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Summaries**

Editor
Agnes Zsokà

Foreword from the President

EDAMBA, the **European Doctoral programmes Association in Management and Business Administration** has the mission to support and facilitate cooperation by providing and managing a network to exchange information, disseminate best practices and raise the quality of doctoral education among its members in Europe and beyond. For the past quarter century, **EDAMBA** has helped the participating schools to increase the quality of their Doctoral programmes, as well as to create an environment of excellence with a European perspective, all the while pursuing diversity. In many ways it has proved to be an unparalleled forum of discussion to schools that have a long established tradition of doctoral education and also to those who have recently started this new practice. The ultimate goal is to have the **EDAMBA** network reach as far and wide as possible, while at the same time maintaining the integrity of the various programmes within the network.

Currently EDAMBA has 60 doctoral programmes as members of the Association coming from 24 countries. It is governed by the General Assembly, which elects each year an Executive Committee. The main current activities of the Association are the Annual Meetings, the Research Summer Academy, the Consortium on Doctoral Supervision, the Thesis Competition.

The Annual meetings have become during the years the main platform for discussing common problems and issues, discussing impressive changes in the doctoral landscape and promoting best practices among the Directors of Doctoral programmes in the association. The Summer Academy operating since 1992 with its international dimension has been the privileged forum for dialogue on research paradigms and methodologies while building a strong scholarly network among doctoral students coming from a broad range of programmes and disciplines.

The Winter Academy launched in 2008 aims at improving the quality of doctoral supervision by fostering a dialogue among senior and junior faculty and developing competent supervisors for addressing the shortage of qualified faculty in Business and Management studies in the European Universities and Business Schools. In the steps of the Winter Academy, as a joint initiative between the ELASM and EDAMBA in shaping the new landscape of global doctoral education, EDAMBA runs a Consortium on the importance of supervision in doctoral education. A European Code of Practice for Doctoral Studies in Management and Business has just been published for consultation with our membership and wider community.

The Thesis Competition was first launched in 2003. It aims at distinguishing high-quality doctoral dissertations which have significantly contributed to new knowledge in all areas of business studies and management. The top-3 peer reviewed abstracts are given prizes and the short-list of selected abstracts is published in this EDAMBA journal. With this publication, we hope to contribute to the dissemination of distinguished doctoral dissertations from throughout our network in Europe and worldwide.

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FIRST AWARD

LEGITIMACY IN THE PLURIVERSE **Towards an expanded view on Corporate-Community Relations in the** **Global Forestry Industry**

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Abstract

This thesis critically analyses corporate-community relations in the forestry industry, with a particular focus on cases in the Latin American context. The key conceptual focus is on the legitimacy of corporate activity from the perspective of local communities in the contested field of sustainability. The concept of legitimacy is critically discussed in the light of a pluriversal approach to reality: Instead of assuming that legitimacy can be derived from a universally socially constructed system of shared norms and beliefs, legitimacy in the pluriverse signals that the world is not made up of one single history or worldview but many different ways of knowing, sensing, and being; what is perceived as legitimate depends on the place-based social imaginaries of the communities where it emerges.

INTRODUCTION

The aim of this thesis is to understand how legitimacy is created when different worldviews and understandings of sustainability collide in deliberation processes between forestry industry and local communities in Chile and Uruguay. The research details the limitations in how legitimacy is currently defined and scrutinizes the strand of literature labeled "Political CSR" (Palazzo and Scherer 2006). Through the empirical work, the study shows how legitimacy is conceptualized within the communities in conflict with forestry companies, and how this legitimacy is not formed through deliberation that seeks consensus in the public sphere, as suggested by Habermas cited in the political CSR literature. Instead, this legitimacy emerges in places impacted or threatened by forestry operations is directly dependent on the available narratives, practices and stories in the communities themselves.

To build a frame that sheds light on the otherwise marginalized and excluded, I draw on the work of decolonial scholars (Dussel 2013; Mignolo 2011; see also Blaser 2010; Escobar, 2008), who point out the limits of Eurocentric universalist epistemologies which hides the sacrifices of those suffering from modernity's hidden but constitutive side coloniality (Mignolo 2011). These scholars stress the importance of transcending the hidden assumptions embedded in modernity (Dussel 2013) and advancing the perspective of the occluded (Mignolo 2011). The starting point of this research is thus to understand the perspectives of the excluded and their views on what is considered legitimate in corporate community encounters and whether deliberation solves any problems from them.

Based on the empirical findings, I argue that there is a need to approach legitimacy creation from a 'pluriversal' perspective that is attentive not only the worlds of (modern) corporations but also the place-based realities of the communities. The word pluriverse signals that the world comprises many different worlds with different place-based histories, different worldviews, and different ways of knowing, sensing, and being (Blaser 2010; Mignolo 2011; Escobar 2008). Thus, place is important both as a site of material and cultural reproduction, and legitimacy depends on the relations that exist in place between humans and nonhumans. A pluriversal perspective is not the same as engaging in a debate on pluralism, or pluralist identities (Edward and Willmott 2012; Mouffe 1999), such perspectives fall short of dealing with how different worlds come into being and are sustained through relations and practices in particular locations (Escobar 2008).

I suggest a move towards seeing legitimacy as the capacity to sustain and reproduce life in a community (see Dussel 2013), where the concept of community also includes the territorial boundaries which it inhabits. This also calls for a shift from governance that strives for consensus through deliberation towards the opening up for conversations across differences through 'rooted governance'; processes where communities come together to decide how to organise social life based on their own capacity within particular places. In this setting business entities can be an integral part of the decision-making process, however, it must be the long-term reproduction of life in the community (not shareholder profits) that guides the processes of the conversations.

PRESENTATION OF EMPIRICAL CASES

The first article¹ focuses on media representation and how legitimacy for a pulp mill investment in Chile was constructed in the public sphere (news print) during a time period of 20 years, including the deliberation of the impact assessments before the construction (1995-1998) and the debates that arose after an environmental conflict (2004-2006). Based on newspaper material and in-depth interviews with opponents (conducted in 2012), the study asks: 1) how were the demands of the opponents presented and contested in media texts before the approval of the mill and after the environmental conflict, and (2) how did this

¹ Published as: Ehrnström-Fuentes, M 2015, 'Production of absence through media representation: A case study on legitimacy and deliberation of a pulp mill dispute in southern Chile' *Geoforum*, vol 59, pp. 51-62. DOI: 10.1016/j.geoforum.2014.11.024

media representation contribute to the legitimation of the mill? The findings reveal a systematic delegitimation, or production of absences (de Sousa Santos 2013), of those who did not champion progress, industrialization, and development in the public debate. Based on the findings, I argue that the legitimacy of a decision outcome cannot only be measured based on available discourses in the public sphere, or how well governance schemes are designed to include marginalized voices in the deliberation. What is perceived as legitimate is also highly dependent on whose values and norms are considered rational and valid in society at large at particular points in time.

The second article² critically examines the concept of political CSR, or legitimacy creation through deliberation, as something that can be universally agreed upon in places where incommensurable differences exist. Through a comparative case study of two local stakeholder groups – one urban and one rural – involved in a conflict over a pulp mill in the south of Chile, this paper asks: why did the two groups choose different participation strategies in the deliberation over the desirability of the mill? Based on multiple data sources, the study finds differences in how each community made sense of the world through place-bound social imaginaries, which affected the stakeholders' willingness to participate in deliberation. The findings suggest that legitimacy cannot be universally secured through dialogues that seek consensus at the expense of occluded imaginaries, rather it exists as a pluriversal construct. If political CSR is to play a role in legitimacy creation across imaginaries, the focus should be on constructing economic alternatives embedded in place that supports the co-existence of different forms of life.

The third article is a case study from Uruguay, where the political support for forestry projects has been reinforced by the conflicts that arose with Argentina during the construction of a pulp mill in the border town Fray Bentos. Here small-scale farmers fight against the spread and adverse effects of plantations in their own neighbourhood. The study addresses the following research question: given the almost universal acceptance of the desirability of forestry development, how can those whose livelihoods are threatened by the arrival of forestry projects (plantations and pulp mills) in their community construct broader support for their claims? The article builds on testimonies of three small-scale farmers who actively seek to resist forestry plantations next to their land. As they are an absolute and silenced minority, their attempts to raise claims in the public discourses have not been successful. Neither do these farmers possess the power of a social movement that would be capable of building successful resistance. To counter the power of the industry and the further expansion of plantations, one of the testimonies reveals a strategy of place-based politics. Through community projects that aim to revitalize ancient indigenous legends; set up agroecological farms; and teach school children about the environment, they seek to build a new model for rural living and sustainable futures. Their efforts point at a new openings, where an increased local awareness can lead to new imaginations and alternatives of how to live well also without the influence of forestry corporations.

² Published as: Ehrnström-Fuentes, M 2016, 'Delinking Legitimacies: A Pluriversal Perspective on Political CSR' *Journal of Management Studies*. Vol. 53, pp 433–462 DOI: 10.1111/joms.12173

THEORETICAL FRAME

The limits of global governance

In the past decade, the concept of ‘governance’ has acquired an increasingly central role as a substitute for authoritative, institutionalised, top-down political decision-making (Hajer and Wagenaar 2003). Legitimacy is no longer created through the authority invested in political institutions but in the actual processes of ‘defining and implementing global rules’ (Scherer and Palazzo 2011, p. 900). The focus lies on collaboration and supposedly horizontal relationships of engagement by all affected parties. Public participation, collaborative governance, or multi-stakeholder dialogues are promoted as desirable activities that produces outcomes that are both legitimate and tailored to the needs of all affected parties (Hajer and Waagener 2003; Palazzo and Scherer 2006; Scherer and Palazzo 2011).

This perspective that stresses consensus and collaboration is not easily applied to the contested terrain of corporate-community relations in industries such as forestry, where the success and survival of the business itself depends on access to land and natural resources used for other means of production by locals. In fact, the empirical work that suggest that corporations can achieve legitimacy through the engagement with stakeholders rely extensively on value based movements with their base in the Global North, and European-based NGOs (see for example Baur and Palazzo 2011; Mena and Palazzo 2012). This does not resonate with the marginalised or even excluded position that certain groups in rural communities in the Global South occupy, and whose ability to influence politics through broader civil society support is very restricted (Banerjee 2011).

The limit of these types of governance schemes is that they fail to consider the existence of realities other than those within modern society (de Sousa Santos 2009). These initiatives emerge from a particular political context and particular epistemic tradition(s) that fail to address the colonial differences and the effects of the power of coloniality on the outcome of the deliberation. Coloniality works through the hierarchical relationships of the modern rationality and by claiming universal validity (and superiority) this rationality suppresses the histories, knowledges, and languages, while restricting the field of possibilities in terms of what can be known (Mignolo 2011; De Sousa Santos 2013). This is an important aspect to consider when discussing governance systems that follow Habermas’ (1996) Communicative Action, assuming that consensus can be achieved based on *free* and *reasoned* deliberation. Deliberation is neither free nor reasoned when the logic of coloniality is occluded by the supposed superior rhetoric of modernity (Mignolo 2011). This limitation is what I find in the first article, when analysing media representations of the opponents voices. It was the hierarchical relationships embedded in the modern rhetoric of newspaper texts that set the limits of what could be discussed in the public sphere

Legitimacy as a universal construct

Defined as a “generalized perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values, beliefs and definitions” (Suchman, 1995, p. 574), legitimacy has attracted much interest among

management scholar, and particularly by those who study the legitimation struggles related to political CSR (Baur and Palazzo 2011; Joutsenvirta and Vaara 2015). In the governance literature, legitimacy is also a central concern as it refers to the democratic principles and procedures that lend authority to decisions and the decision-making processes (Hajer and Wagenaar 2003; Mena and Palazzo 2012). The underlying idea is that by participating in decisions that affect their lives, stakeholders give their ‘consent’ to corporations to have an influence on their lives (Gilbert and Benham 2009).

There are three limitations to how legitimacy is framed as an organizational and procedural construct. First, Suchman’s (1995) definition of organisational legitimacy emphasises the consensual nature of legitimacy within the modern imaginary. It is assumed that a relationship of mutual understanding between the entity and one specific socially constructed system of norms can be attained. However, as I demonstrate in my three articles at the community level there are actors involved that do not necessarily adhere to the same socially constructed system nor do they have anything to gain from collaborating with the corporations (rather the contrary).

Second, these definitions of legitimacy do not specify the relationship the organisation has to either the territory (or is dependent on for its own material reproduction) or the relationship that the stakeholders have to the territory where they construct their social life. Such territorial disembeddedness is a common feature of the modern rationality: a type of ‘global delocalisation’ (Virilio cited in Escobar 2008, p. 166) that overlooks place in the definition of social life. This aspect of the place-based practices and imaginaries and their impact on legitimacy was a central theme of the second article, where I showed how people made sense of history in place, related nature, subsisted, and viewed their future in place structured what was considered legitimate in each location and thus also affected the people’s willingness to participate in deliberations.

Third, by stressing the active engagement of stakeholders, it is assumed that all groups of individuals with whom the corporations (wish to) engage automatically have ‘a stake’ in the company. However, there are those actors that would rather not be part of the sphere of influence of the firm but assure a ‘stake-free’ life. The dominant perspective within management categorises such stakeholders as dangerous, or as terrorists who use coercive means to advance their claims (see Mitchell et al. 1997). In all three articles I present stories of actors who choose non-participation as a mode of resistance; demonstrating their objection to become stakeholders through participation.

To expand the understanding of legitimacy beyond the limited perspective of organisational and political legitimacy, I next introduce a pluriversal view on legitimacy.

Legitimacy as reproduction of life in community

Starting from an analysis of the uprising against colonial rules in the Americas, Dussel (2013) argues that the legitimacy of a political order is not related to the consent of the governed to submerge under domination but upheld through a legitimate kind of coercion, valid as long as it can guarantee the production, reproduction, and development of the human life of each of its members. The order loses its legitimacy when ‘the misery of many becomes intolerable,

unsustainable' (Dussel 2013, p. 405). He argues that while Habermas' theory of communicative action focused on social conflicts that emerged in the sphere of cultural reproduction, meaning the cultural values and norms of a society (as also noted by Habermas' himself, cited in Dussel 2013, p. 406), it is still the material reproduction, the capacity to sustain life, that is the most relevant for four fifths of the world's population.

Dussel's work makes it possible to imagine how legitimacy as an outcome of different realities is perceived by the person connected to his or her particular imaginary (embedded in place). This allows legitimacy to exist as a pluriversal construct without subjugating certain realities under the assumptions held by others. The ethical feasibility of an order (the processes of social organisation of life, what needs to be sustained and legitimised) is marked by the limits of human life.

Here, legitimacy of an entity or an activity is not directly related to the norms, values and beliefs, or the consent of the governed in relation to authority. Instead, legitimacy refers to the limits of human life and the capacity to reproduce life within a particular place. Because of its dependence on the natural surroundings to reproduce life³, the rationality embedded in this understanding of legitimacy is neither global nor universal, but is bound to the changing features of the community's own surrounding (natural and institutional) to provide the means to sustain and reproduce life. Thus, legitimacy is not an outcome of dialogues but an interdependent relationship between people, places and nature. This also invites to think differently about local communities, places and the relations that exist not only between humans but between humans and nonhumans (de la Cadena 2010).

Power in the pluriverse

Power is understood and conceptualised differently when arguing for a legitimacy that starts from the capacity to reproduce life in the community instead of out an idea of common shared norms, values and beliefs. Although narratives still inform legitimacy formation, it is not based on some grand narratives of 'Development' or 'Modernisation', but, emerges from the subject's own sociohistorical location, based on his/her own experiences, desires and needs, as a *living* human being (Dussel 2013)⁴ It is the will-to-live that inspires the victims to engage in their own liberation and forms the initial power of the movement: "The power of the *people* becomes present from the beginning, in its extreme vulnerability and poverty, but it is in the end the invincible force of life "that desires-to-live". (Dussel 2013, p. 94-95, italics in the original,)

The capacity to resist the power of domination and exclusion is not only an issue at the level of becoming aware of the threat of death and destruction, but it depends on the wider placed-based context, and the community's capacity to sustain life within that place. This implies that legitimacy derived from this type of power cannot be detached from place. As I show in all

³ Escobar (2008) uses the concept of life not as a reference to human life but to encompass all life that is interdependent (meshed together in a network of relations) for reproduction; Dussel (2013) only makes reference to human life in a community, which still can be interpreted to include the nature that constitutes the habitat of that community.

three articles place plays an important role in how people relate to the corporations, people are part of place and place is a part of people, without place there can be no reproduction of life in the community.

Critique against pluriversal perspectives

Before ending the theoretical frame, I respond to five of the most common criticisms of the pluriverse and perspectives that start from the community.

1) romanticising the local: The criticism commonly raised about a pluriversal perspective is that it paints a romantic picture of the reality and that there are no isolated and pure communities that assume total difference towards the global (and modern) capital markets (Nederveen Pieterse 2000). These described processes in the three articles are not an attempt to romanticize the local but to point at a dynamic process where a shared narrative of difference towards the threat of environmental destruction and the unity embedded in place creates the local agency to counter corporate power over the communities and their lives.

2) the challenges of cultural relativism: It is said that this kind of pluriversal approach is cultural relativism and thus runs the risk of accepting local (tribal) oppression and the violation of human rights (Nederveen Pieterse 2000). The main theme of decolonial studies is *liberation* from the power of coloniality (Dussel 2013; Mignolo, 2011). The focus of the decolonial thinkers is on restoring the dignity of being human in those (colonial) subjects whose own ethical grounding and knowledge systems have been made inferior or nullified in relation to modernity.

3) pushing for a life of poverty: that impoverished communities would be willing to voluntarily reject increased standard of living is often seen as unrealistic (Nederveen Pieterse 2000; Storey 2000). Claiming that everyone would choose the modern lifestyle if they had the choice, overlooks what these communities are actually fighting for (the right to existence and reproduction of life on their own terms). Instead, the existence of pluriversal projects should inspire discussions on how to eliminate the distortions between rich and poor, which is the main obstacle to the emergence of self-determination and creativity at the local level (Acosta 2013).

4) overlooking the role of the state: It is often argued that locals cannot solve global problems, and that there is a need for top-down interventions to solve the global environmental problems (Storey 2000). In my research setting, most of the people I talked to at the community level did not differentiate between state and corporations. Instead, it was as if they saw the state as a facilitator of corporate interests on their lands. Examining the role of the state as a political actor siding with corporations and the consequences this has for the locals (and the environment), is a topic that I suggest need more attention in future studies on political CSR.

5) how realistic is the pluriverse: is a pluriversal approach towards life and sustainability realistic on a global scale? As Zibechi (2012) notes, the greatest challenge for the local movements is to find alternative forms of producing and living. I tend to agree with him that this perspective, “requires a different culture with enough potency that the egomaniacal

dreams of consumption and power with which capital appeals are dissolved by an ethics of life[...].’ (p. 334). Similar processes in the Global North (i.e. degrowth, transition) point at the possibility that cultural shifts also take place elsewhere.

METHODOLOGY

The kind of knowing, sensing, and being, that has emerged as a consequence of my research is what I now position within the storytelling tradition. Blaser (2010) refers to the differences in reality-making through the stories we choose to tell as ‘ways of worlding’, arguing that stories imply different ontologies (worlds) and perform different worlds by also contributing to the phenomena that they narrate. The knowledge that emerges from a storytelling perspective is thus the result of a process of co-creation between the researcher and the people that played a role in its making. However, this knowledge is not abstract nor objective, the one who reads it does so within the limits of his/her world. Instead, knowledge production becomes a chain of interconnected stories, where the connections between stories are the things we are capable of making sense of and reproduce as new perspectives within our own world.

Storytelling as a methodological approach has emerged through the process of this thesis. In my approach towards ‘data collection and analysis’ I have always been attentive to the ‘geopolitical location’ (Mignolo 2011) of the person that speaks (his/her location in the modern/colonial divide), whether myself as a researcher or those informing my research. The methods applied to the articles include a combination of different approaches that made it possible to analyse public discourses (media, corporate communication, political speeches) and attach meanings to place through the narratives (stories and testimonies) of those who were marginalized and excluded in the discourses. In the second article I elaborated a data analysis method that made it possible to analyse large quantities of texts and narratives based on the subject’s position (pro/con) and location (urban/rural).

DISCUSSION

The overall research question that initially guided my research is: can deliberation remedy the legitimacy deficiency felt by global corporations today? After having engaged with corporate-community relations in the forestry sector in South America for four years the simple answer to that question is – unfortunately – ‘no, it cannot’. While legitimacy is the outcome of a deliberative exercise that is based on a rationale that has emerged from one particular world (the modern), it cannot meet the expectations of those whose worlds are made up of other rationalities which the modern world continuously marginalises and excludes in its efforts to build its legitimacy beyond its own borders. Despite my criticisms of deliberation and stakeholder dialogue above, I still want to stress that I believe there is an urgent need to open up, not to close down, the possibility to communicate across differences.

To go beyond the locked-in paradigm of global governance, I suggest a different kind of politics based on *rooted governance* to describe the encounters that take place ‘from the bottom up’ across different imaginaries and different ways of knowing, sensing, and being. Rooted governance describes how (local) communities come together at the roots to define how to organise the reproduction of life in community so that the different ways of life within

that particular place are respected and supported by all members of the community. In this setting, business entities can still be an integral part of the decision-making process, however, it is the long-term reproduction of life in community (not the maximisation of shareholder profits) that guides the processes of the conversations. The solutions are respectful towards the territorial boundaries within which they operate. Table 1 explains these differences between the top-down governance concept and the bottom-up rooted governance.

Table 1 Global Governance vs Rooted Governance

Constructs	Global Governance	Rooted Governance
Legitimacy	Top-down Consent of the governed Public opinion	Bottom-up Capacity to reproduce life in community Shared stories/conversations
Power	Power-over	Power-to-do
Mode of interaction	Stakeholder dialogues	Conversations across differences
Ontology (reality)	Abstract universals (representations)	Observer specific and relational (including with nature)
Time	Linear (follow a predetermined path)	Multidimensional (open ended)
Epistemology (how do we know)	Rational arguments/reason	Multiple ways of knowing, sensing, being.
Goal	Consensus	Detect 'blind spots' of different viewpoints
Efficiency	Sameness	Diversity

In a bottom up system of rooted governance, it is the capacity to reproduce life in community that is central to the rule-making procedures, and not the acceptance of the governed to obey rules (of domination). Here it is the shared stories that give a sense of legitimacy and not abstract measures of the acceptance of dominant discourses. Instead of obeying a ruler, it is the capacity to reproduce life and the 'will-to-live' (Dussel 2013) that helps the community to mobilise and fulfil necessary tasks. These tasks are negotiated not through consensus driven dialogues but conversations across differences. Reality is observer-specific and shaped in relation to the observer's relationship to his or her surroundings. The future is not predetermined based on dominant historic accounts of the past but is open-ended and coincidental depending on the circumstances of the social processes. It is not one set of rational arguments that predetermines the outcomes of what is desirable; legitimacy is instead negotiated from shared place-based accounts of knowing, sensing, and being. The goal of conversations is not to reach a consensus but to detect blind-spots so that the solutions can be geared towards continuous coexistence. The strength of the community lies in its diversity, thus difference cannot be suppressed but celebrated as a force of resilience.

