moussa, coordinator, May 2011)

In addition, the list of 200 villages provided by the research division appeared to be almost useless. Some villages were not where they were indicated, while others corresponded to nomad populations:

In the middle of the rainy season, the coordinators are arriving at some places where there is nothing there. You wonder if it is not sabotage. (Aya, Project Marketing Director of the Business Unit, May 2011)

As a result, the coordinators did not manage to sell many AntennaPhones. They did not achieve their expected results, and returned from their launch trips without the numbers needed to continue the project. As

reported in the following quote, before the Management Committee had made any decision, people started to say that the project needed to be terminated, because it did not have the necessary profit potential:

It didn't work. And people said, "It does not work. We have invested in the project and it does not work." (Aya, Project Marketing Director of the Business Unit, May 2011)

However, Aya judged that the results were not due to the nature of the product and its market nor to a lack of ability or effort on the part of the four coordinators, but due to bad conditions during the launch trips. This was the result of actions by the research and sales divisions, who had acted to manipulate the result of the launch trips. In order to respond to their previous actions, Aya and the four coordinators produced a report listing factual problems encountered during the launch trips and providing solutions. As Aya told the coordinators:

Well, we will write a report on your trips. [...] We will stay factual. We will explain what were the problems you have met and from there we will offer solutions. [...] And then the answer will be an objective answer. (Aya, Project Marketing Director of the Business Unit, May 2011)

This report was presented to Grégoire and later to the Chairman of the Malian Business Unit, in order to annul the results of the first set of trips and launch a second set under more appropriate conditions. Aya won her case and therefore obtained a second chance to demonstrate that accounting targets were achievable:

Finally we got a 'go' to deploy a long launch. The next trips were three weeks long. [...] It was in October [after the end of the rainy season]. (Aya, Project Marketing Director of the Business Unit, May 2011)

This time around, Aya and the coordinators prepared for the trips differently. First, they looked for appropriate villages themselves, to avoid any complications with the research division:

Between the first field trip and the pilot phase, we made several trips. We saw some villages then that fulfilled our conditions. So we decided to rely on those villages. (Aya, Project Marketing Director of the Business Unit, May 2011)

This time, Hyacinthe agreed to the launch trips with very little delay, and weather was not an issue. Each coordinator sold his entire stock of AntennaPhones. Aya was therefore able to present positive results, as explained by a Deputy Marketing Director for the Malian Business Unit:

Well, AntennaPhone, it was the good surprise. [...] It was almost a surprise for everyone when we showed the results. [...] (Innocent, Deputy Marketing Director, May 2011)

The Management Committee members determined that the AntennaPhone market launch was a success. It was therefore decided to deploy AntennaPhone into the market. If deployment was successful, the product would be established as a regular product for the Business Unit.

Deployment

The deployment of the product required more sales trips into the field, in order to demonstrate that it was possible to produce and sell AntennaPhone in high volumes. These trips also demonstrated that the product was not only being sold to micro-entrepreneurs, but that villagers were using it and therefore that the company was selling phone credit in rural areas. Throughout this second part of the deployment phase, the coordinators reported actions by others in the Business Unit who sought to constrain the deployment of the product. These actions emanated mainly from the sales division, to which the four AntennaPhone coordinators now belonged.

As explained by Fofana in the following quote, their sales trips were still not considered important. They would have to wait until their colleagues in the sales division had completed their trips and had brought back the company's vehicles before beginning their own trips. They had to cope with trips being delayed a few days after the date scheduled date, but still had to return the vehicles on time, resulting in shorter sales trips:

[...] You call: "Nope, about the trip ... you can't leave today. You wait until tomorrow, or you wait until the day after tomorrow. There is no truck available." (Fofana, AntennaPhone coordinator, May 2011)

Because their sales trips were not considered a priority, the AntennaPhone coordinators would not obtain the newest vehicles. In addition, in contrast to their colleagues in the sales division, they had to take poor roads to reach rural villages. Those two factors combined to cause mechanical incidents that slowed their progress and therefore made the achievement of their accounting objectives difficult:

We don't get the best trucks, basically. Us, we go to the bushes, where the roads are not in good shape. Most of the time, we've got suspension issues, with the condition of the road. That does not work, you see? (Fofana, AntennaPhone coordinator, May 2011)

Negative tactics from the sales division also included more direct actions. At one point, the four AntennaPhone coordinators were fired by the sales division managers, who decided that the AntennaPhone micro-entrepreneurs did not need to be monitored anymore and some of them could sell AntennaPhone to

other villages. Nobody warned the coordinators. They arrived on a Friday morning to find they no longer had access to their offices:

Koffi tells me the moment all coordinators were almost fired. “They could not access their offices anymore. They could not call.” (Field researcher’s logbook, first fieldwork trip, Mai 2011)

Not being able to call meant they could not provide assistance to the micro-entrepreneurs who were already using the products. When micro-entrepreneurs ran into problems with their installation, they were not typically able to cope with it. Some of them were unable to recharge phone credit and therefore could not sell phone credit until the coordinators were hired again. While the coordinators did get their jobs back, this hiatus reduced the revenue of AntennaPhone during the deployment phase. More importantly for Aya and Jeanne, the actions of the sales division manager might demoralise the coordinators and cause them give up on their job, weakening the project results.

It was Aya, with the help of Grégoire, who got the coordinators hired again. She explained that they were vital to the sustainability of the project. Once again, Aya and Grégoire acted in order to reverse the effects of the previous actions taken by their colleagues.

Overall, the actions by the sales division sought to slow down or temporarily block the deployment of AntennaPhone, or at least render the achievement of its accounting objectives difficult.

Validating the deployment phase

By the middle of the deployment phase, after two sets of sales trips in addition to the launch, the objectives seemed to be reachable. This was explained by Akissi, the Director of the Commercial Department. She also recognized the work accomplished by the coordinators:

Well, now we have around 738 AntennaPhones that are implemented... They [the coordinators] have worked well... The objective is to reach 1,000 products for December. (Akissi, Director of the Commercial Department, May 2011)

At the end of the deployment phase, in December 2011, the coordinators were confident. One of their colleagues, Fortuné, who worked for the research division under the supervision of Alphonsine and was gathering data for the next presentation to the Management Committee, had unofficially informed Aya and the coordinators that all objectives had been reached. The coordinators had fulfilled the accounting objectives determined by the hierarchy, and this despite the counteractions of the research and the sales division teams.

Accordingly, AntennaPhone met conditions that had been set in order to pass to industrialization phase and therefore to become a regular product for the Business Unit:

Around December 15th [2011], Koffi told me that according to someone whom he did not want to name at first, but who end up to be Fortuné, numbers are very good. (Field researcher's logbook, conversation through Facebook, December 2011)

However, the presentation to the Management Committee did not go as expected. As explained by Jeanne below, it seemed that someone had modified numbers to make the project appear unprofitable, in order to stop its further development. The numbers were not those that Fortuné had given surreptitiously to the AntennaPhone team.

I call Jeanne. She is revolted. She says, she will call for another Management Committee and go through with the "real numbers this time." (Field researcher's logbook, conversation through Phone, January 2012)

According to Jeanne and Aya, the numbers had been manipulated in order to influence the decision of including AntennaPhone as a full product of the Business Unit. This must have been done, they said, either by the sales division who provided the basic sales data to the research division, or by the research division that constructed the presentation of the data. When Alphonsine from the research division began the presentation to the Management Committee, Aya realized that the numbers were not those she had received unofficially:

There is someone [from Alphonsine teams] who sent me the results directly [...] and the results we saw [during the Management Committee meeting], they were completely different. (Aya, Project Marketing Director of the Business Unit, July 2012)

The crucial changes in the numbers were related to the two different sources of revenue: the number of sold products and the amount of phone credit bought by micro-entrepreneurs. According to Aya, the number of sold AntennaPhones presented was almost a half of what Akissi mentioned in May. However, Akissi no longer worked for the Malian Business Unit and therefore was not present for this Management Committee meeting to defend the numbers. In comparison to what Aya knew to be the right number, 744 AntennaPhone vanished:

I call Aya. She told me that numbers must have been altered, because in the Management Committee meeting, sales were announced as 432 AntennaPhones, while for Aya, it was 1176. (Field researcher's logbook, conversation by phone, January 2012)

Thus, it appeared that in order to stop the development of AntennaPhone, some actors discounted the numbers of sold product. That is, they appear to have deliberately manipulated this sales figure to influence the decision of the Management Committee.