How are then global corporations supposed to act responsibly towards communities? The short answer to that question would be: learn to understand the meaning of the word 'no'. There are limits, physical limits, and imaginary limits, to how much corporations can grow. However, I think that this question about global corporations is misdirected. Instead, I hope that in the near future we can go beyond the needs of the corporations and start talking about the needs of the people. The reproduction of organisational institutions should only be legitimate as long as they support the reproduction of life and not the destruction thereof.

Rooted governance can be a tool to bring corporations back to their roots, making visible the damage they do to the places that sustain them. Acknowledging this may not change the institutional framework by which the corporate world functions today, but it might make the people working for these organisations begin their own processes of decolonisation. Being confronted with the limits of their own worldview might encourage them to open up new alternatives. Future research should examine such alternative economies that can radically change corporate-community relations.

CONCLUDING REMARKS

This research journey has made me aware of the pluriverse that exists right in front of me. The conversations I have engaged in with different people along the way have made me 'radically vulnerable' (Nagar 2014) questioning many of the things that I used to take for granted as universal truths. It has also made me realize that if we do not acknowledge the importance of sustaining community life and nature there will soon be no life left to sustain, for ourselves or for our children. Acknowledging the pluriverse is a first step towards a serious conversation on the legitimacy of all different forms of life on this planet. As such, it is also an open invitation to join all those communities around the world who do not want to bear the brunt of the sacrifices of the modern myth. By acknowledging that the pluriverse exists among us, we plant a seed of hope for planetary co-existence and contribute to its (re-)emergence not only at a distance but in here, in our minds, in our worlds, and above all in our hearts.

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SECOND AWARD

GO WITH THE FLOW:

**POST-HUMANIST ACCOUNTS OF HOW MATTER MATTERS IN
ORGANIZATIONAL CHANGE**

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ABSTRACT:

How does an entangled view of human and technologies, body and mind, structure and agency, matter for how we understand organizational change? This thesis explores this question by building on research assuming a relational or process ontology. Specifically, it contributes to four different organizational theories, namely institutional logics, sensemaking, translation of management ideas, and identity work, by decentering the human as the agent primarily responsible for and capable of change and by showing how the material-discursive conditions of possibilities performatively enacting certain practices, subjects and objects as legitimate and eventually taken for granted, can be scrutinized and understood.

**RATIONALE FOR THE STUDY AND RESEARCH OBJECTIVES:
TOWARDS A POST-HUMANISTIC ACCOUNT OF HOW MATTER MATTERS IN
ORGANIZATIONAL CHANGE**

Over the past two decades, the fields of organization studies and information systems have witnessed dramatic shifts in terms of the conceptualization and understanding of organizational change, and in particular technology-related change. This can be described as a move from a view of change as a temporally delimited response to demographic, economic, social, and political forces, to an understanding of it as a contingent, embedded, and dynamic process (Feldman, 2000; Hernes & Maitlis, 2010; Orlikowski, 1996; Orlikowski, 2000; Shotter, 2006; Tsoukas & Chia, 2002). While the significance of technologies has indeed been

recognized in this latter stream of research (Barley, 1986, 1990; Boudreau & Robey, 2005; DeSanctis & Poole, 1994; Orlikowski & Gash, 1994; Walsham, 1993), attention has tended to focus on the effects of technologies, or the dynamic interaction between technologies and specific meanings, actions, cultures or structures at specific occasions, such as in the implementation of new information technologies.

The deeply constitutive entanglement of humans and organizations with materiality has received little attention (Carlile et al., 2013; Introna, 2013; Orlikowski & Scott, 2008). Another way to put this is to say that the majority of research has operated with a being ontology in which the world is constituted by, or comprised of, ontologically distinct entities (social and technical) that interact or connect in order to produce organizational phenomena. While this stream of literature has certainly made a significant contribution in terms of generating insights into organization theory and practice, it has also come to enact as a given a dualistic view of the world, a view in which object is separated from subject, mind from matter, structure from agency, human intention from embodied experience, and present from past and future, (Barad, 2007; Introna, 2013; Law & Urry, 2004).

Grounded in a relational ontology, streams of research in science and technology studies (STS), actor-network theory (ANT), feminist and science studies, and, most recently, sociomateriality, have opened up new avenues to explore the dynamic, uncertain, and technologically permeated world (Barad, 2007; Haraway 1997; Latour, 1988, 2005; Orlikowski, 2007; Scott & Orlikowski, 2014; Suchman, 2007). The radical nature and novelty of these approaches has drawn criticism, however, from a research community that has seemingly failed to appreciate fully the possibilities for intellectual expansion that these approaches represent (Leonardi, 2013; Mutch, 2013).

In line with critique previously raised against an actor-centric vocabulary that only allows for the enactment of distinct actors (Barad, 2007; Cecez-Kecmanovic, 2016; Introna, 2013; Latour 1996, 1999, 2004), this thesis argues that the assessment and critique of relationally-grounded approaches, such as sociomateriality, have been based on the being ontology that it rejects (Cecez-Kecmanovic, 2016). Thus, for example, discussions of these issues have often been concerned with the importance and distinct nature of the material and its relation to the social, with the result that accounts drawing on sociomateriality have been critiqued for their supposed failure to define the material (its “intrinsic properties”) and to explain entanglement (Leonardi, 2013; Mutch, 2013).

In common for all articles is that they share inspiration from philosophical traditions rooted in an ontology of becoming and that attempt to transcend the subject–object dualism in order to develop a new conceptual repertoire and vocabulary that facilitate a deeper discussion regarding the inherent entanglement of the social and the material (Barad, 2007; Ingold, 2007, 2015; Latour, 1988, 2005; Orlikowski, 2007; Orlikowski & Scott, 2014). This means that these articles share the following overarching research aims:

- to produce accounts of organizational change that move beyond an understanding of agency as being located within separate human and material actors and toward an understanding that foregrounds the temporal and performative flow of agency;
- to deconstruct organizational categories, such as efficiency, productivity, quality, and service, and to examine the material-discursive practices that regulate, make intelligible, and make normative these categories;

- to attend to and challenge performative normative enactments of theories and epistemological practices. Specifically, to extend current conceptions of what four different organizational theories: institutional logics, sensemaking, translation of management ideas, and identity work, can do in the creative co-construction of organizational realities, and;
- to contribute to the development of onto-epistemological practices that allow for greater sensitivity to how organizational realities and the experience of them are sociomaterially configured and for researchers to act (or rather intra-act) more creatively and responsibly.

FOLLOWING THE PERFORMATIVE FLOW OF AGENCY: STUDYING THE SOCIOMATERIAL WITH AN ONTOLOGY OF BECOMING

The articles in this thesis are grounded in the arguments of process-philosophers as Whitehead (1929, 1978) and Bergson (2002, 2007) and those of post-humanist scholars as Deleuze and Guattari (1987), Foucault (1980), Butler (1990), Barad (2007) Latour (1988, 2005), Law (1999), Mol (2003), and Suchman, (2007). I also draw on the work of social anthropologist Tim Ingold (2007, 2011), who shares with these scholars a desire to move beyond the traditional humanist view of individual actors living in a world separate of things and to assume an ontological position in which agency is not attributed to actors but instead emerges within the temporal and performative flow of practice. From this perspective, there is no fixed point outside the temporal flow against which it and its enactments—such as culture, identity, markets, technology, institutions, and financial resources—may be understood. Rather, the flow is what enables these phenomena by constituting the temporal conditions for their enactment (Butler, 1993). From this perspective, primary attention is paid, not to what actors do, think, or say, but rather to what provides them with their actions and intentionality—that is, to what are already assumed to be appropriate and legitimate ways of acting—by the circulating flow of agency through material-discursive practices (barad, 2007; Introna, 2013).

METHODOLOGY AND PRESENTATION OF CASE ORGANIZATIONS

Background

My five-year PhD project has been a journey that has placed me in many different subject positions, allowing me as a researcher to intra-act in the world in many different ways. Figure 2 offers an overview of this journey, relating the empirical phenomenon and the philosophical, methodological, and theoretical concepts that have inspired me and been central to my understanding of what my PhD project is about and what kind of researcher I am at different points in time. The figure depicts a journey from an interpretivist position, in which I wanted to uncover the underlying meanings or logics that caused people in my interviews to speak and behave in certain ways, to a post-humanist position, in which the answer to why interviewees speak and behave in certain ways cannot be found in some underlying meaning or some overarching discourse, but resides rather in the material-discursive practices in and through which people act and at the same time become enacted.

From a post-humanist position, the role of the researcher is not to develop knowledge through representations created at a distance, but rather from a direct material engagement with the world (Barad, 2007; Introna, 2013; Shotter, 2014). In the fifth paper, I elaborate on the performative consequences of moving from a humanist representational approach to a performative approach grounded in an ontology of becoming for studies of subject formation, in this case, subjects working in and visiting the reception area of the Swedish Migration Board.

Figure 2. Overview of my PhD journey

Time	2012	2013	2014	2015	2016	2017
Philosophical foundation		Phenomenology	Flat ontology	Relational		
	Interpretivism	Critical realism Practice	Performativity	Process	Post humanism	Agential realism
	Social constructionism		Symmetry		Onto-epistemology	Ontology of becoming
Methodology	Explorative	Interviews	Grounded theory	Narrative analysis	Ethnography	Reflexivity
	Case study	Retrospective	Observations	Archival data	Diffraction	Genealogy
	Micro level	Semi structured	Abduction	Discourse analysis	Rhizomatic	Intuition
		Coding	Triangulation	Shadowing		Tracing the interweaving of lines
Theoretical concepts	Interpretive frames	Socio-technical	Epistemic objects	Entanglement	Identity work	Translation
	Institutional logics	Boundary objects	Sociomateriality	Sensemaking	Critical theory	Flow
	Routines	ANT	Socio-materiality	Intra-action	Becoming	Subjection
	Institutional work	Affordances	Agency	Agential cu	Enactment	Meshwork
	Organizational change	Healthcare				Correspondence
Empirical focus	Lean & IT	Teamwork	Institutional change	NPM	Power	Professional identities
	Operational/Flow efficiency	Space	Visuals	Organizational identity	Quality	Subject positions
	Lean implementation	Public sector		Quality	Resistance	Subjectivity
	IT implementation/adoption/development	Emotions				
	Continuous improvement					

Data collection

The articles in this thesis are based on data collection conducted in four case studies at different sites within two organizations: Nordic University Hospital (a pseudonym) and the Swedish Migration Board. The case selection in this thesis is a result of an exploratory and iterative process in which data collection has both inspired and been informed by theoretical readings and writing of papers. The data collection began as part of a larger research project which aim was to investigate the dynamics between the Lean principle of working with local and small-scale changes and improvements and the deployment of information technologies, often building on large-scale initiatives aimed at the automation of defined processes.

Grounded in an ontology of becoming, the methodological approach in this thesis has been guided by the ambition to explore, not how the doings or actions of assumed entities interrelate or connect, to produce certain organizational phenomena, but rather how the possibilities for action and the flow of agency become conditioned to performatively enact the appropriate, legitimate, and seemingly self-evident (Barad, 2007; Butler 1990, 1997; Ingold, 2015). Thus, the accounts in this thesis are genealogical in the sense that they start in the seemingly self-evident present (of practices and subjects) and then tracing the constitutive conditions that allow this particular flow of practice to seem obvious, meaningful, or legitimate.

Nordic University Hospital

Two of the papers in this thesis are based on data collected at Nordic University Hospital. The hospital is a publicly owned and funded tertiary academic medical center that, since a merger in 2004, has operated at two main sites in a Nordic capital. The organization has a budget of around 1 billion Euros and a staff of 15,000 that serves a population of some 2 million. In this thesis, I focus on the general surgery ward, which is one of three emergency surgery wards, and the emergency desk.

The collection of data at Nordic began in November 2012 and continued until October 2013. In total, I spent approximately 79 hours observing the operations and conducted in total 53 interviews with staff members from different professional categories.

The Swedish Migration Board

Three of the papers in this thesis are based on data collected at the Swedish Migration Board (SMB). The SMB is the central authority for the implementation of migration policy in Sweden, managing asylum applications and making asylum decisions and defending them in appeals court.

I started my fieldwork at the MB in November 2012. The first part of the study, which focused on the examination unit, continued throughout the spring of 2012. As my approach was exploratory, observations during the early phases of the fieldwork were aimed at tracking and developing an understanding of all the major work practices of the unit's case officers and team leaders. In January 2014, an opportunity arose to carry out four months of ethnographically-inspired work at the MB reception unit in Stockholm. This fieldwork was conducted from January 10 to April 25, 2014, during which time I spent approximately two to three days (most often divided into half-days) a week involved in the operations, attending

internal meetings, and observing the individual work of case officers and their meetings with the applicants. Complementary to the observations, a total of 67 interviews were conducted with staff members from all professional categories. Archival records were also an important source of data and served to complement the observations and interview accounts.

SUMMARY OF PAPERS

Paper 1: Visualizing Institutional Logics in Sociomaterial Practices

(Published in *Information & Organization*, 2014; Runner-up 2014 Best Paper Award, *Information & Organization*)

This paper aims to deepen our understanding of the mechanisms underlying the mutual constitution of competing institutional logics and sociomaterial entanglements by combining a sociomaterial lens with the institutional logics perspective. We present findings from an interpretive, longitudinal case study at the emergency general surgery ward of a Nordic university hospital. By focusing our analysis on how sociomaterial affordances emerge through the implementation, use and continued development of digital and physical visualization boards, we show how these artifacts constitute an integral part of the operational staff's sensemaking and enactment of a new institutional logic. We make two contributions. First, we show how the perceived affordances of a technology are created from the experience of using several different technologies and how the rejection of one technology can simultaneously constitute another. Second, we show how visualization artifacts, entangled in sociomaterial practices, can shape individual focus of attention and thus facilitate the integration of a new institutional logic in operational practice.

Paper 2: How practice makes sense in healthcare operations: Studying sensemaking as performative, material-discursive practice

(Published in *Human Relations*, 2017)

This paper aims to move sensemaking theory forward by exploring a post-humanist view of how sense is made in material-discursive practices. Answering recent calls for novel theoretical views on sensemaking, we adopt a relational ontology, assuming subject and object to be ontologically entangled, and viewing agency as a circulating flow through material-discursive practices. Employing this perspective, we study how sensemaking unfolds at the emergency ward of a Nordic university hospital. By working through the concepts of material-discursive practices, flow of agency, and subject positions, we produce an account of sensemaking that decenters the human actor as the locus and source of sensemaking, and foregrounds the performativity of practices through which certain ways of acting become enacted as sensible. This allows us to propose an alternative to the traditional view of sensemaking as episodic, cognitive-discursive practices enacted within and between separate human actors: With this view, what makes sense is understood as a material-discursive practice and related subject positions, which due to their specific positioning in the circulating flow of agency emerge as sensible. Consequently, every actor is not just making sense, but is also already being made sense of; positioning and being positioned in the flow of agency.

Paper 3: The decentered translation of management ideas: attending to the performativity of sociomaterial practices

(Submitted to *Organization Studies*)

This article contributes to our understanding of how management ideas become translated within and through situated mundane everyday work practices by adopting a performative, sociomaterial perspective and a non-actor centric vocabulary. Specifically, we draw on the

vocabulary of social anthropologist Tim Ingold and his notion of the meshwork to account for the constitutive role of materiality in the ways in which Lean Management becomes translated at the Swedish Migration Board. In doing so, we are able to decenter human intentions, preferences, frames and actions and move beyond viewing the management idea as a defined and bounded phenomenon transforming organizational practices only to the extent that influential human translators allow and facilitate it. Instead, we can account for how translation unfolds, always and everywhere in the mundane sociomaterial practices of everyday work—conditioning subjects to think and act in certain ways. Thus, our account shows how the idea not only becomes transformed, but also transforms subjects and objects, as translators become simultaneously translated by becoming differentially positioned in the performative flow of sociomaterial practices.

Paper 4: Hey, you there! Studying identity work as a process of material-discursive interpellation

(Submitted to *Organization Studies*)

This paper responds to recent calls to study how materiality is implicated in the regulation of identity work from a relational and performative ontological perspective. Drawing on the concept of interpellation, especially as described by Althusser and Butler through the metaphor of hailing, we show how material-discursive practices at three different service sites of the Swedish Migration Board are profoundly constitutive of the manner in which asylum seekers and officers become hailed into various subject positions. In so doing, our study contributes to the development of a post-structural, post-humanist understanding of how identity work becomes regulated within organizations. Specifically, we move beyond the conception of the intentional human and the non-intentional non-human in order to foreground the manner in which mundane material-discursive practices always and already condition (or govern) the possibilities in the context of which identity work takes place.

Paper 5: From criminal to customer: a post-humanist inquiry into processes of subjection at the Swedish Migration Board

(Submitted to *Qualitative Inquiry*)

What is the role of the researcher in a world that is continuously enacted and reconfigured in sociomaterial practices, a world in which subject and object, structure and agency, body and mind, knower and known, cannot be separated? In this article, I explore this question by drawing on my own experiences conducting a qualitative longitudinal case study at the Swedish Migration Board. My goal is to highlight the differences in the kinds of knowledge that humanist, representational practices, and post-humanist epistemological practices, grounded in an ontology of becoming, produce regarding the subjects working in and visiting the reception area of the Swedish Migration Board. My aim is to contribute to the development of practices that allow us to be more sensitive to how organizational realities, and our experience of them, are sociomaterially configured and to act (or, rather, intra-act) more creatively and responsibly with/in the world as researchers.

CONTRIBUTIONS

A developed understanding of how sociomateriality matters

In this thesis, I propose a shift away from a spatially-oriented vocabulary (“actor,” “network,” “connection,” “association,” and so on) to one that allows for the decentering of the human as the primary agent responsible for translating management ideas, making sense of new work

practices, integrating institutional logics, and conducting identity work, as well as for attending to the constitutive role of materiality in these processes. Rather than focusing on actors and their relational associations, I have, by drawing on work grounded in a process ontology (Althusser, 2006a, Barad, 2007; Bergson, 2002; Butler, 1993, 1997; Ingold, 2007, 2015; Latour, 1999, 2013), studied how actors emerge as positions within a temporal, performative, material-discursive flow of agency. A few studies have demonstrated the ontological kinship and shared roots of a relational ontology and process metaphysics and pointed to a clear overlap in terms of assumptions and orientations (Cecez-Kecmanovic, 2016; Introna, 2013; Shotter, 2006). The papers in this thesis build on and extend this work by showing how a process-oriented vocabulary enables researchers to account for the entangled relationship between the social and the material in a way that constitutes a radical departure from an ontology of being and that, moreover, in fact makes a difference in terms of how organizational realities are understood.

Extended understanding of what organizational theories can do

The articles in this thesis contribute to theory by showing how assuming an ontology of becoming allows us as researchers to be responsive to our own entanglement in material-discursive practices. It allows us to attend to how our intra-actions with theories of institutional logics, sensemaking, translation of management ideas, and identity work enact normative, taken-for-granted assumptions, practices, and positions. By then questioning these normative enactments and by working through alternative concepts rooted in an ontology of becoming, the articles in this thesis extend our understanding of what these theories can do in the creative co-construction of organizational realities.

A non-actor centric understanding of materiality

This thesis contributes to research areas such as sociomateriality (Orlikowski & Scott, 2008; Scott & Orlikowski, 2014), the role of materiality in processes of institutionalization (Monterio & Nicolini, 2015; Jones & Boxenbaum, 2013; Jones & Massa, 2013), and the material turn more generally (Carlile et al., 2013)—by showing how a decentering of the human as the primary actor capable and responsible for change does not necessarily mean that we have to imbue materiality with agency. Rather, the articles show how, by focusing on the performative flow of practices, we restore objects, as well as subjects, to the performative flow of practice through which they came into being and continue to subsist (Ingold, 2015). In other words, we show how objects are also continuously becoming translated into the objects that the performative flow of agency assumes them to be.

Accounting for the becoming subject

In following the agentic flow temporally, we see how the way in which the individual understands herself has always and already been conditioned through the ways in which this flow has positioned her within material-discursive practices. Thus, this thesis shows, not only how matter matters in the construction of sensible, meaningful, and legitimate work practices, but also how material-discursive processes of translation, sensemaking, identity work, and institutionalization emerge as processes that happen to the subjects, both doing and undergoing action (Ingold, 2016). Thus, adopting a sociomaterial perspective grounded in a process ontology does not mean that the material is foregrounded at the expense of the human; the “material turn” does not have to imply a turn away from the human. On the contrary, by refusing to assume that human beings have fixed boundaries (and consequently not reducing them to such boundaries) but instead following the temporal, performative flow

of material-discursive practices, it is possible to study the human subject as she continuously becomes, entangled within and conditioned by the flow of material-discursive practices. It enables us to see how she could always become differently, could always be more than what a specific position allows her to be.

IMPLICATIONS FOR PRACTICE

Change is everywhere

An important implication of the conclusions drawn in the articles of this thesis is that the understanding of where and how organizational change is possible changes. In following the flow of agency through material-discursive practices, we see agency, and thus, the possibility for change, not only as exercised in individual attitudes, commitments, goals, visions, values and beliefs, nor in the individual or collective ability to solve problems, develop a culture, communicate effectively, formulate a strategy, or engage employees in active participation tactics that foster learning by doing. Rather, by assuming an agency that flows through material-discursive practices, we see that change is very subtle, and that it does not start, and is not only possible, within humans. In following the flow of agency, we see how change is possible always and everywhere but how this possibility is conditioned by the temporal performative flow of material-discursive practices.

Materiality is not just tools

The analysis and discussion in this thesis can assist managers in developing insights into the fundamental impact that material artifacts have in organizations. It can help them understand how materiality/IT is not only relevant at certain times and during special circumstances, for example during implementation of a new IT system, but how matter matters always and everywhere, entangled in, and thus constitutive of, organizational practices and subjects. It helps them understand how artefacts are not just tools that they can use to create meaning. They don't own the agency to create meaning, to change their practices and themselves.

Expanded responsibility

A consequence of not ascribing agency to humans is that you cannot point to these and ask for change. You cannot point to a normative position and ask people to go there. You as a manager don't own the agency to change. As you don't own the agency you don't own the responsibility. However, as Barad says: responsibility is not ours alone, yet, it is greater than if it were ours alone. Because it includes a responsibility – ability to respond – not just to other actors, but to becomings in each moment. It requires that we attend to and question that which is taken for granted and show how possibilities for becoming are re-created in each meeting, in each intra-action (Barad, 2007). The articles in this thesis can help us see that everything we assume to exist as a more or less fixed category could always be different, that in each moment lies the possibility of becoming differently. It provides insights that help us question and trace the taken for granted, to show the falsehood of its origin, and to open up future possibilities for the so-called given.

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THIRD AWARD

Preference Disaggregation: Towards an Integrated Framework

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Abstract

Preference disaggregation aims at capturing preference models by decomposing indirect preference information. The preference model reflects on the conflicting points of view that collectively form a basis for the judgments. This topic is addressed by several disciplines, including behavioral science (decision analysis), artificial intelligence (preference learning), economics and marketing (choice modeling). These streams, although originated from different philosophies, are converging to a comprehensive understanding of human preferences as the main ingredient of decisions. This dissertation sheds light on this phenomenon by introducing an integrated analytical framework that allows capturing preferences of a complex form through observing holistic choices and judgments.

Keywords: Preference Disaggregation, Multiple Criteria Analysis, Linear Programming, Simulation

1. Introduction

Alice is passionate about art and sun. She recently spent a week in Barcelona to enjoy the great art museums and warm sunny days that the city offers. During her trip, she stayed in a hotel near the beach. At the end of her trip, as she usually does, Alice started writing online reviews on some of the places that she had been visiting and the hotel that she was staying at during her trip. In her overall review of the hotel, which is the number of stars that she gives to the hotel, Alice considers several factors such as comfort and cleanness, ease of access to the central area, price, the staff friendliness, as well as her overall feelings and impression of the hotel. Her overall assessment of the hotel might alter by some, probably less visible, factors such as the music that she has heard in the lobby, the decoration and colors of the hotel, the ambiance of the restaurant in hotel, and several other factors that Alice may or may not be aware of, but they change her feelings about the hotel in a direct or indirect way. Alice

evaluates other services and products in a similar manner. Alice is not the only person whose decisions and judgments are based on multiple evaluation criteria, but the same is true for all consumers in the marketplace.

When facing a decision situation such as choosing a product or a service amongst all the available alternatives, consumers typically consider several criteria to evaluate the existing alternatives and to eventually make a final decision. Some of these criteria are visible to the consumer and they are directly taken into account, whereas some others might operate in an indirect way and at a subconscious level. Whether direct or not, both types of criteria form the preferences of the consumers, which eventually result in their final decision. Decomposing the holistic preferences based on the evaluation criteria and understanding how each of these criteria contribute to the final decisions and choices made by the Decision Maker (DM) is at the core of several disciplines, including decision science, artificial intelligence, and consumer behavior studies. This is the focus in preference disaggregation paradigm based on the Multiple Criteria Decision Analysis (MCDA) perspective.

This doctorate dissertation is based on the disaggregation paradigm in MCDA, following Multi-Attribute Value Theory (MAVT) approach, and aims at developing an integrated framework for capturing complex preferences from realistic and holistic preference information. The research, on one hand, addresses one of the core issues in Decision Analysis, that is elicitation of preferences, and on the other hand attempts to fulfill the increasing demand in Management Science research, that is development of computationally efficient analytical frameworks that enable us to process large amount of data in realistic time. To this aim, the dissertation introduces innovative analytical framework based on Linear Programming (LP) techniques that are developed through a series of studies, with demonstrated effectiveness based on experimental analysis, simulation, and real data.

In the three main chapters of the thesis, three major contributions into different aspects of preference elicitation have been made. In the first part, a motivating example on the case of non-monotonic preferences in the branding context, addressing how brand color can influence customers' perception of a brand, is presented. To this aim, an innovative iterative approach based on linear programming is developed and applied to a real data set of the major beauty and care brands (this chapter is published in the Pattern Recognition Letters journal). The next part of the thesis provides a general analytical framework that aims at capturing preferences of complex form from indirect preference information and holistic comparisons, in a computationally efficient way. The methodology follows a linear programming approach and enables capturing complex preferences from decision examples and holistic judgments, while maintaining the balance between complexity and expressiveness of the elicited preference model. The effectiveness of the methodology is demonstrated through illustrative example, comparison with the benchmark methods, and an extensive simulation analysis (the paper is published in the European Journal of Operational Research). The third part of the thesis follows an exhaustive experimental analysis based on simulation to study the impact of parametrisation procedures and problem settings on the outcome quality of a preference disaggregation analysis. The study identifies different problem settings in which existing parametrisation procedures fail to yield robust and expressive results, and introduces a new parametrisation method that demonstrates a "good" performance across various settings (published in the Computers and Operations Research journal).

The three parts of the thesis collectively make a significant theoretical contribution to the Decision Analysis literature, and have several implications for practice. The thesis provides

an integrated framework for decision analysis from a multiple criteria perspective based on indirect preferences, together with a careful examination of the impact of different characteristics of a decision problem. The example of analytical investigation of the impact of brand color on brand image demonstrates how a complex problem can be formulated and addressed from such perspective. Moreover, this thesis has several implications for the practitioners, particularly in product development decisions, resource allocation in product improvement practices by understanding trade-off analysis behavior of consumers, and in general decision-making processes at complex environments, especially when the prior knowledge on the context is relatively scarce.

The results of this doctorate dissertation are appeared in the leading journals of the field. The published papers and their corresponding chapters in the dissertation are highlighted in the following table.

Chapter	Article Title	Journal	Publishing Date	Journal Metrics
2	Understanding the Impact of brand color on brand image: a preference disaggregation approach.	Pattern Recognition Letters	Volume 67, issue 1, pages 107-115, 2015	ABS 3, SJR Q1, Impact Factor: 1.995
3	A linear programming approach for learning non-monotonic additive value functions in multiple criteria decision aiding	European Journal of Operational Research (EJOR)	Volume 259, issue 3, pages 1073-1084, 2017	ABS 4, SJR Q1, Impact Factor: 3.297
4	Expressiveness and robustness measures for the evaluation of an additive value function in multiple criteria preference disaggregation methods: an experimental analysis	Computers & Operations Research	Volume 87, pages 146-164, 2017	ABS 4, SJR Q1, Impact Factor 2.600

This summary consists of five parts. After a general introduction, the background of the thesis and its theoretical context will be addressed in the next section. In section 3, the main contributions of the thesis will be highlighted, followed by addressing the methodology, data, and key findings. Finally, significance of the thesis for theory and practice will be addressed. Links to the three journal publications from the thesis are provided in the appendix.

2. Background

The assessment of alternatives in real-world decision-making requires consideration of a variety of criteria. With an indirect elicitation of preferences, the preference model is constructed in order to identify a rational basis underlying the provided holistic judgments (Jacquet-Lagrèze and Siskos, 2001). Within MCDA, various preference models can be used for this purpose, see, e.g., (Kadziński et al., 2015; Sarabando and Dias, 2010; Słowiński et al., 2002; Soylu, 2011; de Almeida, 2007; Vetschera and de Almeida, 2012; Zheng et al., 2014), but the most prevailing one is Multi-Attribute Value Theory (MAVT) (Keeney and Raiffa, 1993). MAVT is built on utility theory, which was developed during the 1940s and 1950s by

Von Neuman and Morgenstern (Von Neumann and Morgenstern, 1944) and Savage (Savage Leonard, 1954). In general, utility is a real number representing the preferability of an item. Utility theory, although initially developed for normative decision-making, has been one of the main methodological streams of multiple criteria analysis (Zopounidis and Pardalos, 2010). MAVT is often found to be appropriate for practical decision support due to the high interpretability of numerical scores that can be decomposed into per-criterion marginal values and easily explained due to low amount of inter-criteria parameters (Greco et al., 2012; Sarabando and Dias, 2010).

In decision-making involving multiple criteria, the main attempt concerns the way by which the final decision must be made. In this spirit, several aggregation procedures have been developed to identify the best alternative amongst the available solutions, by simultaneously considering several conflicting points of view. Goal programming (Charnes and Cooper, 1961) has largely impacted the philosophy and evolution of this paradigm. These procedures mainly follow a normative approach that is based on the axioms of rationality and optimality, assuming that the decision behavior is purposive and goal directed (Einhorn and Hogarth, 1981). Following this view, therefore, the aim is to find the decisions that must be made in order to ensure the efficient use of means to attain certain ends (Fishburn, 1970; Von Neumann and Morgenstern, 1944; Tversky, 1972). When the goals are in conflict, however, the notion of optimality does not make much sense as the problem is not maximizing or minimizing an explicit criterion, but it seeks for compromises between the conflicting goals that reflect one's values. Therefore, in presence of multiple conflicting criteria, the notion of optimality is replaced by consistency with one's values (Einhorn and Hogarth, 1981). Following this mentality, significant attempts during the recent years have been made in order to discover the DM's values. Descriptive theories of human judgments and choices are developed along this direction by analyzing the decisions that are already made by the DM in order to discover, understand, and explain the rational behind them (Tversky and Kahneman, 1975; Kahneman and Tversky, 1984; Von Winterfeldt and Edwards, 1993; Slovic et al., 1977). Disaggregation techniques in MCDA aim at understanding judgments and choices of a DM by decomposing the holistic preferences over the set of relevant criteria that form the basis for the preferences.

3. Main contributions of the dissertation

Most of the existing preference disaggregation methods assume a monotonic relationship between input attributes and preferences. The few methods currently addressing non-monotonicity demand excessive computational effort or require extra information from the DM. Developing an efficient methodology for learning non-monotonic preference models is therefore of great importance.

The assumption of monotonicity is widely used because it seems reasonable for many criteria (such as price of a product, level of risk, security, safety and ease of use of a service, required time and effort for accomplishing a task). However, this is not the case for many other attributes. In a medical context, for instance, attributes such as sugar and cholesterol levels in blood are clear examples of non-monotonic attributes. In finance, there are many indicators used to depict the financial performance of a firm that experts believe they must be controlled within a specific range. For instance, a large value for the cash to total assets ratio implies that the firm is losing many profitable investment opportunities, whereas a low value indicates a low capacity of the firm to cope with operating expenditures (Despotis and

Zopounidis, 1995). In marketing, non-monotonic preferences are widely prevalent in product design. Examples include screen size for a smartphone, sweetness of a chocolate, or any design attribute based on ideal point model (Rao, 2014).

This dissertation addresses fundamental issues in three main aspects of preference disaggregation. First, great potentials of MCDA frameworks in formulating and exploring complex problems, especially those with no prior knowledge on the underlying patterns, is demonstrated. Second, an efficient analytical framework for elicitation of preference models of complex form is introduced. Third, decision problem characteristics and parametrisation in preference disaggregation analysis is studied.

3.1. Potentials of MCDA for dealing with complex problems

As a motivating example, the thesis elaborates on the case of non-monotonic preferences in the context of branding by investigating the impact of brand color on the customers perception of a brand. In this regard, the main question is **how can MCDA be used for exploring the cognitive role that color plays in determining brand perception?** This question is addressed by proposing an innovative analytical framework based on LP techniques. A challenging feature of color analysis in branding is that any assumption on the patterns of color impact on the perception would be unrealistic, supported by the mixed results in this literature. The proposed framework does not require any prior knowledge on the form of the pattern, in the sense that the estimated patterns are free in shape. The problem is structured from a MCDA perspective, and answered by analyzing the secondary survey data combined with the data that is independently collected by scanning colors of the major beauty and care brands with a single representative color. The problem of brand color is one of the most important subjects in branding and marketing, and up to our knowledge, this is the first study that investigates the entire continuum of colors over the entire its three dimensional space (Ghaderi et al., 2015).

3.2. Capturing complex preference models

Inspired by the example of brand color, the second research problem is **how can we capture preferences of non-monotonic form?** With this regard, a general analytical framework for capturing preferences of complex form by relaxing the assumption of monotonicity is introduced. The assumption of monotonicity limits the applicability of the MCDA methods in many fields; therefore it is crucial to overcome this limitation. The analytical framework to elicit such complex preference models still needs to be tractable and efficient in terms of computational demand, in order to ensure its applicability to data sets of realistic size. These two requirements motivated the research in the second part of the thesis. The problem is addressed by developing an analytical framework based on LP techniques. The proposed approach aims to infer non-monotonic additive preference models from holistic judgments in form of pairwise comparisons by maximizing the discriminatory power of the estimated preference model against its complexity. The effectiveness and efficiency of the proposed framework is demonstrated through comparison with the benchmark methods, and a comprehensive experimental analysis based on simulation covering a broad range of decision problem settings. (Ghaderi et al., 2017).

3.3. Parametrisation and decision problem settings in disaggregation analysis

The preference disaggregation frameworks in MCDA, including the one introduced in this dissertation, involves the choice of several parameters that can directly affect the performance of the inference process. The quality of the outcomes of a disaggregation analysis, in addition to the parametrisation of the problem, could depend also on the settings of the decision problem. In this respect, the next question addressed in this dissertation is **how and to what extent the parametrisation procedures and problem settings can change outcome quality of the inference model? Which procedures should be followed in different settings in order to ensure a minimum level of the desired quality?** To address these questions, first, two main dimensions of outcome quality for the preference disaggregation analysis are introduced: expressiveness of the estimated preference model, and robustness of the recommendations resulting from the estimated preference model. Moreover, two measures for quantifying each dimension is introduced. Then it is investigated how the two main dimensions of the outcome quality are influenced by different characteristics of a decision problem and by different parametrisation procedures such as selection of the characteristic points on the evaluation scale of the criteria. Based on the findings from the first two parts, a supervised parametrisation procedure is proposed which. The results from an extensive experimental analysis demonstrate effectiveness of the proposed procedure in maintaining a “good” balance between the two conflicting aspects of the preference disaggregation outcome quality (Kadziński et al., 2017).

4. Methodology, data, and key findings

To address the problem of brand colors and its relationship with the perception of brands by the customers, data from a survey on brand image dimensions is combined with independently measuring brand color components through scanning their logos. The dataset consists of two parts. The first part comes from the opinion of 4,769 respondents on 40 dimensions of brand image over 34 major cosmetic brands. The second part of the dataset consists of information regarding the representative color of the brand (blue of Nivea, red of Colgate). Only those brands for which such representative color does exist are considered in this analysis. For each brand, the color is measured by scanning the logo and represented in the hue-saturation-brightness color space. The results of the analysis provides: i) the optimal level for each color component in order to communicate a particular brand image, ii) the relative importance of each color component for each of the brand image dimensions, iii) positioning dimensions of brand image in the color space. Despite the common assumptions, the results demonstrate that the importance of color hue is significantly less than color saturation and brightness, while there is no significant difference between brightness and saturation. In other words, in order to communicate a particular brand image to the customers, more focus should be placed on the brightness and saturation of a color than its hue or pigment.

The second study relaxes the assumption of monotonicity and provides an efficient analytical framework based on linear programming techniques to capture preference models from indirect and holistic preference information. The results of the comparison with the representative benchmark methods are in the favor of the proposed framework. In addition to the benchmark comparisons, the effectiveness of the methodology is investigated through a comprehensive experimental analysis based on simulation. Considering different aspects of a decision problem, such as number of alternatives, number of criteria, amount of supplied

preference information, and degree of complexity in formation of preferences, 48, 000 decision problems are simulated. The results demonstrate “good” performance of the methodology in heterogeneous decision problem settings, both in terms of discriminatory power and simplicity/smoothness of the estimated preference models.

The third part of the dissertation studies the impact of parametrisation in preference disaggregation on the quality of the resulted preference model. In this regard, two main dimensions of estimated preference model, expressiveness and robustness, are simultaneously investigated and two measures for each dimension is introduced. In addition, a new supervised procedure for selecting landmarks on the criteria evaluation scale is proposed. The results from a comprehensive experimental study by simulating 550,000 decision problems covering various decision problem settings indicate that i) expressiveness and robustness are conflicting qualities, ii) the proposed strategy for selection of landmarks outperforms the existing procedures in reaching compromise between these two conflicting quality dimensions across various settings, which, in turn, results in an increase in the usefulness of an additive value model in the preference disaggregation methods. The advantage of the proposed supervised strategy was particularly evident when numerous pairwise comparisons were available.

5. Significance/implications for theory and practice

The three main chapters of the thesis collectively contribute to two main paradigms: decision science, and consumer research. The key concept relating the two paradigms is the notion of preferences. In the following subsections, the theoretical contributions in these two active research paradigms and implications for practice will be addressed.

5.1. Contribution to Decision Science

The preference disaggregation approach introduced in the thesis contributes to multiple criteria decision analysis literature by addressing the case of non-monotonicity in preferences. Compared to the existing methodologies, this framework is able to capture non-monotonic preferences without making any assumption on the shape of the preference model and without asking for extra information from the DM. In addition, this thesis contributes to decision science studies by performing a series of experimental analysis based on simulation of a broad range of decision settings. Experimental analysis approach based on simulation has been used to enhance our understanding of how characteristics of a decision problem can influence the quality of the inference outcomes (chapter 4 of the thesis), as well as to test the performance of the newly introduced disaggregation framework (chapter 3 of the thesis). The framework of the simulation study can be utilized by scholars who are interested in experimental analysis of various types of decision problems. Moreover, the findings from the third study can be used for better elicitation of preferences in a decision analysis practice by better adaptation of parametrisation procedures to the decision problem settings.

5.2. Contribution to Consumer Behaviour literature

Modeling of consumer preferences among multiattribute alternatives has been one of the major activities in consumer research (Green and Srinivasan, 1978). The classical approach for this purpose is based on two important works at 1970s, the behavior theory approach by Fishbein (Fishbein, 1976) and the conjoint measurement of judgmental data by Green (Green and Rao, 1971). Since then, conjoint analysis has received considerable academic and industry attention as a basis for the analysis of consumers' tradeoffs among multiattribute products (Green and Srinivasan, 1990; Gustafsson et al., 2013; Rao et al., 2014). Analysis of consumers' tradeoffs is at the core of the developed framework in this thesis. The introduced framework has several advantages over the classical conjoint analysis approach due to its powerful capabilities in capturing various preference models. Moreover, its flexibility in admitting various types of preferences as input information facilitates modeling complex preferences with low cognitive demand from the consumers' side. This framework can be viewed as an alternative or supplementary framework for conjoint analysis, especially in the contexts where no prior knowledge on the shape of preferences is available.

5.3. Implications for Practitioners

This thesis has several implications for the practitioners. The framework introduced in this thesis can help practitioners in decision-making processes in complex environments where several conflicting points of view should simultaneously be considered, especially when some of these evaluation criteria contain an ideal point or several local ideal points.

In particular, addressing the design of brand elements as a multiple criteria analysis problem helps brand managers in this crucial task. Disaggregation of preferences of complex form based on preference information of the simplest form (pairwise comparison) helps marketing managers to gain a better understanding of the needs of consumers in the market. Moreover, the analytical framework introduced in this thesis helps on predicting market reaction to changes in some of the product attributes. This provides insights on the sensitivity analysis towards the changes in the features of a product or service. Such results can provide a basis for the decisions on product improvement, also allocation of resources in order to gain the highest value by investing on the attributes that the market cares the most about. Also, by capturing non-linearity in preferences, the framework helps to identify the levels on attributes up to which the investment is beneficial and beyond that the gain in value is becoming rather marginal.

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Appendix: Links to the three journal publications

Understanding the impact of brand colour on brand image: a preference disaggregation approach in Pattern Recognition Letters:

<http://www.sciencedirect.com/science/article/pii/S0167865515001567>

A linear programming approach for learning non-monotonic additive value functions in multiple criteria decision aiding in European Journal of Operational Research:

<http://www.sciencedirect.com/science/article/pii/S037722171>

Expressiveness and robustness measures for the evaluation of an additive value function in multiple criteria preference disaggregation methods: an experimental analysis in Computers and Operations Research:

<http://www.sciencedirect.com/science/article/pii/S03050548173012>

Distinguished Papers

HOW NOVELTY IS GENERATED. COGNITIVE PROCESSES IN ORGANIZATION

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Abstract.

This dissertation addresses the role of metaphors and conceptual blending in the production of novelty within the organizational realm. More specifically, it examines: the manifestation of metaphors with the broad realm of organization and management studies; the roles that metaphors play in the production of different types of novelty in organizations; and how conceptual blending operates in the production of a new business model concept. Each chapter builds on the literature on cognition and cognitive linguistic and addresses a specific dimension of the cognitive micro-processes in the creation of novelty in organizations and by mobilizing different qualitative methodologies.

Keywords: novelty, metaphor, cognitive studies, business model innovation, innovation.

THE POWER OF METAPHORS IN MANAGEMENT STUDIES

Metaphors are recognized to act as framing devices to make sense of what we see and experience in our everyday lives (Lakoff & Johnson, 1980), since they work by way of powerful scheme that give significance to the unknown. In explaining one kind of thing in terms of another

(Ortony, 1975; Lakoff & Johnson, 1980), metaphors are essential units of human thought. They foster interpretation of organizational problems (Weick, 1989), and help in dealing with complexity (Hargadon & Sutton, 1997), even in cultural differences (Riad & Vaara, 2011). In more than three decades, management literature has been investigating metaphor from different theoretical perspectives and by applying diverse methodological lenses. While the debate on metaphors might be seen as a very specialised discussion among a few scholars, I claim that since the seminal works by Schön (1979, 1993), and Morgan (1980; 1986), studies on metaphors have increasingly occupied a central stage in the literature of management. Indeed, organizational scholars have shown that metaphor is a *sensemaking* device for organizational change; that it is a persuasive tool, and that is used in generating new concepts for theory development.

This debate has borrowed from several disciplines, such as cognitive science (Dedre Gentner, 1983), cognitive linguistics (Lakoff & Johnson, 1980), psychology (Ortony, 1975),

cognitive psychology (Gentner & Markman, 1997), philosophy of science (Black, 1954, 1962, 1979; Hesse, 1963), and sociology (Berger and Luckmann, 1966). The inter-disciplinarity nature has contaminated a variety of streams of literature (organizational change, strategic management, organization theory), with a large spectrum of themes analysed.

Notwithstanding this rich research production, almost no effort has been spent so far to systematise this vast and partially fragmented body of research, with the noteworthy exception of the work by Cornelissen et al. (2008).