With respect to the computation of the amount of phone credit sold, the number presented to the Management Committee only included direct AntennaPhone consumption through the SIM card. Credit sold through regular SIM card in order to take advantage of promotions was not included. Moreover, it did not take into account the phone credits sold by the micro-entrepreneur to villagers, who used them in their own phones. All these sales data were supposed to be consolidated into the revenue generated by AntennaPhone for the business unit, but they were not:

Anyway, there is an accounting problem. They forget credit sold directly by micro-entrepreneurs to clients, who would like to use the credit in their own cellphone. (Aya, Project Marketing Director of the Business Unit, July 2012)

To summarize, it seemed that the support teams may have deliberately altered AntennaPhone results in two ways, both of which diminished the contribution of the product to the Business Unit's overall revenue. First, the number of AntennaPhone's sold appeared much lower than what Aya expected. Second, the elements used to calculate the revenue of the project seemed to be incomplete.

These actions to manipulate numbers, reported not just by Aya but also by the coordinators and by Jeanne, were possibly fraudulent, and seemed at the very least to be intended to influence the decision to fully accept AntennaPhone as a Business Unit product. According to the figures presented to Management Committee, AntennaPhone did not appear to have reached its revenue targets. If these numbers were correct, the project should be terminated.

Nevertheless, during the Management Committee meeting, Aya expressed that she was dubious about the accounting numbers that were presented. Alphonsine responded by saying that perhaps the problem might come from a calculation error. The Management Committee therefore decided to postpone their decision on the project. They asked Aya to prepare another presentation with what she thought were the appropriate numbers. She therefore received a chance to reverse the consequences of her colleagues' actions and influence the final decision of the Management Committee. She mobilized the four coordinators in the construction of the next presentation, to prove that the project was viable and that it deserved to be pursued:

Aya says she will ask the technical director to give her the numbers and then she will ask the four coordinators to look at them, at the same time as her. She says: “I want to know where the problem comes from.” (Field researcher’s logbook, conversation with Aya by phone, January 2012)

In July 2012, more than six months after the previous Management Committee meeting, Aya presented what she considered the right numbers. Management Committee validated the passage of AntennaPhone to full production. The product was then considered as a regular product of the Business Unit, with its own budget.

To sum up, because they had some power through providing information or making logistical decisions, the sales divisions managers were able to block or slow down the project and affect the production of the necessary accounting numbers. They used their agency to impact the decision making process. Reacting to these actions by their colleagues, the managers in charge of the AntennaPhone project developed their own actions to counter the negative effects of the support teams. They thus created space to construct the accounting results necessary to pass through the various gates of the decision making process, taking AntennaPhone through to the status of a regular product of the Business Unit. At each gate, the decision to continue the project was negotiated through the actions of two groups having opposite opinions on the type of projects that should be developed by the Malian Business Unit. These negotiations around the achievement of the accounting objectives, defined as the key indicator to move from one phase to another, occur at three different levels: the practical achievement of sales, the calculation of the sales results by taking only certain profit variables into account, and the actual presentation of the accounting results.

Consequences for the individuals accountable for the projects

While accounting results were used to prove the profitability of the project, phase after phase, they also served to assess the individual performance of the four coordinators hired for the AntennaPhone project. The actions of rival teams, identified in the previous section as the research and sales divisions, negatively impacted the coordinators’ ability to demonstrate that they had fulfilled their mandate. After the failure of the first launch, the one that took place during the rainy season and was considered a failure, the coordinators were personally held accountable for the results:

Coordinators haven't got the right numbers. They haven't met their objectives. They were highly criticised. They felt rejected. (Aya, Project Marketing Director of the Business Unit, May 2011)

Thus, even if the reason for the failure of the sales efforts appeared to be a chain of actions taken by rival actors, only those who were directly responsible for reaching the sales targets, and not those who were supposed to create the necessary conditions for them to succeed, were held responsible for the failure. According to Aya, it seemed that within the business Unit, they were blamed for such results and quite isolated from other actors, due to what was presented as their individual performance. They did not demonstrate that the AntennaPhone had a market and therefore failed in their hierarchical accountability. Since they were temporary contractors, they faced the possibility of losing their jobs.