Therefore, I suggest it is timely to map this literature in order to provide a comprehensive analysis of the contribution of studies on metaphors to management literature, to identify relations among streams of research that have developed along separate paths, and to identify which are the key ideas of this research and the opportunity for future theoretical and empirical advancements. Then, the research question is as follows: *how the debate has been developing in the last four decades?*

I used a mixed method approach to map the studies on metaphors in the literature of management. This approach integrates both quantitative and qualitative methods. The period the review covers begins with the seminal paper by Morgan (1980) published by *Administrative Science Quarterly*. To have a complete picture of the articles published in management journals that used the construct of metaphors, I searched the database of ISI Web of Science. The search was conducted on the articles that contained at least one of the following word roots (metaphor* OR tropol* OR analog*) in their title, abstract, or keywords, that are part of the Business and Economics disciplinary area. I first read a handful of the articles and to detect their differences and develop possible analytical categories. I then produced a coding book, which oriented me in a systematic coding of the whole catalogue. The codes are the following: (1) The main literature to which the article contributed (e.g., organization theory, organizational behaviour, change management, marketing). (2) The use of metaphor as a dependent or independent variable. (3) The type of metaphor present in the study (e.g., conceptual, embodied). (4) The unit of analysis: *micro*, *meso*, or *macro* level. (5) The disciplinary orientation, whether it is psychological, which studies the metaphor as a construct that pertains to an abstract conceptual space, or sociological, which studies the metaphor as a socially constructed entity used in the organizing. (6) The method in which a metaphor is studied, which is inductive when the metaphor arises from the field (Grant & Oswick, 1996), or deductive, when the author imposes it (Cornelissen, Oswick, Christensen, & Phillips, 2008). With such a coding book, I read and coded all articles.

The qualitative examination suggests that a rich debate has been growing in the last decades, both in terms of themes investigated and of inter-disciplinarity. The streams of literature that have most contributed to the advancement of knowledge of metaphor are organization theory, marketing, organizational change, and organizational behaviour. However, these findings suggest that a closer dialogue is needed between these traditions in order to provide more insightful results. Management scholars tend to be confined within their fields, and marketing research would benefit to other streams of literature for several reasons. First, since it employs a different literature, such as semiotic and rhetorical studies, that provide good fuel to investigate metaphors not only as a cognitive mechanism, but also as a linguistic phenomenon that pertains our everyday life. This reviews also shows that three salient metaphors' dimensions emerge as central in metaphors investigation and could inspire future lines of research. A first dimension concerns *metaphors in action*: metaphors are related with the cognitive but also the practice world, and unexpectedly interact with artefacts and actions. A second dimension regards the cognitive mechanisms by which metaphors emerge and work as a means of generating novelty at both individual level, and at theoretical level. A third dimension, highlighted by more recent studies, is the plurality of metaphors and

their dynamics. Research should move from the focus to one key metaphor to the analysis of different metaphors: metaphors are numerous and might play a different role in our recognition and production of novelty.

COPING WITH DIFFERENT TYPES OF INNOVATION: WHAT DO METAPHORS REVEAL ABOUT HOW ENTREPRENEURS COGNITIVELY REPRESENT INNOVATION?

Entrepreneurs play a central role in generating and adopting innovations (Pérez-Luño, Wiklund, & Valle Cabrera, 2011). The identification and implementation of novel and successful ideas is the 'lifeblood of entrepreneurship' (Ward, 2004). By definition, entrepreneurs operate in contexts of high levels of uncertainty and complexity (Cardon, Zietsma, Saporito, Matherne, & Davis, 2005; Garud, Gehman, & Giuliani, 2014; Seidel & O'Mahony, 2014), and the literature so far has attempted to understand how entrepreneurs cope with this uncertainty. Hill and Levenhagen (1995) discussed how entrepreneurs use mental models both to understand their environment (*sensemaking*) and to communicate their understanding to others and gain the support they need (*sensegiving*). When they do this, entrepreneurs also make extensive use of metaphors to interpret the large amounts of information they come across every day (Hill & Levenhagen, 1995). Metaphors render past events more comprehensible (Cornelissen & Clarke, 2010; Oswick & Montgomery, 1999). Similarly, innovation literature has demonstrated that the generation of new products is facilitated by the use of metaphors and stories (Seidel & O'Mahony, 2014), and by analogical thinking to develop breakthrough product innovations (Gassmann & Zeschky, 2008), in dealing with novelty at team level (Hargadon & Sutton, 1997), or in clarifying innovative ideas to others (Bartel & Garud, 2009; Dahl & Moreau, 2002; Hargadon & Douglas, 2001) Schön, 1979).

Organizational scholars have already stated that metaphors provide a large amount of information about cognitive, behavioral, and emotional dimensions (Sackmann, 1989) and, because of their explicatory and generative impact, illuminate particular phenomena (Weick, 1979, 1995; Oswick, Keenoy, & Grant, 2002). The analysis of metaphors also discloses the contradictory nature of organizations, because they uncover perceptions, attitudes and feelings that otherwise could not be unfold (Oswick & Montgomery, 1999).

So far, the literature studying analogies and metaphors has restricted its focus to a specific type of innovation, namely new product development (Bereiter, 2009; Dell'Era et al., 2011; Gassmann & Zeschky, 2008; Seidel & O'Mahony, 2014). There is still a lack of research exploring how metaphors work at the individual level in developing and understanding other types of technological and non-technological innovation, such as process, strategic, marketing, and organizational innovation (Garcia & Calantone, 2002; Mol & Birkinshaw, 2014; Tavassoli & Karlsson, 2015). Despite the effort to understand how complexity can be controlled and predicted, there is still no clear comprehension of how entrepreneurs make sense of the multifaceted nature of innovation and how they explain it to

other people. Tackling this issue is relevant since it would clarify how entrepreneurs engage daily with innovation and how they solve some of the issues they regularly encounter. In order to fill these gaps, this study addresses the following research question: *What can metaphors reveal about how entrepreneurs cognitively elaborate and represent different types of innovation?*

To answer this, we conducted an exploratory study on a sample of 39 innovative entrepreneurs, focusing our attention on their use of *metaphorical* language, because it provides more information – unconsciously expressed – than *literal* language, which is more controlled (Lakoff & Johnson, 1980). We adopted an inductive approach to studying the underlying metaphors that emerged from discursive interaction (Grant & Oswick, 1996) and that naturally surfaced within the talk and *sensemaking* of the actors (Cornelissen et al., 2008). By exploiting the Behavioural Event Interview technique (BEI) (Flanagan, 1954), a method that permits the interviewee to talk extensively about past episodes, we attempted to trace how entrepreneurs talked about innovation processes and, in particular, how they make sense of their complexity. The analysis of the interviews highlighted several results. First, we counted 1,302 metaphors used specifically to explain episodes of innovation processes. Entrepreneurs mainly talked about episodes concerning product innovation (36.46%), followed by organizational innovation (30.94%), strategic innovation (20.99%), marketing innovation (6.08%), and process innovation (5.52%). By counting the metaphors used to explain each type of innovation, we found that the distribution of metaphorical language was different for each. Entrepreneurs rely strongly on metaphors to explain organizational innovation, while there is a limited use of literal language to make sense of and explain marketing innovation. This result suggests that certain innovations incorporate a degree of complexity that involves a different cognitive effort, which emerges at the level of making meaning from metaphors and would not be traced by looking only at literal language. Indeed, when the level of complexity is high, the vocabulary becomes more metaphorical and the complexity of the different types of innovations is elaborated differently. In particular, we registered the following distribution: there were 580 metaphors to explain organizational innovation (45%), 283 metaphors linked to product innovation (22%), followed by 250 metaphors to explain strategic innovation (19%), 104 metaphors for process innovation (8%), and 85 metaphors for marketing innovation (6%).

Unlike previous studies that usually focus their attention on a narrow set of metaphors (Dodd, 2002; Oswick & Montgomery, 1999; Seidel & O'Mahony, 2014), we found a rich and diversified array of themes. We detected metaphors linked to 15 themes, ranging from journey, war, and the body to socio-political dimensions, and covering a large variety of topics. This richness implies that entrepreneurs draw on multiple subjects to interpret the key events of an innovation process and, in turn, to explain it. We also noticed that some of the themes are anchored to more concrete and routine activities, such as socio-political dimensions, physical objects, machines, games and sports, food, and family. On the other hand, they also refer to more visionary and imaginative subjects, such as science, journeys, imaginary world, natural features, and war. In this way, entrepreneurs are attached to their daily experiences but also imagine distant scenarios that help them to make sense of and describe the complexity of the innovation process.

THE CONCEPTUAL INNOVATION OF A BUSINESS MODEL: THE CASE OF THE HUFFINGTON POST

Since the business model construct was introduced by Amit and Zott (2001) to understand value creation in e-business, the management literature has sought to understand more in depth how a new value creation model can emerge. More recently, scholars taking a cognitive perspective have shifted attention to the business model conceived as a cognitive structure (Doz & Kosonen, 2010), that is, as a ‘cognitive device [that represents] a business enterprise’s value creation and value capture activities’ (Aversa et al., 2015b: 152). This line of research investigates business model innovation, analysing the features of the generative cognitive processes that are at the basis of a new business model design (Baden-Fuller and Morgan, 2010; (Doz & Kosonen, 2010; Martins et al., 2015; Mikhalkina & Cabantous, 2015). In this same vein, Martins et al. (2015), in their conceptual paper, suggested that the cognitive perspective on business model innovation allows us to understand how managers conceptualize a business model and how their cognitive elaboration affects the emergence and implementation of a new one (Aversa and Haefliger, 2016). This perspective identified two key cognitive mechanisms by which individuals generate a novel way to create value: analogical thinking and conceptual combination (Martins et al., 2015). A significant body of studies have investigated how analogical reasoning, at the heart of novelty generation in product innovation (Dahl & Moreau, 2002; Gassmann & Zeschky, 2008) and strategic decisions (Gavetti, Levinthal, & Rivkin, 2008; Gavetti & Rivkin, 2005), acts as a powerful cognitive mechanism through which managers, facing an unknown problem or scrutinizing a puzzling opportunity, use a well-known source to transfer knowledge to the unfamiliar target.

However, there is still scant research on conceptual combination with respect to strategy and, specifically, business model innovation.

According to the cognitive psychology literature, we know that in contrast to analogical reasoning, conceptual combination relies more on differences instead of similarities, which contributes to the emergence of a richer and more creative new concept. Moreover, the new concept is not a raw sum of concepts but, rather, a combination of selected conceptual material from two or more distinct input sources, selected through a structured process of selection and composition (Fauconnier & Turner, 2002). However, little is still known concerning the dynamics of conceptual combination and how the basic mechanisms governing conceptual innovation operates in the process of designing a business model (Zott & Amit 2015). Moreover, there have been scant empirical investigations of this issue.

We thus address the theoretical and empirical gap in the research on conceptual combination as a central generative process that leads to the creation of an entirely new business concept through the following research question: *how is a new business model generated through conceptual combination?*

We developed a longitudinal case study of *The Huffington Post* (THP), which was launched in 2005; at the time, it brought an entirely new business model to the newspaper sector. We concentrate our analysis on the inception of THP, when it was ideated and then launched in 2005 and the following years until 2010, when the new business model was refined. We chose to look at these early stages of the business model innovation process, leaving aside the implementation stage (Zott & Amit, 2015), because the idea generation stage is the most crucial moment within the process of designing a new business model, when

the structuring of the conceptual components and relations at the basis of the new model plays a central role (Zott & Amit, 2015; Martins et al., 2015).

With this paper, we bridge the gap with cognitive studies on new concept generation and specifically the conceptual blending model (Gentner, 1983, Fauconnier, 1997; Fauconnier & Turner, 2002; Thagard & Findlay, 2012) with the cognitive approach in business model innovation (Martins et al., 2015), to explore in depth the mechanisms that generate a new business model concept. We then collected a data set of 24 video and audio interviews with Arianna Huffington from 2007 to 2015, in which she narrated in rich detail the birth and initial steps of her entrepreneurial endeavor. The rich dataset of interviews was triangulated (Yin, 2003) by collecting 68 newspaper articles on THP, 35 research reports about the blog and the newspaper sector produced by internationally recognized research centers that constantly monitor the evolution of media. Furthermore, we collected 13 post blogs on the THP foundation. We used a mixed method approach based on data mining interviews and a qualitative coding of interviews and reports.

The qualitative coding conducted on Arianna audios and video interviews, together with interviews published by newspapers, shows that the new concept emerged as a combination of different inputs: blog and newspaper. Moreover, based on the insights of Amit and Zott (2012), THP can be identified as business model innovation. First, it met the increasing need for constantly updated news and ‘delivering a product that is faster and more personalized than that provided by the bigger, more established news organizations’ (Christensen et al., 2012, Nieman Report, 2012: 6). In this way, THP was able to compete with giants such as *The New York Times* and become a real competitor. Second, the contents were presented in an innovative way, by aggregating news, which are commented on by bloggers and journalists (*content* innovation). Third, it established novel ways of producing information (*structure* innovation). An engaged community of bloggers and journalists collaborated to produce news, the new business model was ‘about building networked communities around [editorial] ideas’ (Christensen et al., 2012, Nieman Report, 2012: 14). Fourth, new governance arrangements were created between a central board of editors, journalists, and bloggers (*governance* innovation). Fifth, new values emerged from an increasingly engaged community of readers, they could directly help in the making of news, but were also active in spreading them by means of social networks, and to nurture the debate through comments.

Thereby, by combining different concepts and their relations, a new meaning is generated at the intersections, with the combination process being more complex than the mere adding-removing procedure previously analysed through the analogical thinking perspective (Dahl & Moreau, 2002; Gassmann & Zeschky, 2008), and by cognitive psychologists (Gentner, 1983).

Our findings seem to support the Thagard’s hypothesis that the combinations of mental representations drive not only the creative process of scientific discoveries and technological inventions (Thagard, 2012), but also social innovations as it is the design of a new business model. We suggest that a new business model relies on a representation of why and how a company gets paid, and changing a business model means first of all changing its conceptual structure. In the light of these findings, we suggest that the different role of inputs as *head* and *modifier*, as discussed by Martins *et al.* (2015), should be partially reconsidered. The authors, following a common linguistic distinction (Wisniewski, 1997a; 1997b), argued that inputs act asymmetrically in the combination process, being the *modifier* which defines the characteristics of the business model and confers the main attributes to the *head*. We argue that when two or more inputs are detected, the cognitive process of *selective projection* and *composition* is not as directed and asymmetric as suggested by the framework of *head* and *modifier*. However, we suggest that this difference holds from a business point of view.

The choice of the *head* acts as a clear anchor to the ‘usage environment’, as it implies the choice of the competitive positioning of the new business model concept. Arianna Huffington, blended symmetrically both inputs, but chose the newspaper sector as *head*, to position its business model in the competitive landscape. Not surprisingly, the legitimization of the new concept came from this sector in 2015, when, for the first time, a Pulitzer Prize for national reporting was assigned to an online news site, marking a turning point for journalism and newspapers (Bell, *The Guardian*, 2012).

The *search for coherence*, serves as a fine-tuning process and aims to settle the components of the business model. As a system of elements, relations and goals the whole business model conceptual network has to satisfy internal and external constraints. The *search for coherence* implies deciding which elements have to be accepted or rejected from a conceptual system; the coherence criterion is that the emerging concept should “accept” elements which minimize the violation of constraints’. Thus, the review of the interrelated components of the conceptual system ends in a stable working model, when it cannot be improved by further incremental changes. When THP went online in 2005 it was not stabilized yet as a business model. Indeed, the revenue model was based on money flows coming from traditional advertising sell. Then the concept was refined and a new relation was activated between news production and advertising, transforming sponsors into providers of contents. This was coherent with the open model adopted by THP and the positive constraints between content sources and curation, given that the content produced by the advertising company was clearly marked as *sponsor generated blogs*.

Considering that the *search for coherence* might imply reiterated cycles of simulation of the prototype concept, with further conceptual structure refinement, we suggest that conceptual combination does not unfold as a rigid sequential set of phases, as previously suggested (Martins et al., 2015), instead it is a set of mechanisms with the possibility of recursion (Fauconnier & Turner, 2002). Indeed, there is the possibility for multiple successive combinations (Fauconnier & Turner, 2002), where the mechanisms can be activated anytime. Thus, the combination process can be conceived as flexible and fluid.

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Creating value through acquisitions – *Integrating strategic, organizational, and procedural perspectives*

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ABSTRACT

Written as a composite of value creation through acquisitions from different research strands the dissertation promises to be interesting for strategic management researchers and practitioners. This summary is part of my synopsis, which discusses the theoretical background, methodical approach, and contributions made on a meta-level. It aims to display how all papers are linked together, but also to discuss each paper individually, as well as implications, limitations, and propositions for future research.

INTRODUCTION

Mergers and acquisitions (M&A) is used as a generic term for bringing together two formerly independent organizations into a new corporate structure (Coyle, 2000; Hubbard, 1999). From a strategic perspective, M&A is useful overcoming external challenges such as negative market developments, state reforms, and technological changes (Child et al., 2001). Acquisitions are also used to speed up corporate growth for higher performance (Krishnan & Park, 2002) and to expand a company's competences (Schoenberg, 2003). Despite the different purposes acquisitions can serve, such undertakings are high risk. Failure rates remain constantly high and range between 40% and 60%, reported by both researchers and practitioners (Almor et al., 2014). Yet the above mentioned aims are sufficient to deploy M&A as a strategic opportunity for corporate development and value creation (Bower, 2001). Overcapacity, slower economic growth, competitive pressures, an increasing focus on core competences, as well as progress in technology and regulation have forced companies to grow faster and broader (Krishnan & Park, 2002). This requires organizations to continually adapt to changes (Andriopoulos & Lewis, 2009) caused by internal and external ambiguities, complexities, and variations (Lewis & Smith, 2014). Firms conducting a series of acquisitions to execute their strategy (Laamanen & Keil, 2008) can add the needed variety to their business models and display increased survival rates (Almor et al., 2014). Conversely, the problem in M&A is not only the continually reported high failure rates, but even more severe is that up to 90% of all M&A transactions cannot create value after deal closing (Christensen et al., 2011; King et al., 2004).

The inability to follow up on acquisition motives is primarily attributed to shortcomings in the M&A integration phase (Epstein, 2004; Habeck et al., 2002). Being concerned about acquisition integration or implementation alone will not suffice the call for a broader, integrative view, as acquisition integration is neither a self-purpose nor an isolated event, even though research usually treats it as such (Steigenberger, 2016). A pertinent integration approach first depends on pre-merger characteristics (Bauer & Matzler, 2014); second, on the expected synergies that are dependent on the motives of the acquisition (Christensen et al., 2011), third, on managerial interventions to bridge causal ambiguity between decision and

effect (Cording et al., 2008) and how the whole process is set up; and fourth, on the context that impacts individual and organizational behaviour (Bauer et al., forthcoming).

THEORETICAL BACKGROUND

Strategic Fit in M&A as an Indicator for Value Creation

The theoretical background of the dissertation thesis is based upon strategic fit as an essential component for value creation. The concept of strategic fit indicates that an augmentation between buyer and target company (e.g., market relatedness, resource similarity, or complementarity) contributes to an increase in financial and non-financial goals once the involved organizations are integrated (Jemison & Sitkin, 1986). An over-emphasis of pre-acquisition characteristics and ultimate M&A success in the strategic management school, calls for taking account of measures during the integration phase. In order to address the missing link between pre-acquisition synergy potential and post-acquisition synergy realization, the first contribution of this paper-based dissertation provides the following objective:

Paper 1: Integration of pre-acquisition acquirer–target fit in terms of exploration and exploitation with actual success in post-acquisition exploration and exploitation and ultimate M&A success

M&A Integration – Coordinating Capability Transfer

M&A integration is a key driver for value creation and M&A success (Haspeslagh & Jemison, 1991; Steigenberger, 2016). However, over the last decades a discourse has emerged whether or not in light of the capability gains a company should be integrated into the other (Zaheer et al., 2013). A springboard of this discussion is based upon the theory of organizational design (Thompson, 1967), where coordination among different units of an organization enables the maintenance of interdependencies. This means that if one activity is dependent upon another, coordination is required to increase performance outcomes of both firms. In such cases, matters on how to structure an organization and the information flow should be resolved in order to foster efficiency and effectiveness of activities (Galbraith, 1974). Transferred to M&A integration management, coordination activities aim to create structural contingencies that allow for interdependency and interaction in terms of strategic, systems, processes, and physical exchange resulting in operational capabilities, common goals, common procedures, and common authority. By this means, integration is not considered as one end of a continuum reverse to separation or autonomy, but more as a distinct concept for capability leverage (Zaheer et al., 2013).

By applying different coordination mechanisms interdependencies between buyer and target should be established. According to Birkinshaw et al. (2000), coordination mechanisms of integration focus on actions taken by management to navigate the dynamics between two entities. The application of coordination mechanisms helps to develop a connection between previously separate knowledge sources or other resources (Cohen & Levinthal, 1990). Refining and creating acquisition-specific tools can induce greater learning outcomes through the creative process itself than the use of the outputs of coordination and implementation devices (Zollo & Singh, 2004). Therefore, with the following paper of my dissertation I examine effects of coordination mechanisms in M&A integration.

Paper 2: Analysis of formal and informal coordination mechanisms on the exploration outcome of the integrated organization; as the usefulness of coordination mechanisms in M&A depends upon transaction

experience, this paper additionally investigates moderating influences of tacit and explicit acquisition experiences

My next contribution in this area deals with the question as to whether formal mechanisms of coordination are necessary and to what extent self-coordination effects can be exploited. This paper was inspired by Puranam et al.'s (2009) paper on common ground "as an alternative to the use of formal mechanisms that aid coordination between the activities underlying external and internal capabilities". A common ground consists of two dimensions, meta-knowledge and shared beliefs, and serves as a frame of reference between related parties (Dao et al., 2016). In the context of technology acquisitions, Puranam and colleagues (2009) provide empirical evidence that a common ground between acquirer and the target organization can substitute formal integration mechanisms and thus, avoid the costs of disruptions imposed on acquired organizations. While Puranam et al. (2009) observed the effects of common ground in relation to keeping the target and acquirer organizationally separate, my co-authors and I are interested in examining how this phenomenon would enhance collaboration among integrated employees. We show that common ground does not act as a substitute for formal integration mechanisms, but rather as a complement facilitating a means of formal integration. Thus, this research allows for a rich insight into the topic of post-merger coordination. It is helpful for all acquisitions in which sharing and transferring resources and capabilities are important sources of value (Cording et al., 2008). Moreover, with this case study analysis, we address Meglio and Risberg's (2010) call for more process-oriented studies with observations and interviews.

Paper 3: Common ground as a coordination mechanism during post-acquisition integration and whether it can substitute for human and task integration

A further aspect in the field of M&A integration and coordination mechanisms that receives increasing attention is the importance of contextual factors in M&A (Weber & Tarba, 2010). The variety of empirical results on the effects of M&A integration (Paruchuri et al., 2006; Puranam et al., 2009) suggests that not only variance explaining factors are missing (King et al., 2004), but also that M&A integration is more multifaceted than represented by the research (Angwin & Meadows, 2015). Environmental and organizational forces influence every transaction (Scott & Davis, 2007). When viewing an organization as an entity that is intertwined with its surroundings (Karniouchina et al., 2013; Scott & Davis, 2007), dynamics of the environment also shape the merging companies as well as all actions set during the integration phase related to outcomes. Therefore, in order to account for the boundary conditions set by the environment in which the merging organizations are situated, my co-authors and I examine the contest-specificity of M&A integration. More specifically, we analyse how the industry lifecycle frames integration-related decisions and measures.