After having obtained permission to conduct a second market launch, under more favourable weather conditions, Aya gathered the coordinators in her office and reminded them of the importance of meeting the objectives, of making sure they sold as many AntennaPhones as possible in order to demonstrate not just that the product had a market, but also that they were qualified for the job they had been hired to do. This is expressed in the following quote:

The only answer we can have, facing such a situation, is a numbers answer, [is to produce] the result and [to show that we] control of the product. (Aya, Project Marketing Director of the Business Unit, May 2011)

Aya was telling the coordinators to work even harder, in order to demonstrate to the rest of the Business Unit that the product was profitable and that they were the right employees, even though the "situation" she alluded to was the actions of their colleagues to hamper the project. She remind them that the only response to actions aiming to destabilize their work was to devote even more energy, to do whatever they were capable of, to reach their objectives. Because the teams who were supposed to support the project were instead acting to confound it, the fulfillment the accounting objectives became even more important.

This discussion seemed to have an impact on coordinators, since when they came back from the next trip, all of them had sold their entire stock of products. To accomplish this, they had evidently spent a lot of energy. Three of them suffered from exhaustion, with two of them ending up in hospital:

Fofana alludes to ends of the trips, especially the launch trip, where Koffi went to the hospital as soon as he came back. Moussa collapsed two days after and Fofana went to hospital a week later. (Field researcher's logbook, first fieldwork trip, May 2011)

Thus, during the mission to develop and launch the project, coordinators' behaviours were shaped by the necessity of reaching the accounting objectives. This devotion to their objectives appeared not to decrease until after the successful market launch. Aya even said that some of her colleagues working in other departments and on other projects told her of having met the four coordinators while they were out on their field trips, describing the coordinators as workaholics. She related one of these incidents as follows:

One of my colleagues from the Purchasing Division went on a business trip to the Sikkasso region. He told me [after he came back], "One evening, around 11:00 PM, I was sitting eating in a cantina and I saw a [Firm H] truck. When the coordinator and the driver got out of the car, they were unrecognizable. They were covered in dust." My colleague told me, "Frankly, there are people who work in our Business Unit, but your guys they work way more, ... they are like aliens." (Aya, Project Marketing Director of the Business Unit, May 2011)

Thus, it appears that the combination of needing to meet hierarchical expectations, as the only way to keep their jobs, and the desire to counteract their colleagues' attempts to destroy their work, combined with double effect to make them achieve their goals. The actions of their colleagues, direct and indirect acts to render the achievement of hierarchically determined accounting objectives more difficult, at the same more made their achievement more desirable because it appeared to be the only way to influence the decision making process and move the project forward, and thereby keep their jobs. This suggests that horizontal forms of power, enacted within the context and framework of hierarchical accountability, can have ambiguous and complex effects on accountability relationships.

DISCUSSION

The preceding analysis gives us an understanding on how peers and collaborators in an organization can act on the realization of an individual's hierarchical accountability. The analysis sheds lights on the micro-interactions and forms of situational power that affect the achievement of accounting objectives determined by the organizational hierarchy, ultimately influence the organization's decision making processes. We have seen how colleagues who were supposed to support a project actively hindered it by interfering with the construction and presentation of hierarchical accounts, using non-cooperation, inappropriate calculations, and possibly even fraud. In order to reestablish the accounting that would prove they were meeting their strategic objectives, the AntennaPhone team and its allies had to find a way to counteract their adversaries' previous

actions. Among their counteractions were those intended to construct even stronger accounting results in order to push the development of the product forward, as well as the early provision of results that would normally be delivered later in the process. This reinforced the hierarchical accountability imposed on the coordinators, the employees whose jobs were at stake, leading them to make extraordinary efforts to achieve the sales targets. This study thus highlights how situational forms of power, emerging from micro-level relationships of agency and featuring both cooperation and interference, combine with structural forms of hierarchical power to act on the individual subject.

Our contributions to accounting literature are threefold. First we have shown that the realization of hierarchical accountability does not only concern actors directly involved in producing accounts, that is, the hierarchical authorities who determine the objectives and the individuals who are meet them (Ahrens & Chapman, 2002; Berry et al., 1985; Dent, 1991; Miller & O'Leary, 1994b; Roberts, 1991, 2009). Because actors do not work in isolation from one another, but are supposed to cooperate in the realisation of organizational goals, they have to adjust their ways of working with each other (Strauss, 1964, 1993). Accordingly, interactions between peers participate in the articulation and operation of hierarchical forms of accountability. Since actors bring different understandings and interests into collaborative processes, they will act in order to influence the work of others, creating a social order in the workplace through interaction, negotiation and manipulation, all of which influence the construction and interpretation of hierarchical accounts. Consequently, the achievement of an accounting objective results from a multi-interactional process, involving many actors working within the organization, in addition to those who demand accounts and those who provide them. From these interactional situations emerge certain forms of power, derived from the diversity of interests and conflicting understandings of the organisation's goals. These situational and interactional forms of power shape the achievement of accounting objectives and the provision of accounts, enriching our understanding of how structural power is exercised by the hierarchical authorities on the individual employee who is called to account (Ahrens & Chapman, 2002; Roberts & Scapens, 1985; Scapens & Roberts, 1993). The complex negotiations around hierarchical accountability are shaped by actors exercising situational forms of power to support and to constrain others at a similar level in the organization. We therefore observe how

agency in interpersonal interactions shapes the disciplinary effects of accounting tools employed within hierarchical accountability relationship.

Second, we have demonstrated that social accountability, the horizontal accountability within organizations that shapes hierarchical accountability, is more complex and conflictual than prior literature has implied. Interactions between colleagues in regards to accountability have been described in terms of solidarity, involving actions of support and understanding between colleagues (Roberts, 1991). The preceding study documents how other forms of interaction can take place between colleagues, with less positive effects. Interactions can have negative impacts due to the fact that individuals have different interests and different understandings of what the organization should be doing. Individuals will therefore act in order to orient the organization's activities toward their own understandings. Consequently, people working within an organization will act to influence and constrain the actions of others who are seeking to provide accounts. In the preceding case, the research and sales divisions acted to interfere with the achievement of accounting objectives and the provision of accounts to the Management Committee. The AntennaPhone employees countered by seeking to establish the conditions to achieve the results and to provide their account of the project. These interactions do not simply render the individualizing effects of hierarchical forms of accountability bearable (Roberts, 1991). They also complicate the possibility of providing accounts. As the results, the accountable person can become even more isolated from other employees of the organization. The individualizing effects of hierarchical accountability can thus be exacerbated.

Third, the preceding case demonstrates that structural forms of power shaping the individual and her behaviour (Graham, 2010; Miller & O'Leary, 1987, 1994a, 1994b) do not vanish as soon as we adopt a micro interactional level of analysis. In fact, the AntennaPhone case highlights that the performance of hierarchical accountability becomes even more important as a result of interactions with other local actors. The case suggests that in order to counter manipulative actions by others, the employees were willing to work longer and harder to reach the accounting objectives, and were willing to adapt their response to hierarchical expectations in order to achieve organizational goals, as they understood them. The effort demanded by the organizational hierarchy, expressed at distance through accounting objectives, became a resource for the

AntennaPhone employees to draw upon as the “only” solution to counter the actions of their adversarial peers. Structural forms of power thus remain operative in situational power relationships. Even though the case shows the potential for agency by these adversaries, the effect of this agency was limited by counteractions that to some extent sidestepped the hierarchically imposed procedures and to some extent reinforced the hierarchically determined expectations. Despite the fact that nonconforming actions were taken by individuals on both sides of the conflict, neither side questioned the global frame within which their actions took place. The actors were willing to do all they could to achieve the objectives and altered their behaviours to this end. Achieve the objectives appears to have been part of the strategy to counteract others who sought to hinder the achievement of hierarchical accounting objectives.