Paper 4: Differences in the effects of degree of integration, formal, and informal coordination mechanisms in M&A integration depending on industry lifecycle

APPROPRIATENESS AND APPLICATION OF METHODOLOGY

In three papers included in this dissertation, my co-authors and I have applied quantitative research methods. We conducted several surveys with primary data to gain a higher level of granularity that secondary data cannot account for (Zaheer et al., 2013). Despite this, survey data is also common in M&A research, particularly in the context of M&A integration (Zaheer et al., 2013). Single key informant research design was opted for with a focus on top executives, who are cited to be the most knowledgeable about strategy- and integration-related issues (Bauer & Matzler, 2014). For measuring latent variables, existing scales were

modified. The major advantages of this approach are: 1) the validity if the measurement model is already proven, and 2) it facilitates the comparability of the research result. For all surveys pretests were conducted, and following minor adjustments to formulations and examples, questionnaires were sent out by postal mail (Dillman et al., 2009). After reminder emails and follow-up phone calls, completed questionnaires were gathered with a response rate of on average 17.6% throughout all studies, which is common for primary data research on M&A (Bauer & Matzler, 2014). Potential non- or late-response biases and common method bias was analysed following common suggestions. The results of our tests indicate that the mentioned biases are not a major concern in our data. In all research papers either ordinary least squares (OLS) regression analysis with moderation effects (Baron & Kenny, 1986; Dawson, 2014) or variance-based structural equation modelling (SEM) using SmartPLS has been applied (Ringle et al., 2015). SEM was the preferred choice over a standard regression analysis for two reasons: First, when investigating two independent variables (Byrne, 2013). Second, SEM is the preferred choice when research involves latent constructs (Bollen & Lennox, 1991).

To account for the claim of taking integrative perspectives from the strategic, organizational behaviour, and procedural perspective also requires the application of different methodical approaches. One study of my paper-based dissertation was conducted using a single case study approach to gain an in-depth understanding (Yin, 2014) on the interplay of shared knowledge and shared beliefs (i.e., common ground) in the post-acquisition integration phase for several reasons (Graebner, 2004). First, there is a lack of prior research and theory on the influence of preexisting knowledge and belief overlaps of acquirer and target employees to create value from acquisitions. Second, research mainly draws an acquirer perspective even though it is acknowledged that target managers play a decisive role. Third, integration is not only managed by top-managers, in most cases middle managers and lower managers are not only in charge of but are also affected by integration. Consequently, the aim was to shed light on their role during integration implementation. Fourth, acquisition integration is not a static event but rather a dynamic process with over-time changing attitudes and behaviours (Meglio & Risberg, 2010). Large-scale studies can investigate specific relationships, but to answer how these relationships affect an outcome – it requires ‘depth’ as a necessary dimension of empirical research (Yin, 2014). The qualitative content analysis following Mayring (2008) was chosen to analyse transcripts and archival data. Content analysis aims at systematically analysing communication, following rules and theory, to derive conclusions concerning aspects of communication. For data analysis, we synthesized the interview transcripts and the archival data, cycled between our data and theory in an iterative approach to further develop understanding and theory (Eisenhardt & Graebner, 2007) on how a self-coordination can be triggered based on shared knowledge and shared beliefs.

DATA AND FINDINGS

Data was gathered through several surveys with partially identical scales to combine and/or compare data over several studies. At first, a sample of acquirers with transactions within a time span of three years (to make sure that the integration phase was already completed; Ellis et al., 2009) was retrieved from the Zephyr database of the Bureau van Dijk. Two main characteristics are inherent in the data – the focus on SMEs and the focus on acquirers from German-speaking countries. In a second step questionnaires were sent to responsible managers, including follow up calls. For Paper 1 data from the 2013 study was used, for Paper 2 data from the 2014 study was used, while paper 4 integrated data from both the 2012 and 2014 studies. The following table provides an overview of the larger scale primary data studies, from which data was obtained for my dissertation.

Year	Acquisitions completed between	Central constructs/ Core issues of interest	Basic population/ Sample
2012	Jan 2007 and Jan 2009	<ul style="list-style-type: none"> • Marketing fit • Cultural compatibility • Brand integration • Degree & duration of integration • Coordination mechanisms • M&A success 	528/ 116
2013	Jan 2007 and Dec 2010	<ul style="list-style-type: none"> • Exploration and exploitation fit • Common ground • Continuity • Degree & duration of integration • Changes in exploration and exploitation • M&A success 	616/ 101
2014	Jan 2008 and Dec 2011	<ul style="list-style-type: none"> • Tacit and explicit acquisition knowledge • Entrepreneurial and market orientation of acquirers • Degree & duration of integration • Temporal separation • Changes in exploration and exploitation • M&A success • Environmental hostility 	761/ 115

Table 1: Survey data partially used for dissertation papers

For the qualitative research approach, I joined my supervisors and two post-docs from Innsbruck University and Copenhagen Business School to accompany a medium-sized firm during its integration process of an acquired competitor. Data originate from both, primary (14 semi-structured interviews with 12 persons held by our research team at two distinct points in time) and secondary sources (archival data such as correspondences between internal and external parties, press-releases, checklists). The interviewees were from the acquirer's headquarter (7 persons) and regional business unit (3 persons) and the target (2 persons). We developed three different interview guidelines to reflect on the different units of investigation. Twelve of the interviews, which lasted between 60 and 120 min, were face-to-face, while one interview was conducted on the telephone and one by e-mail.

SIGNIFICANCE AND IMPLICATIONS FOR THEORY AND PRACTICE

Firms conducting (a series of) acquisitions to execute their strategy (Laamanen & Keil, 2008) can add the needed variety to their business models and display increased survival rates (Almor et al., 2014). However, up to 90% of all M&A transactions cannot create value after deal closing (Christensen et al., 2011). The inability to follow up on acquisition motives is primarily attributed to shortcomings in the M&A integration phase (Epstein, 2004), but M&A integration is neither a self-purpose nor an isolated event, even though research usually treats it as such (Steigenberger, 2016). A pertinent integration approach first depends on pre-merger characteristics (Bauer & Matzler, 2014); second, on the expected synergies that are dependent on the motives of the acquisition (Christensen et al., 2011), third, on managerial interventions to bridge causal ambiguity between decision and effect (Cording et al., 2008) and how the

whole process is set up; and fourth, on the context that impacts individual and organizational behaviour (Bauer et al., forthcoming).

The aim of this PhD dissertation is to go beyond traditional success-factors by integrating strategic, organizational, and procedural perspectives. A core starting point is to recognize that what causes success is not necessarily the opposite of what causes failure. Therefore, I closely examine potential indicators of synergy creation, M&A integration-related decisions, measures for shaping and implementing the integration goals, and contextual factors in my dissertation to achieve a thorough understanding of pre- and post M&A value creation mechanisms, coordination mechanisms of M&A integration, and boundary conditions for realizing long-term growth. The following figure displays the identified research problems, the intended contributions, and thematic integration by each paper pertaining to the contributions.

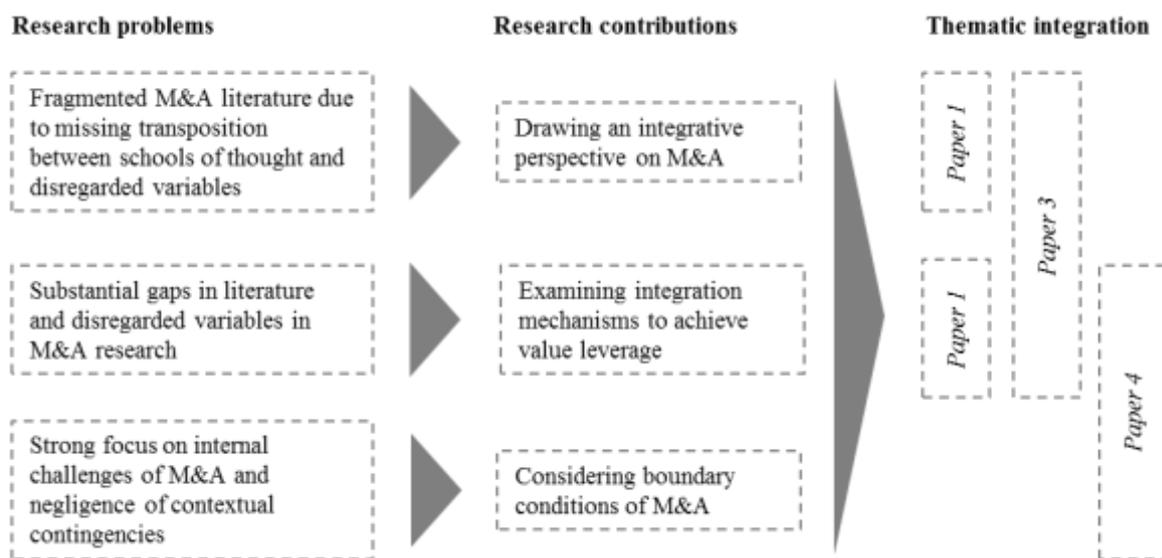


Figure 1: Significance and approach to research problems in my dissertation

The contributions of this paper-based dissertation are threefold. First, an integrative perspective on M&A integration is offered by combining interdependencies between pre-acquisition synergy potential with post-acquisition synergy realization and M&A success. Second, specific fields in the realm of M&A integration are delved into by investigating different effects of coordination measures by deploying different methods. Third, boundary conditions of M&A transactions are examined by considering the industry context. For management practice inferences can be made concerning first, the interrelationships of decisions and actions between pre- and post M&A phases; and second, the deployment of coordination mechanisms depending on the need for flexibility and clarity, both – timewise and context-wise. The originality and innovation of my thesis occurs in two arenas. First by adopting a meta perspective, my dissertation synopsis is an attempt to link and reflect on the different papers to develop how they relate both to each other and future research projects, which is uncommon for a doctoral dissertation and should provide a guidance for follow up research in academia. With this I also intended to show reflected thought and understanding of the benefits and shortcomings of different research methods and impact of researcher’s underlying philosophy / perspective. Second, by adopting a micro perspective that is focused on specific research problems and contributions, I delved into M&A research and developed distinct papers that passed through the peer-reviewed process of academic conferences and journals to account for research rigor. For each paper, I would like to summarize the originality and innovation of my work as follows.

1. M&A research suffers from fragmentation and inconsistent results (King et al., 2004), which leaves substantial gaps in the literature (Haleblian et al., 2009). Further, different views on M&A emerge, namely the strategic, organizational and process perspective, that help to remove the complexity of the field, but at the same time these schools of thought only marginally inform each other (Bauer & Matzler, 2014). Both problem areas result at the cost of a holistic understanding of interrelationships (Cartwright, 2005). Paper 1 of this dissertation is an attempt to establish linkages between pre- and post-acquisition mechanisms of value creation and ultimate M&A success. By conceptualizing strategic fit as a match in learning orientations (exploration and exploitations; Levinthal & March, 1993; March, 1991), linking synergy potential to creation, and thus making value-creating mechanisms visible the research contributes to an integrative perspective on M&A.
2. Interdependencies between organizations are established by deploying coordination mechanisms. The second paper of this dissertation analyses how formal and informal mechanisms of coordination (Faraj & Xiao, 2006) can be utilized to leverage post-acquisition exploration. Further, the reprocessing or application of acquisition experience is accounted for by embracing its tacit and explicit dimensions, which has not been analysed in M&A research so far. M&A literature in technology acquisition repeatedly points toward the disruptive effects of integration measures on employees' working environment leading to decreased performance (Vuuren et al., 2010) because of the unsettling of established intergroup dynamics, power-relations, and perceived discontinuity (Paruchuri et al., 2006). Paper 2 provides an alternative to circumvent such detrimental effects.

3. The importance of coordination mechanisms is emphasized by the results of Paper 3. Common ground is a kind of informal mechanisms of coordination (Puranam et al., 2009). As indicated by the results of Paper 2 and other studies, a subtle and emergent way of coordination is particularly beneficial in the presence of a high degree of volatility, complexity, and uncertainty (Bechky, 2006), such as in M&A integration. Paper 3 shows that despite the positive effect, informal ways of coordinating M&A integration can be perceived as a lack of clarity and transparency over time. Consequently, common ground cannot be a full substitute for formal mechanisms of coordination. M&A integration measures should be deployed with due consideration of the context. The industry lifecycle sets framework conditions and effects of M&A integration, whose measures differ according to the industry lifecycle. Paper 4 deals with the industry context, which is entirely novel in the field of M&A. The intention is to shed light on the parameters that determine the choice for depth of integration and the application of formal and informal mechanisms of coordination.

Table 2 provides an overview on all papers included to my dissertation. The results of Paper 1 reveal that managers should screen their target firms based on a similar strategic orientation pertinent to exploration and exploitation. Paper 2 shows that companies can foster their explorative output by creating circumstances under which employees of both the acquiring and acquired firm can connect with one another. Knowledge exchange for unlocking innovation capabilities is stimulated when organizational members understand and comprehend each other properly (Jaworski & Kohli, 1993). The importance of deploying such informal mechanisms when coordinating M&A integration is emphasized by the results of Paper 3. The results of Paper 4 complement the implications on coordination mechanisms in M&A management. When preparing and implementing acquisition integration, managers should take the industry environment into account. The following table provides an overview on the papers included in this thesis.

No.	Title	Authors	Status	Journal Conference proceedings	/
1	Examining links between pre and post M&A value creation mechanisms - Exploitation, exploration and ambidexterity in central European SMEs	Florian Bauer Andreas Strobl Mai Anh Dao Kurt Matzler Nicole Rudolf	Published	<i>Long Range Planning</i> (forthcoming) DOI: 10.1016/j.lrp.2016.07.002	
2	Leveraging exploration through post-acquisition integration: The role of coordination mechanisms and acquisition experience	Mai Anh Dao	Presented	Proceedings of the European Academy of Management Conference, Paris 2016	
3	The complementing and facilitating nature of common ground in acquisitions – Why task and human integration are still necessary in the presence of common ground	Mai Anh Dao Florian Bauer Andreas Strobl Kurt Matzler Marc Eulerich	Published	<i>The International Journal of Human Resource Management</i> 2016, Volume: 27, Issue: 20, Pages: 2505-2530	
4	How industry lifecycle sets boundary conditions for M&A integration	Florian Bauer Mai Anh Dao Kurt Matzler Shlomo Y. Tarba	Published	<i>Long Range Planning</i> 2017, Volume: 50, Issue: 4, Pages: 505-517	

Table 2: Overview of papers integrated in my dissertation

CONCLUSION

Written as a composite of value creation through acquisitions from different research strands the dissertation promises to be interesting for the readership of strategic management researchers and practitioners for several reasons. First, it highlights relevant questions pertaining to M&A that covers unabated strategic management (issues) for corporate survival, as acquisitions are deployed to speed up corporate growth, to extend capabilities, or to overcome external challenges such as technological changes or state reforms. Second, corporate decisions are involved along the whole acquisition and to comprehensively understand managerial influence I provide an integrative perspective – ranging from analysing pre-acquisition characteristics to post-acquisition decisions for integrating the acquired firm. Understanding how pre- and post-acquisition management decisions and actions intertwine shall better explain acquisition performance. Third, I borrow concepts from the organisational behaviour school to avoid an oversimplification and de-naturalization of humans and investigate how they affect and are affected by acquisitions.

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Walking a tightrope: Understanding and managing tensions in social enterprises

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Abstract

Social enterprises, through combining the pursuit of positive social impact with a business venture, experience organizational tensions. Although the study of tensions has received attention in the literature, it remains unclear the nature and management of different types of tensions. Drawing on the theoretical lenses of hybridity, cooptation, and business models, this doctoral thesis aims to unpack tensions that social enterprises experience at different organizational levels. Through qualitative methods, it examines how social enterprises can interact at the inter-organizational level, how different styles can be combined at the firm level, and how tensions can be managed at the individual level.

1. INTRODUCTION

Gijsbert Huijink, a Dutch entrepreneur, moved to Spain with his wife in 2005 and was looking for a change: “I sensed I needed something new... We wanted to live here but didn’t have a clear idea of work or business.” Upon buying an old house to renovate, he encountered a complication: although there were power lines very close to their home, the electric company informed them that the grid was saturated and he would have to pay 80,000 euros to increase the capacity to be able to connect their home to the grid. Gijsbert was appalled at the thought of paying an exorbitant amount to be able to access the grid. He refused to pay the 80,000 euros and instead installed solar panels in his home, which produced enough energy during the day, but none at night. A wind turbine could cover his remaining energy demands, but the high upfront costs of such infrastructure were prohibitive. He looked for a cooperative to share the costs but was surprised to not find a single cooperative in all of Spain. This led him to co-found Som Energia, Spain’s first renewable energy cooperative with a triple-bottom line, in 2010. Som Energia, *We Are Energy* translated in English, has more than 25,000 members, over 3.5 million euros invested by its members in sustainable energy projects. Som Energia’s story is an example of a social enterprise where the organization is dedicated to positive social and environmental impact while being a financially sustainable organization. With Som Energia’s growth, Gijsbert has been faced with new challenges: how should Som Energia interact with other newly established renewable energy cooperatives? How does the organization differ from other social enterprises being formed in the energy sector? How can the financial sustainability of the enterprise be balanced with positive social impact?

This doctoral thesis is a qualitative investigation of the social enterprise phenomenon that provides new theoretical understanding about how social enterprises are started, how they interact with each other in the same industry, and how they manage tensions unique to this organizational form. In this paper, first I explore how the phenomenon of social enterprises has been theorized and draw on organizational theories used to explain the tensions within this type of organization. Next, the methods used in the chapters of the thesis

are presented. I continue with a presentation of the theoretical contributions of the manuscripts included in this doctoral thesis. As a descriptive tool, I present Gijssbert Huijink from the Som Energia case to illustrate the theoretical findings of each manuscript. Finally, I conclude with implications for practitioners along with the limitations and avenues for future research.

2. THEORETICAL BACKGROUND

Although the past decade has seen a steep rise in scholarly interest (Battilana & Lee, 2014; Dees & Anderson, 2003; Doherty, Haugh, & Lyon, 2014; Haigh, Walker, Bacq, & Kickul, 2015; Smith, Gonin, & Besharov, 2013), research on social enterprises is still in an initial phase of development (Bacq & Janssen, 2011). Social enterprises are conceptualized as organizations that pursue the simultaneous missions of both financial sustainability and positive social impact (Austin et al., 2006; Chell, 2007; Mair & Martí, 2006; Peredo & McLean, 2006; Santos, Pache, & Birkholz, 2015).

By integrating the objective of positive societal impact in a financially-sustainable business venture, social enterprises can find themselves with conflicting goals, values, and actions. Scholars have studied managing tensions that can arise from integrating conflicting missions (Battilana & Dorado, 2010; Santos et al., 2015; Smith et al., 2013), as well as the strategies that social enterprises might use to resolve tensions to achieve their multiple goals (Haigh et al., 2015). While this theoretical debate has addressed important issues, little is known about the tensions beyond social-business tensions, as social enterprises continue to rise (Smith et al., 2013). Responding to Dacin and colleagues' (2010) call to look at the growth and rise of social enterprise across contexts, the goal of this thesis is to contribute to the theoretical understanding of the nature and management of tensions that emerge within and between social enterprises. The following research questions have emerged for this phenomenon-driven, qualitative study:

1. How do social enterprises interact with each other within the same industry?
2. How is the initial development of a new social enterprise managed?
3. How can leaders manage the tension between the social and commercial missions within an organization?

2.1 Hybrid organizing

This thesis examines how social enterprises manage tensions within and between organizations. Hybrid organizing is defined as the resulting actions, processes, and structures from the integration of multiple organizational forms (Battilana & Lee, 2014). Although there has been a lack of overarching theories to predict and explain the phenomenon of social enterprises (Bacq & Janssen, 2011; Dacin et al., 2010), the theoretical framework of hybrid organizing allows for studying both the integration of multiple different elements for the creation of a new action, form, or logic and the tensions that can ensue. The theories of hybridity and hybrid organizing have been used here for their explanatory power to understand the complexity of the tensions within and between social enterprises (Doherty et al., 2014). The application of the conceptual framework of hybrid organizations to social enterprises as a research setting is appropriate particularly due to the conflicting goals inherent in this type of organization (Ebrahim et al., 2014).

2.2 Institutional logics approach

The institutional logics approach has been employed in the study of social enterprises to contribute theoretical clarity to the literature on hybrid organizing (Skelcher & Smith, 2015). Institutional logics are considered the set of practices and symbols that a society uses as its organizing principles (Friedland & Alford, 1991). Logics are not static, but rather in contexts of multiple logics, the agency of individuals affects how logics are handled and

integrated in an organization (Skelcher & Smith, 2015). In their study of social enterprises, Pache and Santos (2013) found two distinct logics: a social welfare logic and a commercial logic. The tension arises due to the inherent difference in values between the two. The social welfare logic responds to social needs by leveraging resources as a means to contributing positive social impact, not an end in itself. Conversely, the commercial logic focuses on products and services being a means to creating profit, making financial resources an end.

2.3 Alternative theoretical lenses

The key theme throughout this thesis is managing tensions that arise from integrating different elements (e.g., social and commercial logics, actions of cooperation and competition, phases of ideation and implementation) to better understand the different ways tensions can arise in an organization and how they can be managed. The first manuscript uses the cooptation theoretical lens to look at organizational tensions at the inter-organizational level. Cooptation, actions where simultaneous competition and cooperation occur, has been studied across multiple industries such as technology, food, and healthcare (Bengtsson & Kock, 2000; Brown, Gianiodis, & Santoro, forthcoming; Gnyawali, He, & Madhavan, 2006). Although social enterprises may collaborate on their social missions, they may also compete for customers, resources, or market share. The literature on social enterprises has looked at individual organizations and the strategies that they use, however with the rise in social enterprises across contexts and industries we lack insights in the dynamics of tensions at the inter-organizational level (York, Hargrave, & Pacheco, 2016).

To analyze tensions from another theoretical perspective, the second manuscript draws on theoretical discussions from business models, identified as the central unit of analysis to understand hybrid organizing. The business model framework is a useful way to understand the integration of two distinct phases in enterprise creation: ideation and implementation (Baron & Ensley, 2006; Bernstein & Singh, 2006; Boons & Lüdeke-Freund, 2013). In ideation, high intelligence and creativity are required to develop new products or services (Baron & Ensley, 2006), while implementation is centered around project management skills to get the products to market (Bernstein & Singh, 2006). In social enterprises, a central challenge is finding a balance between the need to be innovative in the ideation while at the same time responding the pressure to implement the core business (Battilana & Lee, 2014).

3. THEORY BUILDING FROM CASE STUDIES

Following qualitative methods, the research questions here have been derived from the phenomenon itself (Eisenhardt, 1989), then theory has been consulted and included. Each manuscript answers one of the research questions using case studies for either theory building or illustrative purposes. The case method is appropriate as a means of extending existing theory to help explain phenomena (Eisenhardt, 1989; Yin, 2009). Table 1 is a list of all the cases included.