Thus, the structural forms of power exercised by the organizational hierarchy and the situational forms of power exercised by peers come together to reinforce the disciplinary effects of accounting (Miller & O'Leary, 1987, 1994b). Accounting orients the actions of employees, even in situations of internal conflict, around the achievement or non-achievement of accounting objectives. Thus, structural and interactional forms of power render the realization of hierarchical accountability more desirable and reinforce the structural domination of hierarchy over the individual. Hierarchical forms of domination therefore offer individuals a frame in which to orient their own actions, in order to act and counteract upon their peers. The realization of hierarchical forms of accountability is therefore a co-construction emerging from interactional negotiations and manipulations within a frame of structural power.

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FIGURE 1

AntennaPhone, exterior



FIGURE 2

AntennaPhone, interior



FIGURE 3

Organizational chart for the development of AntennaPhone

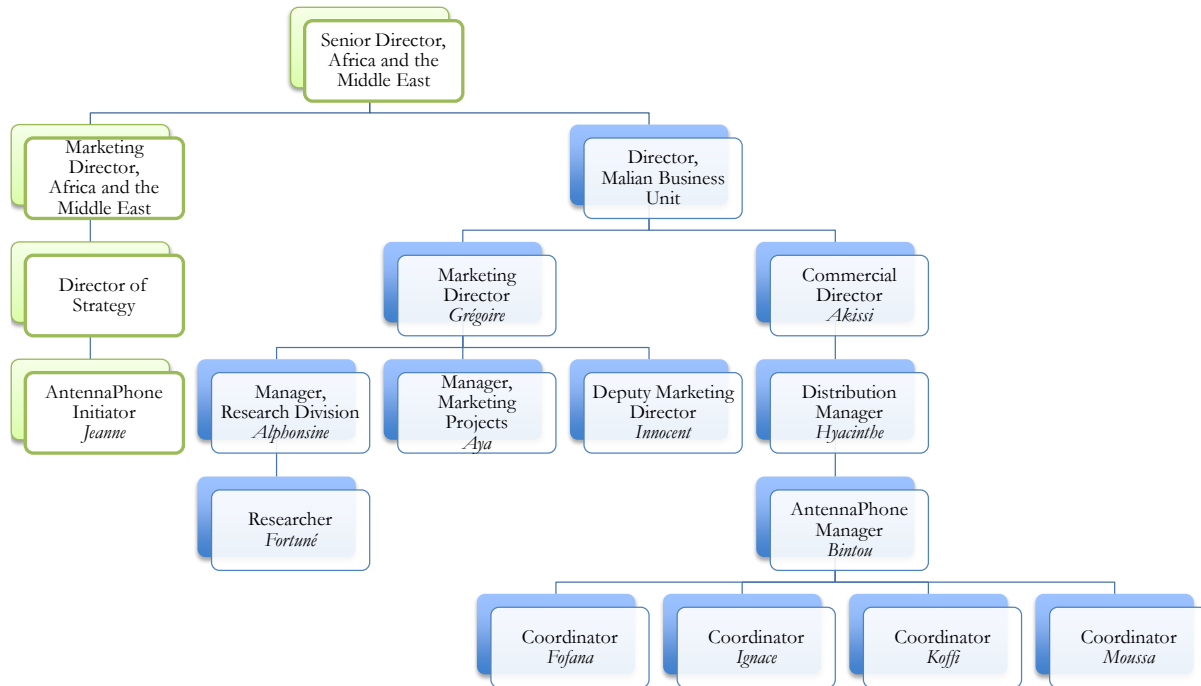


FIGURE 4

Description of the product development process

Adapted from a corporate PowerPoint presentation, 2009

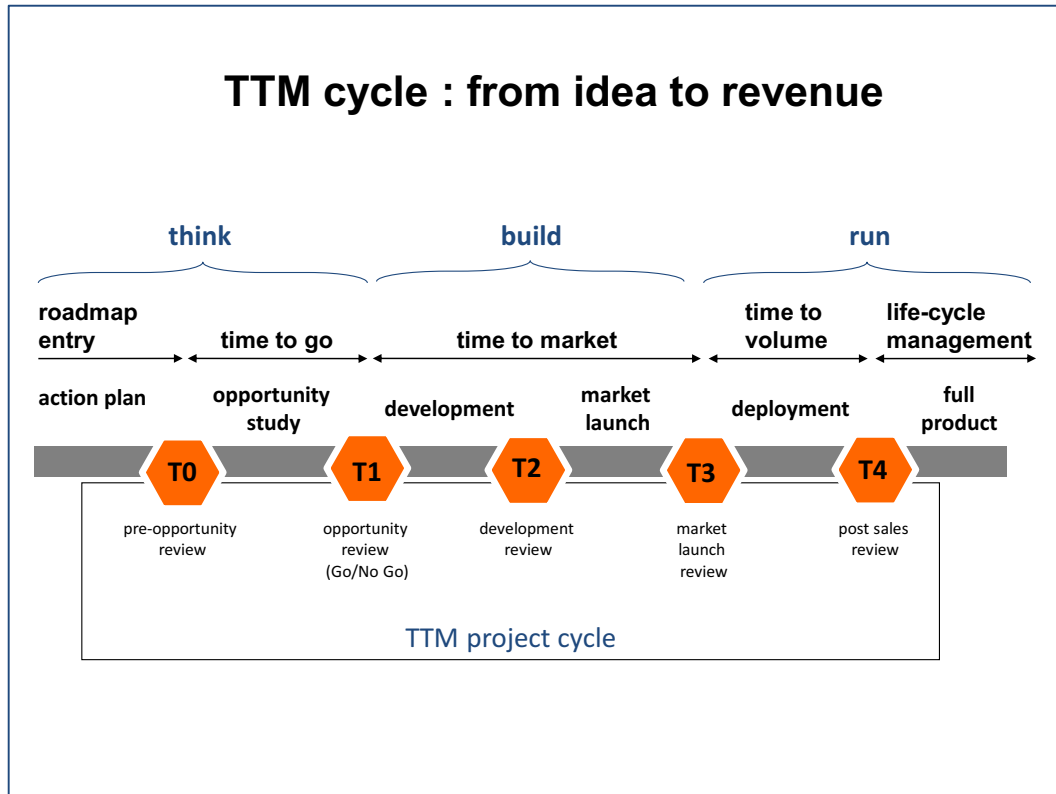


TABLE 1**Interviews conducted in Mali – May 2011**