All the manuscripts use theoretical and purposeful sampling where cases are not chosen for their representativeness, but rather for their extremeness and richness in information because they clearly show the phenomenon being studied (Eisenhardt, 1989; Yin, 2009). The first manuscript employs an in-depth, nested case study (Yin, 2009) where all the organizations studied are part of a larger project and have had frequent interactions with each other for over a decade. Manuscript 2 uses multiple cases with enough replications within and between cases to build theory (Eisenhardt, 1989). Data in Manuscript 3 was collected from secondary sources (e.g., newspapers, websites, and academic articles). The manuscript uses multiple illustrative cases as descriptive tools to engage the reader. It uses the case method to

illustrate theory in an attempt to allow the reader to have vicarious experiences through the cases themselves (Stake, 1995).

For data collection and analysis, Manuscripts 1 and 2 follow similar methods. Data was collected using a multi-source approach with a combination of interviews, archival data, and observations (Eisenhardt, 1989; Stake, 1995; Yin, 2009). Data analysis and interpretation followed three steps. A narrative account was developed to become intimately familiar with each case (Eisenhardt, 1989). This step allows unique patterns to emerge from the data before generalizing. Then a process of open coding of the data took place where first-order themes were identified. The open codes were then grouped into second-order concepts and finally into aggregate dimensions that can be linked to extend and build theory beyond initial impressions in an iterative and systematic manner (Eisenhardt, 1989; Gioia, Corley, & Hamilton, 2013; Stake, 1995).

Manuscript	Case type	Industry	Case(s)
Manuscript 1	Nested case study	Second-hand charity	Roba Amiga program member organizations (nine organizations)
Manuscript 2	Multiple case study	Local food	Kartoffelkombinat
			La ruche qui dit oui
			Mi.cibo
			The Radical Market (pseudonym), illustrative case
Manuscript 3	Illustrative cases and examples	Retail (clothing, shoes, accessories)	AND1
			Cotopaxi
			TOMS Shoes
			Warby Parker
			The Container Store
			Patagonia
		Consumer products	Clorox
			Procter & Gamble
		Finance/investing	BancoSol
			Acumen Fund
			Grameen
			Kiva
			CommonBond
			Los Andes
		Food/beverage	Whole Foods
			Natura (pseudonym)
			Ben & Jerry's
			Starbucks
			Runa
			SABMiller
			King Arthur Flour
			Plum Organics
		Energy	d.light
		Services	B Lab
			change.org
			Kickstarter
		Other	General Electric
Cocoon (pseudonym)			
d.light			

Table 0: List of case studies

4. IMPLICATIONS FOR THEORETICAL KNOWLEDGE

This doctoral thesis is structured as a monograph based on manuscripts where each one responds to one of the research questions of the dissertation. Organization theory scholars acknowledge that institutions operate at different levels of analysis (Thornton et al., 2012). This thesis studies the phenomenon in question at the inter-organizational (Manuscript 1), firm (Manuscript 2), and individual levels (Manuscript 3), as illustrated in Figure 1.

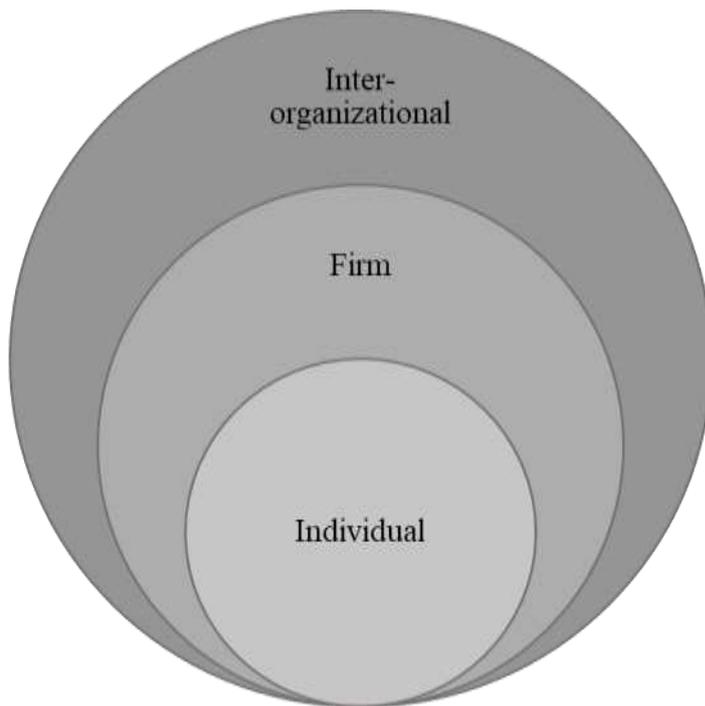


Figure 0: Levels of analysis

4.1 Manuscript 1. Game of thrones: Inter-organizational cooperation among social enterprises

Starting at the inter-organizational level of analysis, this first manuscript looks at the tensions that arise from managing both cooperative and competitive actions between social enterprises. Using the theoretical lens of cooperation, the second-hand-charity organizations nested case study allowed for an in-depth investigation into the inter-organizational dynamics among social enterprises. The findings show that cooperation and competition between social enterprises in the same industry can occur simultaneously, which is commonly referred to as cooperation (Bengtsson & Kock, 2000; Gnyawali et al., 2006). This study revealed that cooperation can occur at three levels of action: internal upgrade, customer interface, or environment shaping. The internal-upgrade level focuses on internal improvements and operations, on which different social enterprises can compete and cooperate at the same time. Actions in the customer interface level center around managing the various customer groups through maintaining quality standards and boundary conditions, again creating a dynamic where there is simultaneous cooperation and competition. The environment-shaping level is aimed at influencing how the industry works, where social enterprises can also engage in cooperation and competition at the same time. The levels of action move from internal to external of the organization. In terms of the current theoretical understanding of inter-

organization dynamics, this study contributes to the discussion by analyzing the management of cooperative relationships. Furthermore, the tension between cooperation and competition may not have a definitive solution per se, but the study of these tensions contributes to understanding how to live with them and, even possibly, to use them as stimuli to grow (Margolis & Walsh, 2003).

Referring to the case of Som Energia as an example, the organization has faced tensions from managing cooperation with other organizations in the energy sector. Although the first of its kind in Spain, Som Energia has spurred the establishment of other energy organizations based on their model. At the internal-upgrade level, although Som Energia has been open with other organizations to share their model as a networking action, they still need to make sure their own business is sustainable. Som Energia competes in having the first mover's advantage, as trailblazers, and want to continue to leverage that. At the same time, the cooperative engages in competition at the environment-shaping level by creating new energy projects separate from themselves working towards changing the energy sector in Spain, an iconoclasm action.

4.2 Manuscript 2. Something old, something new, something borrowed: An exploratory study of creating and implementing social enterprises

Moving to the firm level of analysis and using the theoretical lens of business models, the second manuscript explores the ways in which social entrepreneurs develop new ways of creating value and of implementing business models. This manuscript explores the tensions that can exist between two of the phases of the entrepreneurial process: ideation and implementation. The ideation phase, characterized by creativity, high intelligence, and content, can be categorized into entrepreneurs creating a new model or replicating one from another organization in a different context. The implementation phase, with a strong focus on project management skills, ranges from an as-you-go style (where trial and error is the way the organization moves forward) to a cut-and-dried style (where structures and protocols are set up in advance). Depending on how entrepreneurs choose to develop the idea and implement new enterprises, a model of four types of social value proposition creation and delivery. This study responds to Massa and colleagues' (2017) call to understand how the elements of business models differ when sustainability is at the center.

Linking back to Som Energia to illustrate this tension, Gijsbert spent significant time understanding how renewable energy cooperatives worked in different countries. The model for Som Energia was based on a cooperative in Belgium – a replicated model. The fact that this model worked in another country made the team of co-founders feel more secure about starting the cooperative, emphasizing that it was less risky than coming up with something entirely new. At the same time, Som Energia has implemented their model in an as-you-go style: “We wouldn't have been able to do anything if we had wanted to have everything organized from the beginning.” The organization developed and grew one step at a time and continues to do so: “As the cooperative and the groups grow we'll need to start strengthening the structure but not impeding it.” In this sense, Som Energia fits the organic type of social value proposition creation and delivery. The tension between the ideation and implementation in this case was managed by being flexible within an established framework.

4.3 Manuscript 3. When Missions Collide: Lessons from hybrid organizations for sustaining a strong social mission

At the individual level, the third manuscript draws on the theories of hybrid organizations and institutional logics to understand one of the challenges that managers of hybrid organizations face: integrating dual missions that are based on opposing principles and beliefs. Although dealing with the tension from conflicting goals is not new in the study of

organizations (Lawrence & Lorsch, 1967), the integration of a social mission as part of the core business brings with it challenges beyond traditional goal conflict. Managing the tensions that arise from the integration of social and commercial logics within an organization is a challenge that leaders are currently facing. This manuscript contributes to our theoretical understanding of the phenomenon by identifying techniques from an array of examples showing how to deal with the challenges that arise from these tensions, from more process oriented (e.g., strong vision) to more structural (e.g., legal structure).

In the case of Som Energia, one of the challenges Gijsbert has faced is wanting to find a balance between moving forward and growing (i.e., business logic), while at the same time having members participate and feel included (i.e., social logic). The business logic, daily operations, and sales, are handled by the full-time staff and governing council. The social logic is carried out in two main ways. First, a general assembly is held once a year where all members can participate in person or through video conference. Second, the cooperative set up a flexible structure where members can establish local groups in cities and towns as a way for individual members to contribute to the social mission of the organization by increasing awareness and educating about renewable energy in their communities. In this sense, the cooperative has been able to maintain member buy-in through the flexibility of the local group structure which complements the business logic.

As a whole, this thesis contributes to the current theoretical understanding of the nature and management of tensions that arise in social enterprises. The study of the tensions within and between social enterprises in how they integrate conflicting elements allows for understanding this growing sector in more depth building on Smith, Gonin, and Besharov's (2013) work on social and business tensions by identifying and examining other types of tensions that can arise in social enterprises. Understanding how to manage emergent organizational tensions can contribute to finding better ways of balancing profit and social impact, in general.

This doctoral thesis uses the research setting of social enterprises to allow for a *thick* perspective on how organizations can manage tensions that emerge in hybrid organizing, responding to Skelcher and Smith's (2015) call for the study of hybridity from different theoretical angles to understand and explain the phenomenon. Given the phenomenon-driven nature of this study, this doctoral thesis uses concepts and lenses that resonate with practitioners and can be implemented in practice (Brown & Forster, 2013; Dentchev, 2009), while at the same time contributing to and advancing current theory on social enterprises.

5. IMPLICATIONS FOR PRACTITIONERS

This thesis proposes insights for practitioners in the field of social enterprises and hybrid organizations. First, the thesis addresses the variety of tensions that social enterprises can experience and manage. Tensions can be conceptualized as misalignment between the way things are and the way they were intended to be. While tensions can be difficult to manage due to this misalignment, tension also creates forward movement, new opportunities, and innovative solutions. The tension between the ideation and implementation phases brings about new organizations. The tension between cooperation and competition can influence the environment in which organizations operate. The tension between social and business logics can give room for new ways of doing business that positively impact society.

Second, another approach to dealing with organizational tensions is understanding that they can emerge from the integration of different elements simultaneously. While it might be easier to manage tensions by separating different conflicting elements, practitioners can be faced with managing different logics, actions, and processes at the same time. The dynamics of cooperation found in Manuscript 1 shed light on practitioners in social

enterprises understanding how to manage cooperative and competitive relationships and actions with the same organizations. If a social enterprise is overly-aligned with the idea that like-minded organizations should cooperate to achieve common goals, being faced with competitive actions from other organizations could create resistance and complicate inter-organizational activities and relationships.

Third, all three studies that comprise this thesis provide practitioners with tools and solutions that can be used in different phases of a social enterprise development and at different levels. The findings and model in the second manuscript point social entrepreneurs to the multiple choices they have when starting a social enterprise. To be innovative and implement new business models, entrepreneurs can focus their innovation in a part of the business model, such as the ideation or implementation phases. In addition, the third manuscript describes how leaders dealing with managing the tension between social and business logics can be faced with tensions that are linked to value systems, as social goals are often embedded in one's identity and thus can be a challenge to manage. The tools and techniques presented to manage tensions are related to managing employees, the organization's mission and vision, suppliers and customers, as well as the legal structure. Understanding different levels of action, as described in the first manuscript, is a tool that practitioners may find useful when understanding multiple tensions facing the organization at once.

6. LIMITATIONS AND FUTURE RESEARCH

Although grounded in data and theory, this thesis has its limitations. Case study research has been critiqued for its inability to generalize due to its lack of representativeness. This thesis studies two industries, social enterprise startups and second-hand clothing, in separate studies in addition to numerous cases from multiple industries used as illustrative cases. The rich and "thick" descriptions that have been gained with the case study method are a fit with the purpose of striving for new insights into the phenomenon to build theory. This pragmatic approach is used to find explanations to actions and dynamics (Cornelissen, 2016). Also, in line with Eisenhardt (1989), this doctoral thesis uses multiple case studies across industries and geographies to provide higher generalizability than would be the case with a single case study.

In addition, the findings here make what have been called *petite generalizations* to describe dynamics and behaviors that repeatedly emerge (Stake, 1995). These petite generalizations, seen across multiple cases by identifying positive and counter examples (Stake, 1995; Yin, 2009) and describing patterns (Cornelissen, 2016; Eisenhardt, 1989), highlight the issue of tensions in social enterprises, beyond the industries and examples presented here. Social enterprises are a unique research setting to understand how organizations deal with integrating conflicting elements to create a new hybrid form or way of organizing.

Work remains to be done to further understand the emergence of tensions at different levels of analysis. Given the qualitative nature of this thesis, future research could test the findings here more rigorously. First, this thesis has looked at inter-organization competition to understand how social enterprises interact with each other in the same industry. More research could be done to understand the effects of different types of competition on the financial, social, and/or environmental bottom lines. Although the findings here uncovered competition at the inter-organizational level, we have little understanding of its effects on organizational outcomes.

Second, research could look at start-up social enterprises to understand the situational factors that affect the choices made in the ideation and implementation phases of the

entrepreneurial process. The social value proposition creation and delivery model presented here extends our understanding of part of the entrepreneurial process, but further research could develop a contingency model to understand when one choice or combination of choices in the ideation or implementation phases works better than another.

Finally, although much research has already been done on the tensions between the social and business logics in hybrid organizations, with the rise of organizations reincorporating as benefit corporations, more research could be done to understand the financial benefits of such changes. A more systematic study could be done on the outcomes of these new organizational forms.

7. CONCLUSION

This doctoral thesis adds to current theoretical understanding of how social enterprises manage tensions that arise from the integration of different organizational forms, given the proliferation of the phenomenon. By using theory building through case studies, and with the use of different theoretical lenses, it contributes to the current theoretical discussions and opens space for alternative conversations in the field on the tensions within and between social enterprises in their goal of being financially-sustainable businesses with positive social impact. This thesis contributes to scholars and practitioners alike in improving our understanding of social enterprises and the tensions they face by considering how these organizations interact among each other in the same industry, how new social enterprises are started, and how leaders can balance conflicting missions.

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FACTORS THAT INFLUENCE THE SUCCESSFUL ADOPTION OF M-COMMERCE VIA SIM-ENABLED DEVICES IN A DEVELOPING COUNTRY

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Abstract

m-Commerce adoption has important economic, financial and social benefits and is burgeoning alongside rapid uptake of SIM-enabled devices. However, businesses in developing countries have not effectively unlocked these benefits. This research makes a theoretical contribution by identifying factors that influence m-Commerce adoption by micro and small businesses in Nigeria, and by designing the first m-Commerce adoption stage model for businesses at different levels of maturity. Many factors are unique to the context, e.g. impact of Nigeria's ostentatious culture, regulatory cashless policy and preference for physical contact in business. Others are potentially transferrable e.g. personal innovativeness, and affordable device technology.

1. Introduction

E-Commerce opportunities are revolutionising the way businesses operate today (Molla & Licker, 2004), due to the elimination of geographical limitations and physical contact that is associated with traditional ways of conducting business. Convenience, speed and ease of completing transactions, and wider product varieties are amongst the benefits consumers enjoy via e-Commerce activities. However, there is a growing favour of m-Commerce due to recent development of portable, SIM-enabled devices and applications that enables ubiquity, versatility and ease of conducting commerce. Despite the potential economic, financial and social benefits associated with entering the emerging market that m-Commerce adoption provides (Ebibi et al., 2012), its adoption by businesses in developing countries appears to be low. In addition, there are on-going and emerging factors that are largely under-researched, which when identified and addressed can unlock the benefits m-commerce can provide for businesses.

The International Telecommunication Union suggests that almost 40% of the world's population (2.7 billion people) are online, and access to the internet via mobile phones has risen from 268 million to 2.1 billion between 2007 and 2013, making mobile broadband the most dynamic ICT market (ITU, 2013). This is in keeping with the evolution of smart phones and applications that support internet connectivity and activity on mobile phones. Interestingly, growth of internet access via SIM enabled devices e.g. mobile phones in developing countries more than doubled from 472 million to 1.16 billion between 2011 and 2013 (ibid). The figure may be indicative of a growing preference for activities on mobile phones, because it overcomes the limitations of traditional computer based internet access e.g. size, cost and ease of access. However, in spite of the observed growth in mobile access to the internet, there appears to be low levels of m-Commerce adoption by businesses in developing countries. This justifies the need to explore factors that can lead to increased

adoption of m-Commerce in developing countries, as this would in turn, help unlock the potential benefits that are inherent in its adoption.

Therefore, the aim of this research is to develop a model that may be used to guide successful m-Commerce adoption by micro and small businesses in a developing country - Nigeria. The objectives of the research include:

- ✓ To identify from literature, factors that contribute towards successful adoption of m-Commerce with a focus on factors that are specific to businesses in developing countries like Nigeria
- ✓ To propose a model, using the identified factors, that can serve as a guide to encourage m-Commerce adoption by micro and small business in developing countries
- ✓ To design an instrument that will be used to test and validate the model, using data collected from micro and small businesses that adopt m-Commerce in developing countries
- ✓ To identify from the study, current and unique factors that influence m-Commerce adoption by micro and small businesses in a developing country like Nigeria
- ✓ To discuss implications of the identified factors and provide recommendations for effectively leveraging the factors to support m-Commerce adoption by the target population

Within this thesis, successful adoption of m-Commerce by businesses refers to the ability of businesses to leverage the use of m-Commerce in order to observe some benefit within their business. This benefit can include profit making, e.g. creating additional streams of revenue for the business or saving cost, e.g. using automated systems to confirm payment rather than incurring cost for personnel to receive calls that can be handled by automated systems. In addition, successful adoption of m-Commerce could also include other non-monetary benefits that businesses can receive e.g. increased publicity, increased loyalty, customer acceptance, etc.

2. Justification of Study and Research Gap

Micro and small businesses in Nigeria were chosen as the focus of this research because of the financial contribution of this category of businesses to the economy. In Nigeria, micro, small and medium enterprises contribute 46.54% to the Gross Domestic Product (GDP) of Nigeria (NBS & SMEDAN, 2010). However, the adoption of m-Commerce by micro and small businesses appears to be challenged by limited access to funds. Currently, many widely used mobile applications in Nigeria are owned by multi-national or large scale companies. For instance, as at 2013, Rocket Internet (an international internet incubator headquartered in Berlin) with four arguably successful mobile applications in Nigeria seem to be enjoying a first mover advantage within this sector. Being a multi-national company, they have access to immense resources to embark on m-commerce venture(s). This is in contrast to indigenous micro and small scale businesses, whose potential for m-Commerce adoption could be disadvantaged by limited resources. Although there is an estimated N220 billion (US\$1.42 billion) in a Micro, Small and Medium Enterprises Development Fund (MSMESDF), there still exist the challenge of weak access to finance, especially for SMEs (ORWA, 2013). This underscores another justification to focus on micro and small businesses because academic research can help reduce the cost of research that these businesses would need to incur, and also guide these businesses towards making appropriate, cost-effective decisions.

Since the year 2000, there has been a growing interest in m-Commerce research but different authors have focused on different aspects of m-Commerce. Mobile Banking seems to be quite popular as it has received attention from many authors including Al-jabri & Sohail, 2012; Tiwari & Buse, 2007; Luarn & Lin, 2005. In addition to literature that focus on different

aspects on mobile banking, m-Commerce literature also include those that focus on the technical aspect of m-Commerce such as Kounelis, Baldini, Muftic, & Loschner, 2013; Zhao & Feng, 2009; Itani & Kayssi, 2003. Also, a number of authors have focused on identifying, understanding or explaining factors that influence m-Commerce adoption (Xin, 2009a; Hung, Ku, & Chang, 2003; Zhang, Yuan, & Archer, 2002). Some of the existing literature further identified viable solutions towards overcoming the identified challenges (Chong, 2013; Saidi, 2010; Wei et al., 2009; Khalifa & Shen, 2008a; Scharl et al., 2005; Wu & Wang, 2005; Hung et al., 2003). However, most of these studies focus on the consumers' perspective with only a limited number of studies focusing on how to encourage business adoption of m-Commerce, particularly in developing countries. In addition, the few existing studies were conducted within the context of developed or emerging economies (Wang & Xu, 2012; Niu & Bai, 2008; Balasubraman et al., 2002; Clarke III, 1997). At the time of this research, literature search conducted by the author did not find journal articles that clearly reported on business adoption of m-Commerce in developing countries. This is a gap that this research aims to fill. While a limited number of studies have sought to identify factors that influence business adoption of m-Commerce, some limitations can be associated with these studies. An example of such studies is Saidi (2010). Although the aim of the study was to focus on factors and solutions that address challenges affecting the adoption of m-Commerce in a developing country, from a business perspective, other perspectives such as policy making and technical challenges were also researched. In addition to the fact that this study leaned towards negative factors, their research design and broadened perspective limits the applicability and transferability of their findings and conclusions to businesses. Similarly, although Boadi et al., (2007) focused their research on how mobile commerce can enhance business activities of small scale fishing and farming businesses in a developing country, the study's emphasis was placed on benefits rather than factors affecting m-Commerce adoption. The implication is that existing literature cannot act as primary guide to inform m-Commerce adoption by small businesses in developing countries. This gap presents another justification to conduct a study that will inform this area of research.

In summary, this study seeks to identify factors that influence m-Commerce adoption by micro and small businesses in Nigeria, with the aim of providing a model that could be used to inform successful m-Commerce adoption by businesses in similar environments. The research findings also provides an update to the existing literature.