In chronological order. Grey background indicates employees who worked on the AntennaPhone project.

Names Used in Paper	Position	Interview Details	Duration (h:mm:ss)	Additional Details
Alphonsine	Geo-marketing Director	Individual	0:47:48	
Aya	Project Marketing Director	Individual	3:34:56	
Ignace, Fofana, Koffi, Moussa	Coordinators for AntennaPhone	Group (4 people)	2:27:43	
Bintou	AntennaPhone Chief	Individual	1:01:03	Recording did not work
Innocent	Deputy Marketing Director	Individual	0:44:57	
Akissi	Sales Director	Individual	1:08:07	
	CSR Communications Director	Individual	1:13:31	
	Driver assigned to fieldwork trip for AntennaPhone	Voluntary ²	0:35:07	

² The driver who regularly drove coordinators around during their field visits insisted on telling what he had observed during those missions.

TABLE 2**Interviews conducted at the end of the fieldwork – May/June 2012**

Names Used in Paper	Position	Interview Details	Duration (h:mm:ss)	Additional Details
Aya	Project Marketing Director (BU)	Phone conversation	0:43:26	
Grégoire	Marketing Director (BU)	Phone conversation	0:47:12	
Jeanne	Marketing Projects Director (HQ - Africa)	In person	1:32:05	
	Marketing Director (HQ - Africa)	In person	0:55:07	Recording did not work
	Chairman (BU)	Phone conversation	0:35:07	
	Deputy Manager for West African countries (HQ - Africa)		1:12:23	
	CSR Manager for West African countries (HQ - Africa)		1:11:04	