This research set out to provide answers to the following questions:

- ❖ What is the current state of m-Commerce adoption in developing countries such as Nigeria?
- ❖ What are the factors that affect m-Commerce adoption in developing countries like Nigeria?
- ❖ What factors influence the successful adoption of m-Commerce by micro and small businesses in Nigeria?

With respect to the inclusion criteria, micro and small businesses that have the following criteria were included:

- have a fixed location
- sell physical products
- operate as wholesalers or retailers
- and have owners or managers who are proficient in English

With respect to the exclusion criteria, the following categories of micro and small businesses were excluded:

- Click only businesses⁵
- Service based companies
- Companies whose owners or managers are not proficient in English

The inclusion and exclusion criteria for the study were chosen for the purpose of having a clear focus and scope in the target population. Micro and small businesses that have a fixed location were chosen in order to have a manageable range of samples that is not skewed as a result of businesses that are at the very low end of the retail spectrum, e.g. movable kiosks and hawkers. Also, businesses that have only an online presence were excluded based on this criteria because they operate different business models to businesses with fixed locations which means that their mode of interaction with customers will differ. Therefore, including both business types might result in contrasting patterns. More so, the business category that was selected for this study are likely to benefit more from this study than click only businesses because arguably, the latter category of businesses already have a higher level of sophistication and use of technology than the former category of businesses.

Another inclusion criterion for this study is the focus on businesses that sell products because this ensures that the range of items being sold are tangible; therefore, businesses that sell services were excluded. Examples of businesses that meet the inclusion criteria include restaurants, supermarkets and farming outlets. In addition to selling tangible products, another criterion is that the businesses should operate as wholesalers or retailers. Most micro or small businesses that sell products in Nigeria often operate as wholesalers or retailers; however, to ensure a level of uniformity among participating businesses, this condition was set.

The last inclusion criteria for this study is that managers or owners of such businesses to be included in the study must be fluent in the English language. Although English is the first language in Nigeria, there are parts of Nigeria where other local dialects are accepted as the lingua franca. According to Ethnologue (2015), there are 510 indigenous languages in Nigeria. Therefore, the option of translating the study's questionnaires was not taken because taking on the task of translating the questionnaire into these languages would have made, conducting the study, almost impossible. More so, some of the context of the words, when translated into other languages, might change the meaning in the translated languages; particularly because some of the words are technical or specialist terms.

3. Methodology

This study was conducted using a mixed method approach. This approach was chosen for the purpose of triangulation. Triangulation was defined by Bryman (2012) as the use of more than one method or source of data in the study of social phenomenon in order to cross-check findings. A major advantage of using mixed methods approach is that different methods may be used for different purposes in a single study as this could increase confidence in the study (Saunders et al., 2009). For instance, interviews could be used at the initial stages of the research to collect exploratory data before using questionnaires to collect explanatory data

⁵ Click only businesses refers to businesses that have a website/online presence without a physical store. They only sell their products through their website. Retrieved from <http://www.mbaskool.com/business-concepts/marketing-and-strategy-terms/2587-click-only-companies.html>

later. Also, the use of mixed methods approach may be very useful in overcoming the weaknesses inherent in each method; thereby creating more confidence in conclusions drawn (Saunders et al., 2009).

Therefore, this study made use of two methods - Surveys (Quantitative method) and Interviews (Qualitative method). In a research conducted using the combinations of qualitative and quantitative methods, interviews are usually semi-structured (Hennink et al., 2012). Therefore, this study adopted the use of Semi-structured Interviews in order to collect qualitative data that were analysed using thematic analysis. This data was used for exploratory purposes which helped to facilitate the process of testing, modifying and validating the model. Questionnaires were used for the survey. This assisted in the collection of descriptive and explanatory data which also contributed towards the process of testing and validating the model. Already established contacts and links in Nigeria were used to facilitate access during data collection. Also, contacts of registered companies provided by the Nigerian Bureau of Statistics (NBS) were used for the selection of some participants. Participants Information Sheets and consent forms were provided to respondents prior to data collection.

Data was collected from at least one state within each of the six geo-political regions of Nigeria. At least, 2 sets of pilot tests were conducted prior to each stage of data collection. Telephone interviews were used to generate qualitative data from 12 owners or managers of micro and small sized Enterprises in one or two states within each of the six geo-political regions of Nigeria. For the quantitative data, 230 responses were received although only 197 of them were complete. Incomplete responses were not included in the data set used for analysis. Microsoft Word and Microsoft Excel packages were used for the purpose of analysis. Microsoft Word was used for the conduct of thematic analysis while Microsoft Excel was used for the conduct of various relative frequency statistics.

Within this research, thematic analysis was very useful in analysing the data collected through the semi-structured interviews. By using this method of analysis, insights were gained on current, emerging factors that influence m-Commerce adoption.

Considering that the data collected from the survey was categorical in nature, the most effective way to analyse the data is by placing results into different groups in order to observe different trends or patterns (Peters, 2015). Also, categorical data may be analysed through the use of tests such as chi-square, chi-square goodness-of-fit, Fisher's exact test, etc. (UCLA: Statistical Consulting Group, 2014). However, due to the nature of responses, it was most beneficial to descriptively analyse the data as this provided richer insight to the data than other categorical tests. Therefore, through the use of Microsoft Excel, various relative frequency statistics were conducted and presented in various tables and graphs. More information regarding the justification for this approach can be found in Appendix 7 of the thesis.

4. Major Findings from the Research

The major findings of this research were discussed in various sections of this thesis. However, this section seeks to provide a concise summary of these findings. These findings are based on results of the survey conducted on owners or managers of micro and small businesses in Nigeria. This is because the interviews served exploratory purposes, while the survey served confirmatory purposes. As such, common, unique trends that were identified

from the interviews were also highlighted in the survey. However, patterns that were unique to particular businesses that were interviewed did not feature in the findings of the survey. Therefore, the major findings of the survey are inclusive of major findings from the interviews. These findings are all summarised in this section in order to avoid repetition of points.

From the research data, the following observations were made.

- ✓ Most businesses are 1 to 5 years old and are mostly in Stage 2. This could be an indication that being set up in a technology age could mean more use of or exposure to technology.
- ✓ Most micro and small businesses are owned by graduates who often tend to be sole traders and retailers. This might be due to high emphasis on education and a solution to high unemployment rates in Nigeria.
- ✓ When businesses migrate from one stage of adoption to the other, they do not necessarily outgrow previous stages. Rather, they tend to add to previous m-Commerce activities or progress to smarter ways of conducting previous activities.
- ✓ The adoption of mobile money as a means of receiving or making payment by businesses is on the rise in Nigeria.
- ✓ Currently, the use of websites by micro & small businesses is limited. This could be a reflection of preference for m-Commerce business models than e-Commerce or e-Business models.
- ✓ Within the target population, there appears to be an increasing appreciation of mobile apps and mobile enabled platforms; thus buttressing a preference for m-Commerce rather than e-Commerce.
- ✓ Differences exist between factors identified by current adopters of m-Commerce and past adopters. This could be a reflection of changing trends in Nigeria, e.g. increasing uptake of smartphones and m-Commerce related activities.
- ✓ The introduction of the Central Bank of Nigeria's cashless policy is driving increased adoption of m-Commerce by customers and businesses.
- ✓ Also, there are differences between the combination of factors identified from literature and the combination of factors identified from current adopters of m-Commerce. This could be because most m-Commerce literature focused on the consumer perspective and were mostly conducted on developed or emerging economies. Also, differences in trends or occurrence at the time of this research could have contributed to the observed differences.
- ✓ Although various factors were identified within each stage of adoption spectrum, these factors were classified into High, Mid and Low impact factors through the use of a maths formula.
- ✓ In addition, unique factors that influence m-Commerce adoption by micro and small businesses in developing countries like Nigeria were identified. These unique factors were ostentatious culture, mobile phone culture, regulatory cashless policy and emphasis on physical contact.

5. Research Contribution and Implications

5.1 Theoretical Contribution and Implications

This section seeks to provide a concise summary of the contributions of this research to theory and the body of literature. These are highlighted as follows:

- ✓ This research contributed to the debate on the dividing line between e-Commerce and m-Commerce (Paper publication - Omonedo & Bocij, 2014).
- ✓ This research has provided an update to literature on the factors that influence m-Commerce adoption from a business perspective (Paper publication - Omonedo & Bocij, 2017).
- ✓ This research proposed a general stage model of m-Commerce adoption that could propel interest into a new aspect of m-Commerce research (Figure 1).
- ✓ The research also presented the first stage model that can help classify & motivate micro and small businesses in their adoption of m-Commerce in a developing country (Figure 2).
- ✓ This research also helped identify unique factors that can influence m-Commerce adoption by micro and small businesses in a developing country like Nigeria.
- ✓ The study also identified current, high, mid and low impact factors that could influence m-Commerce adoption in a developing country.

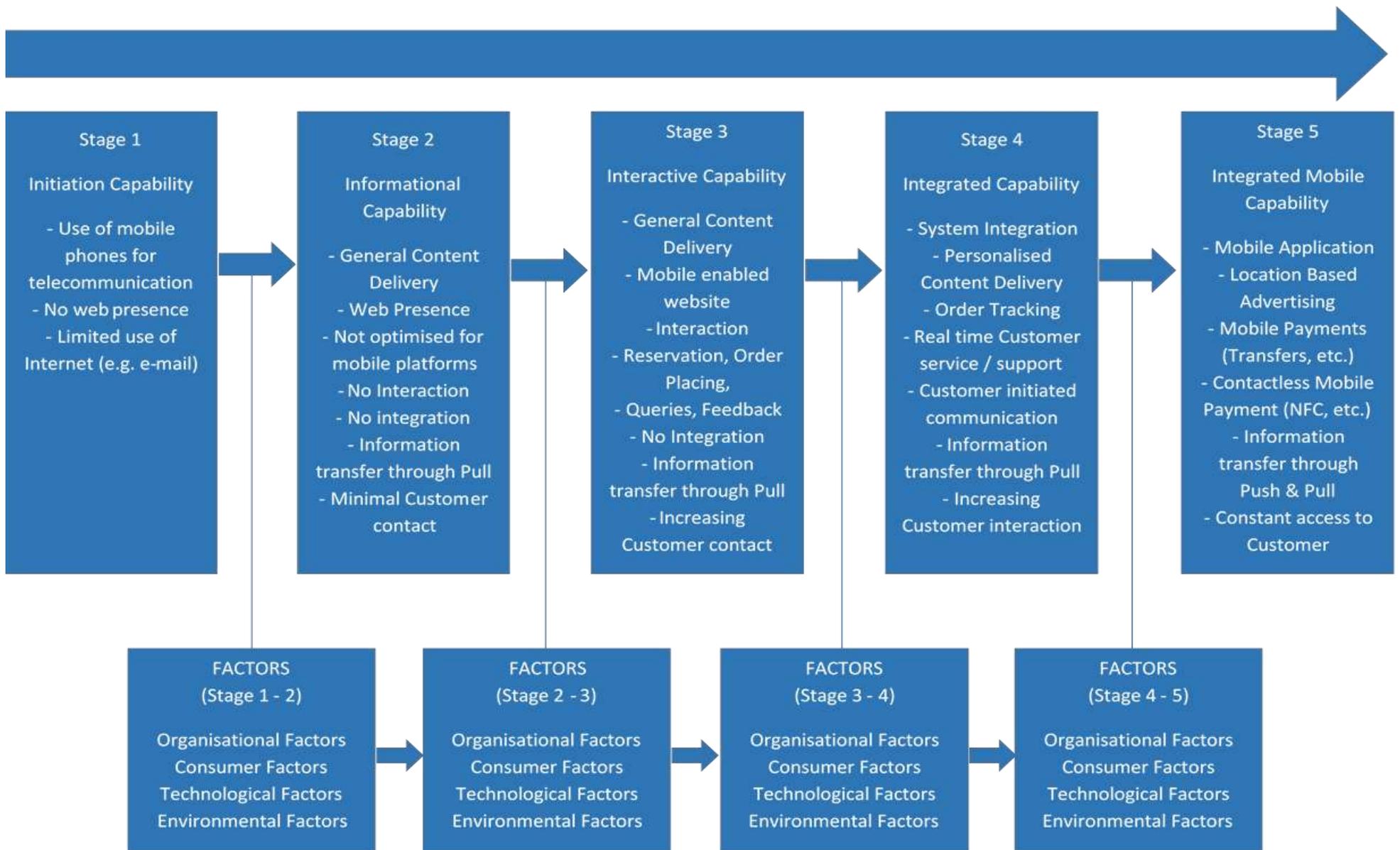


Figure 1: General Model - Initial Design of m-Commerce Adoption Model based on Findings from Literature Review

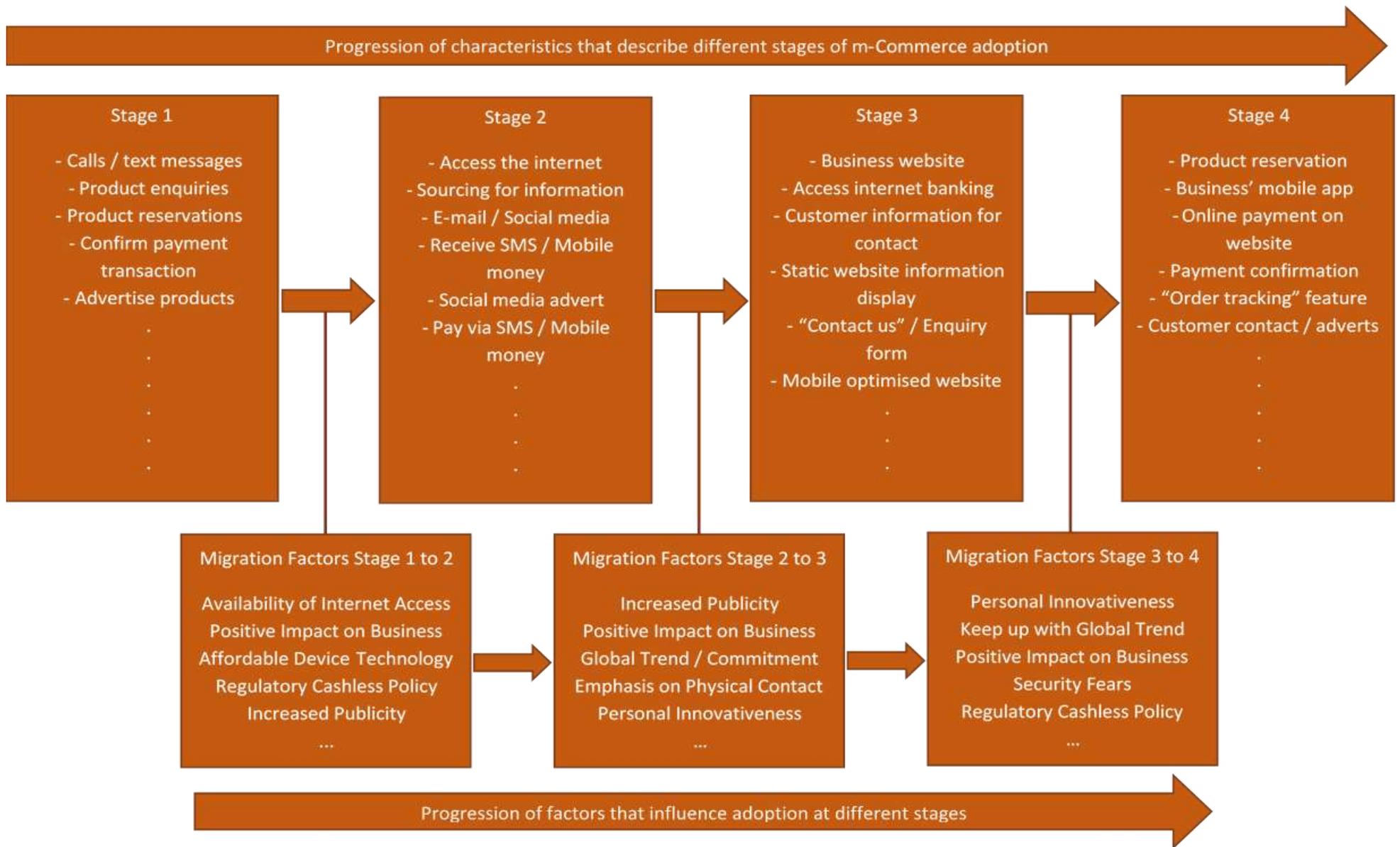


Figure 2: Stage Model - The Tested Model of m-Commerce Adoption by Micro and Small Businesses in Nigeria

5.2 Practical Implications and Recommendations

This section seeks to provide a summary of implications and recommendations of this research to practice. The recommendations are the result of practical implications discussed in chapter seven of the thesis and includes a combination of expert advice from literature, as well as recommendations from this study.

Practical recommendations to businesses include:

- ✓ Businesses are advised to understand the peculiarities of their prospective customers by paying attention to popular considerations that influence their customers' adoption decisions such as price, risk, entertainment, enjoyment, etc.
- ✓ Businesses should ensure they establish some level of personal or face-to-face business relationship with their customers through the use of platforms like BBM channels and other social media platforms, campaigns, etc.
- ✓ Business owners are encouraged to be forward thinking, innovative and able to keep up with changing trends within the area(s) of their operation.
- ✓ Businesses should introduce creative promotional and pricing strategies that can attract price conscious customers.
- ✓ Businesses should embrace transparency through strategies such as including additional information on company websites e.g. easy to reach contact mobile number(s), and a physical store address where consumers can visit if the need arises.
- ✓ Perceived trust may be enhanced through strategies such as creating a good reputation, offering good encryption security, maintaining transparency on data usage, guaranteeing effective dispute resolution, educating customers and creating awareness of security features.
- ✓ Although businesses may not have the capacity to enforce change in customers' perception about factors such as cost, usefulness and enjoyment; businesses can provide appropriate information that will help eliminate or minimise wrong notions about them or their product(s). This can also contribute towards increasing consumer loyalty to a brand.
- ✓ Businesses should also address issues relating to other sources of potential influence on their adoption of m-Commerce, e.g. the current structure of the business and their suppliers' perspective on the business' adoption of m-Commerce activities that involves them.
- ✓ In addition to technology related issues, businesses need to focus on subjective factors that influence consumers within the context they intend to trade, e.g. trust, cost, social influence.
- ✓ Businesses can take advantage of the ostentatious culture by getting celebrities, for instance, to adopt and show case the m-Commerce activity and then create a *hype* around the brand. Before long, many people are likely to take up the activity thereby leading to increased popularity.
- ✓ Businesses can leverage on perceived value by emphasising other indicators that might create a perception of value amongst their customers such as price, class, luxury, usefulness, etc.
- ✓ Businesses can create additional revenues by monetising their app through strategies such as in-app advertisements, freemium model, and subscription model or in-app purchases.
- ✓ Businesses can enhance their productivity through the use of mobile apps such as Dropbox, Prezi, Skype, Charlie, etc.

- ✓ Businesses and m-Commerce providers should design applications that are easy to use and also create awareness of the benefit and ease of use of m-Commerce.

Practical recommendations to government and policy makers include:

- ✓ Government and policy makers are encouraged to develop policies like the cashless policy, which will encourage further adoption of m-Commerce.
- ✓ Government and policy makers are also encouraged to introduce consumer protection laws that can boost customers' confidence in online transactions and reduce perceived security concerns.
- ✓ Government and policy makers can also introduce financial incentives such as tax breaks, which will encourage businesses' adoption of m-Commerce and support the move towards making Nigeria a cashless society

6. Study Limitations and Future Research Directions

This research was conducted with due diligence to ensure appropriate levels of robustness and rigour. However, considering that no single study can cover every aspect of a particular research area, this research also has a few limitations which will be discussed in this section. While these limitations do not undermine the results of this research, these limitations are a reflection that different patterns or result might be observed in this research was to be conducted in a different context. For instance, this research focused on micro and small businesses in Nigeria. Therefore, if this research is to be conducted on micro and small businesses in Canada, UK, Hong Kong, China, etc., different results might be obtained. As such, care would need to be taken if the results of this research are to be applied to other cultural contexts that are different from Nigeria.

Also, considering that this research focused on micro and small businesses that are involved in the sale of tangible goods, different patterns or results might be observed if a similar research is to be conducted on micro and small businesses that offer services in Nigeria. Similarly, different patterns might also be observed if the research is to be conducted on medium, large scale or international businesses in Nigeria. As a result, while some of the factors and patterns observed from this study might be applicable to some extent, the possibility of observing differences in the combined list of factors that influence m-Commerce adoption by this category of businesses cannot be ruled out.

Based on the findings of this study, as well as its limitations, new research directions may be identified. The first line of enquiry can focus on the extension of the m-Commerce adoption model to provide the potential to accommodate new m-Commerce trends that might evolve in future. Also, more research needs to be conducted on m-Commerce adoption from a business perspective. Perhaps, various authors might consider existing research that has focused on various concepts of m-Commerce, albeit from a consumer perspective; and seek to identify possible differences that might emerge from similar studies being conducted from a business perspective. Also, more research needs to be conducted in order to investigate the factors that influence m-Commerce adoption from the perspective of businesses within different socio-cultural contexts, industries, etc.

7. Conclusion

Within the thesis, the objectives of the study were achieved in different stages and the research questions were also addressed at different stages of the research. The research also provided practical and theoretical contributions which have been presented within this write-up. More information on the research can be found in the thesis.

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Consumer Perceptions of Corporate Brand Alliances in Crisis: An Investigation of Negative Spill Over Effects

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Abstract

Although brand alliances represent a viable opportunity for brands, it is an inherently risky strategy, when one of the partners face a crisis. This thesis examines the impact of crises on consumers' evaluations of corporate brand alliances. Employing an experimental design across three crisis contexts, the thesis, for the first time, shows that crises in corporate alliances negatively impact consumers' evaluations of the culpable brand which spills over to the co-branded product. The non-culpable partner, however, is not found to be negatively affected. Attribution and brand commitment significantly influences post-crisis evaluations. The thesis offers managerial guidelines on effective post-crisis communication.

Taking Sustainability to the Operational Level: Purchasing within the MNC

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Abstract

Sustainability has become increasingly important to MNCs with only little attention being paid to its operational level facilitators. This dissertation therefore examines the factors influencing sustainability in MNCs purchasing function in four research questions. In utilizing both quantitative (structural equation modeling on 305 companies) and qualitative (in-depth case study of two Finnish MNCs) research methods, new insights emerged. Three critical aspects, the operational level examination, use of different theoretical lenses, and use of a mixed methodology, contribute to literature and businesses in highlighting the role of the individual, and offering tangible suggestions to businesses.

Introduction

This dissertation on operational-level sustainability in multinational corporations (MNCs) comprises of four essays, which provide manifold contributions to theory as well as businesses. First, in focusing on a specific function, purchasing, this thesis moves beyond strategic-level discussions and consequently contributes to extant business and management research in highlighting the important role of individuals in implementing sustainability and moves towards a common conceptualization of sustainability in MNCs. Second, in utilizing both extensive quantitative and qualitative data, the dissertation provides a clear answer to the main research question in both testing hypothesis and thereafter exploring the realities in companies through a case study. Third, these realities are particularly tangible to businesses themselves as they offer an opportunity to be easily implemented at the function level. In the following, I will now only provide a summary of the dissertation.

Sustainability – with its environmental⁶, social⁷, and economic⁸ aspects (Elkington, 1998) – is critical to organizations in the current business environment. In fact, it has become an increasingly important topic for firms in general, and for internationally operating multinational corporations (MNCs) in particular. Being at the center of the public eye in various markets, MNCs face varying and often conflicting pressures to consider sustainability as part of their day-to-day operations (Marano and Kostova, 2016). Environmental and social sustainability are no longer mere philanthropic or voluntary initiatives, but are rather becoming essential to international operations, given that the depletion of natural resources as well as both human and employee rights are seen as critical global issues for the future (United Nations, 2015).

The extant literature has successfully addressed the strategic-level implications of sustainability in firms, but pays only scant attention to the functional level and the subsequent operational effects. In an attempt to narrow the gap with regard to the operational

⁶ Environmental sustainability in an organization entails carbon footprint reduction, avoidance/omission of chemical pollution, and the use of renewable resources.

⁷ Social sustainability refers to the adherence to human rights in general and labor rights within an organization. Often local community engagement is also included here.

⁸ Economic sustainability refers to the efficient use of resources for increased profitability over time.

implications, I will focus on one specific MNC function: purchasing. The purchasing function offers an ideal empirical context because it acts as a node that connects firms' internal and external stakeholders (Ehrgott et al., 2011), interacting with suppliers and therefore necessarily involved in cross-functional dialogue within the company. Furthermore, both environmental and human-rights issues are highly relevant, and can make a big difference in purchasing practices (Maignan et al. 2002). Purchasing has the responsibility, for instance, to ensure that subcontractors do not use child labor or hazardous materials in the production of their goods and services, as either practice could have significant legal consequences.

Sustainability is a particularly complex issue in MNCs as they and their purchasing functions are required to adapt their business practices to the different institutional environments in the respective host countries (e.g. Tan and Wang, 2011). Prevailing discussions on MNCs and their sustainability consider the organization in its entirety and tend to focus on the actions of either the headquarters or the subsidiaries (Cruz and Pedrozo, 2009). This approach does not fit the setting of the MNC with its globally dispersed purchasing operations and varying institutional environments. I therefore advance existing research in international business and sustainability by establishing an understanding of aspects influencing sustainability in the MNC's purchasing function including both external and the internal drivers in studying:

What influences sustainability in the MNC purchasing function?

In answering this main research question, I investigate potential external and internal drivers through different theoretical lenses in the four essays of this thesis. As Cruz and Pedrozo (2009) suggest, the main factors affecting sustainability work include the governance structure, corporate ethics, and organizational learning. As far as the governance structure and corporate ethics are concerned, I refer to mimetic, coercive, and normative institutional pressures (DiMaggio and Powell, 1983) as potential external drivers. In addition, I consider the role of organizational learning from the perspective of absorptive capacities, including both potential and realized capacities (Cohen and Levinthal, 1990; Zahra and George, 2002), as potential internal drivers. This structure gave rise to the following four sub-questions that help me to identify what sustainability means in the MNC's purchasing function, and what drives its adoption and execution.

First, I set out to understand what sustainability is on an operational level, what theories have been utilized to shed light on it, and what main discussions are taking place in the fields of international business and sustainable purchasing and supply. I therefore address the following question.

1. What is known and not known about sustainability in MNC purchasing?

Building upon the theories and discussions identified in the first essay, I apply two theories as potential external and internal drivers. Institutional pressures give particularly valuable insights into the complex external influences affecting MNCs and their sustainability practices and performance (Marano and Kostova, 2016). Meanwhile, absorptive capacities, as internal capabilities, enhance understanding of the underlying internal mechanisms potentially affecting MNC sustainability (Zahra and George, 2002). I therefore address the following two questions.

2. How do institutional pressures affect triple-bottom-line sustainability in the MNC purchasing function?

3. How do absorptive capacities affect triple-bottom-line sustainability in the MNC purchasing function?

Finally, having identified the potential internal and external factors that affect the purchasing function I further seek to understand its role in the adoption and execution of sustainability in MNCs. To this end, I address the following question:

4. *How are corporate level sustainability policies and practices adopted by actors in the purchasing function and why?*

Each of the four essays this dissertation addresses one of the underlying research questions. Figure 1 illustrates the relationship between the four essays.

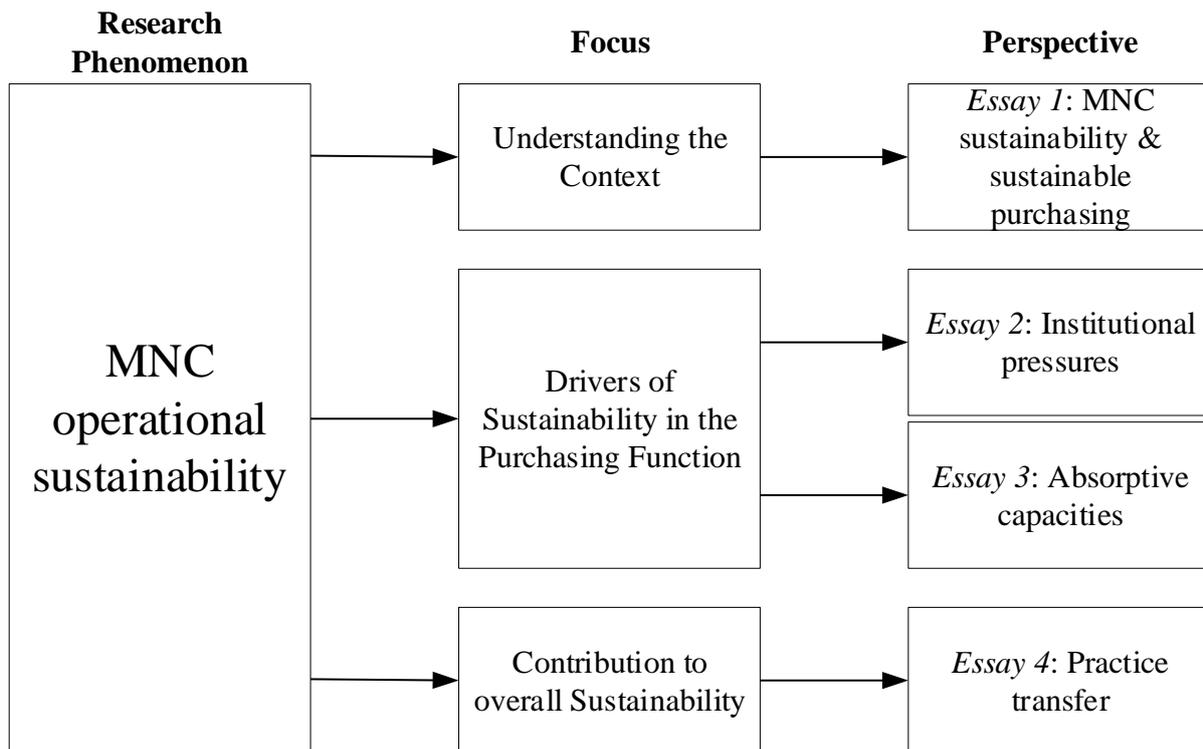


Figure 1. The positioning of the four essays

Theoretical Framework

In seeking an answer to the above-mentioned research question, I have developed a theoretical framework based on the different perspectives and theoretical approaches (see Figure 2).

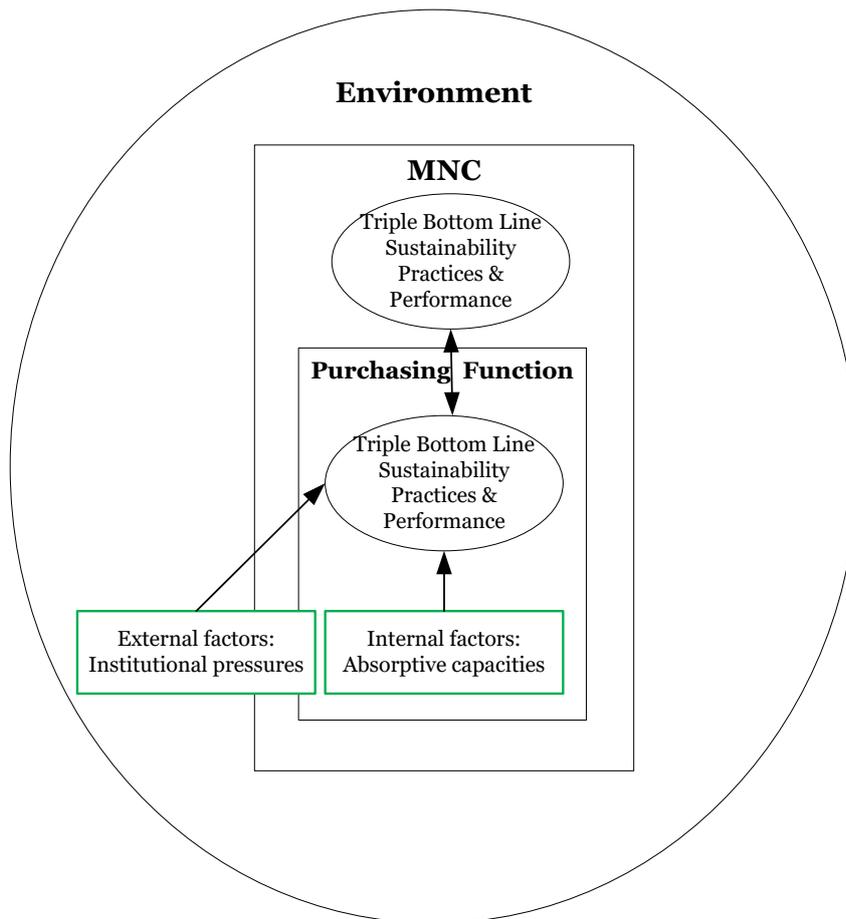


Figure 2. The theoretical framework of the study

An MNC’s approach to sustainability is defined in terms of its execution in the various functions. Each function adopts specific practices that ultimately generate performance outcomes, but little is known about the factors that eventually affect which practices are adopted and their subsequent outcomes. A variety of external and internal drivers may affect MNC sustainability on a day-to-day basis. Relevant theoretical approaches in this context include stakeholder theory (e.g. Spence, 2016), institutional theory (e.g. Escobar and Vredenburg, 2011), the resource-based view (Sarkis et al., 2011), complexity theory (Vachon and Klassen, 2006), resource dependence theory (e.g. Wolf, 2014), social-network theory (Sarkis et al., 2011), and transaction cost economics (Rosen et al., 2002).

Institutional theory offers particularly valid insights into external pressures in that it accounts for the complexity of the MNC environment, which has recently received special attention (e.g. Marano and Kostova, 2016). It thus encompasses stakeholder theory and complexity theory. In terms of internal drivers, however, prevailing theoretical approaches such as the resource-based view do not capture the dynamic capabilities required to adapt to the complex environment. More importantly, recent studies indicate that internal capabilities drive the change towards sustainability (Pinkse et al., 2010). Organizational learning, as a critical component contributing to the development of such capabilities, facilitates the adoption of sustainability (Schneider, 2015), and specific capabilities within the company can significantly affect its environmental, social and economic performance. I thus consider organizational – or in this case functional – learning from the perspective of absorptive capacities (Cohen and Levinthal, 1990; Zahra and George, 2002).

Methodology

The research question guided the methodological decision-making throughout the process. Quantitative research methods, including the two types of structural equation modeling used here, represent the deductive approach to theory testing (Byrne, 2012). The aim in the qualitative multiple-case study, on the other hand, was to develop testable hypotheses from a realist perspective (Eisenhardt, 1989; Yin, 2014). Furthermore, I extend the holistic perspective on sustainability to the research methodology by moving from testing hypotheses to exploring the reality in MNCs. Information on the two datasets is given in Table 1.

Table 1. The two datasets

Dataset	Sample	Data-collection method	#	Time of data collection	Used in essays
1	Purchasing departments of 305 companies in Finland, Germany, Ireland, and Italy	Email survey as agreed by telephone	305 companies: 123 MNCs and 182 non-MNCs	2014	Essays 2 and 3
2	Two Finnish MNCs	Semi-structured face-to-face interviews	46 interviews; Documentation on internal and external sustainability	2015-2016	Essay 4

Given the extent of MNC sustainability research, a deductive quantitative approach to studying potential internal and external drivers seemed to be the most suitable. Qualitative case research was the best choice to enhance understanding of the role of MNC purchasing in sustainability practices. To facilitate this I joined the International Purchasing Survey 2 research group, which collected a large set of survey data from 305 (out of which 123 are MNCs and 182 non-MNCs) companies in Finland, Germany, Italy, and Ireland. I used this data to test hypothesized relationships in two structural equation models. The multiple-case study draws upon 46 case interviews and secondary internal and external company information. My approach is displayed in Figure 3.

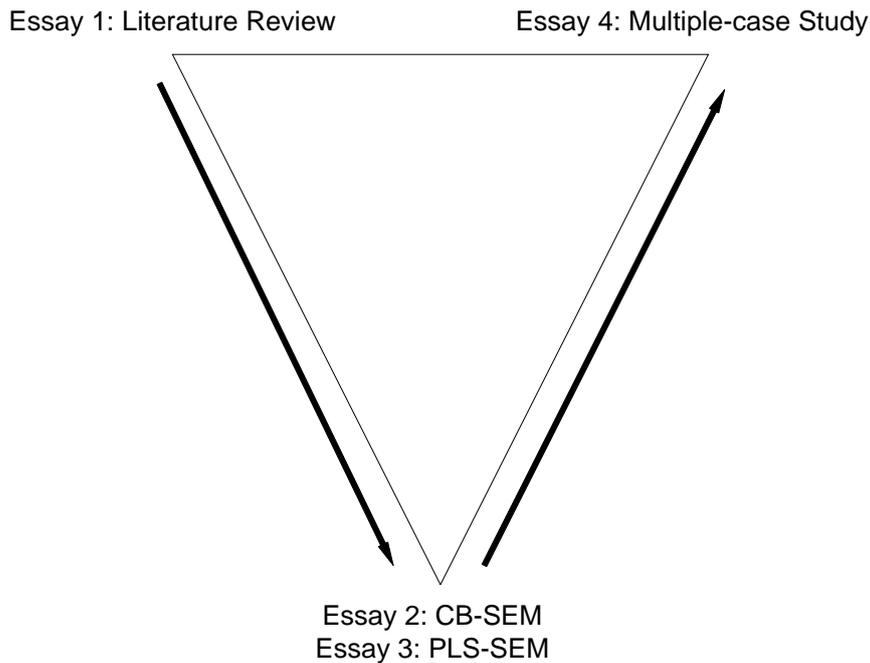


Figure 3. *The positioning of the four essays*

I applied structural equation modeling (SEM) in Essays 2 and 3, which is particularly suitable in this study as its multivariate nature facilitates examination of the latent constructs in a multiple regression model (Byrne, 2012). Whereas Essay 3 builds on the more common covariance-based SEM using MPLUS (Byrne, 2012), given the reflective nature of the constructs, Essay 2 applies partial-least-squares SEM to accommodate the mix of formative and reflective measures (Chin and Newsted, 1999).

In the qualitative study, I utilize a multiple-case study to build theoretical constructs from case-based, empirical evidence (Eisenhardt, 1998). The case-study approach facilitates in-depth investigation of this contemporary phenomenon of MNC sustainability on an operational level (Yin 2014). Given that only little is known about the role of various MNC functions in establishing sustainability, it is easier to retain the characteristics of real-life events through the application of case-study methodology (Yin, 2014).

This case study was conducted in two Finnish MNCs operating in the fashion and the entertainment industries. The case companies were theoretically sampled (Eisenhardt, 1989) to provide a rich and diverse setting representing both product and service organizations as well as perishable as well as non-perishable offerings. Given Eisenhardt's (1989) recommendation that the research setting should be such that the phenomenon is easily observable, I included MNCs with purchasing activities in place. To control for the industry-specific settings I chose two very different MNCs (as illustrated in Figure 4). Whereas MNC A offers non-perishable products, MNC B offers services in its main gaming and entertainment business, tangible products in the form of plush toys, for example, and perishable products through licensed branded foodstuff. Following the recommendations of Eisenhardt (1989), and Yin (2014), I analyzed the data using replication logic.

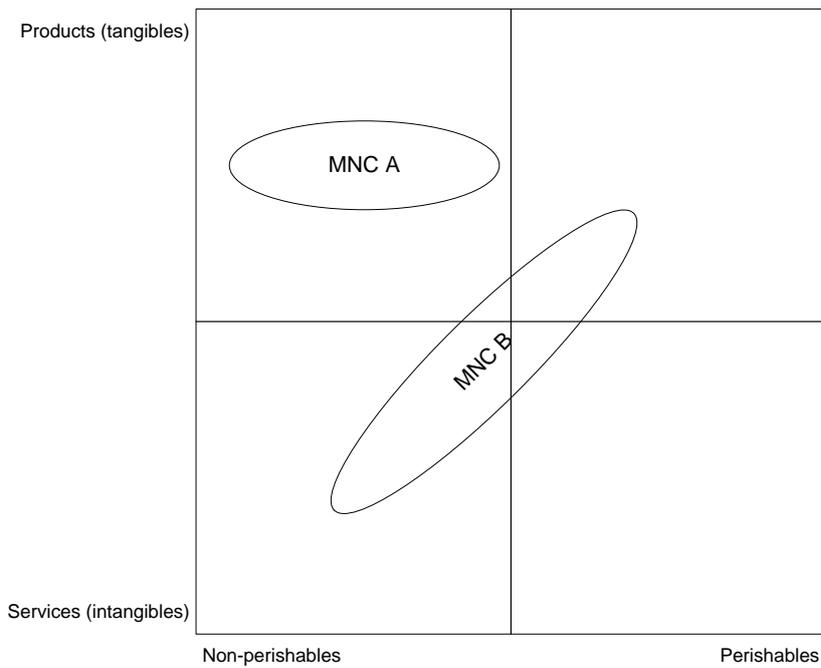


Figure 4. *The two case companies*

In sum, I used a multiple-methods approach, reflecting the nature of the respective underlying research questions and to facilitate triangulation. In this, therefore and in line with Brannen (1996), I established both within- and between-method triangulation. In other words, I focused on each method individually and thereafter drew them together to give a more holistic view.

Summaries of the Essays

This thesis comprises four essays that examine extant studies, investigate institutional pressures and absorptive capacities as potential external and internal drivers, and consider the role of MNC purchasing and its employees in adopting sustainability policies and maintaining sustainability practices.

Table 2. Overview of the essays

	Research Question	Scope	Data	Methodology
Essay 1: Understanding operational sustainability in multinational corporations': a conceptual review and an agenda for future research	What do and don't we know about sustainability in MNC purchasing?	Review of 74 journal articles from the literature on MNC sustainability and sustainable purchasing to shed light on operational sustainability in MNCs	74 journal articles published in 1994-2015.	Systematic literature review to enhance understanding of current conceptualizations of operational sustainability in MNCs.
Essay 2: Why become sustainable? Institutional pressures as drivers of sustainability performance in MNCs	How do institutional pressures impact triple-bottom-line sustainability in the purchasing function of MNCs?	Building on institutional theory, this essay concerns the impact of institutional pressures on triple-bottom-line sustainability.	Data from 305 companies in Finland, Germany, Ireland, and Italy, including 123 MNCs and 182 non-MNCs.	Partial least squares structural-equation modeling of cross-sectional survey data.
Essay 3: Learning Sustainability? Absorptive capacities as drivers of sustainability in MNC purchasing	How do absorptive capacities affect triple-bottom-line sustainability in the purchasing function of MNCs?	This essay investigates the impact of absorptive capacities, as representative of organizational learning, on environmental and social-sustainability practices and economic performance.	Data from 305 companies in Finland, Germany, Ireland, and Italy, including 123 MNCs and 182 non-MNCs.	Covariance-based structural equation modeling of cross-sectional survey data.
Essay 4: Sustainability policy and practices on a day-to-day basis: the role of MNC purchasing	How are corporate level sustainability policies and practices adopted by actors in the purchasing function and why?	Building on types of practice adoption within MNCs, this essay aims at identifying the role of MNC purchasing and its employees in adopting sustainability policies and practices.	Interview data from 46 respondents in two Finnish MNCs.	Personal interviews analyzed as a qualitative case study of two Finnish MNCs.

Findings

The Role of the Triple Bottom Line in Operational Sustainability

Existing studies adopt various conceptualizations of sustainability reflecting Elkington's (1998) triple bottom line, or a focus on social, environmental, or economic sustainability. I believe, however, that the operational conceptualization of sustainability is different. There is a clear distinction between sustainability within the company and sustainability as interaction with external stakeholders (as studied here in terms of absorptive capacities and institutional pressures). This extends the current understanding of sustainability in international business. Moreover, previous studies predominantly focus on environmental and social sustainability in the actions of MNCs (e.g. Pinkse et al., 2010;), whereas according to these findings, there are clear distinctions between sustainability initiatives within the MNC and its functions, and those aimed at the business environment. Table 3 summarizes these distinctions.

Table 3. Triple Bottom Line Sustainability: the internal and the external environment

	Economic Sustainability	Social Sustainability	Environmental Sustainability
Internal	<ul style="list-style-type: none"> Prerequisite for MNC existence and initiatives targeted at environmental and social sustainability 	<ul style="list-style-type: none"> Employee well-being programs In the manufacturing environment: work safety 	<ul style="list-style-type: none"> Green initiatives: waste minimization, electricity savings In the manufacturing environment: use of chemicals and other raw materials
External	<ul style="list-style-type: none"> If the MNC is "<i>financially stable</i>", philanthropic initiatives towards the stakeholders may be undertaken Linked to financial loss or risk mitigation 	<ul style="list-style-type: none"> In the manufacturing environment: working conditions at the supplier's sites Philanthropic initiatives 	<ul style="list-style-type: none"> In the manufacturing environment: the use of raw materials at the supplier's site

The origins of international business in economics create a clear link to the role of economic sustainability in this field. Thus, the finding indicating that economic sustainability is the underlying condition for MNC existence and survival highlights the perceived disconnection of this component from the overall understanding of sustainability. It remains unaffected by institutional pressures and absorptive capacities, as discussed in the preceding section, and is also considered a facilitator of sustainability initiatives. Moreover, given that adhering to standards of social and environmental sustainability tends to be perceived as an element of risk management, engaging in such initiatives could be considered an investment made to avoid potential "sustainability crises".

Social sustainability is the most commonly applied element of operational sustainability in MNCs. It is affected by (realized) absorptive capacities **as well as** (mimetic and normative) institutional pressures, and as such appears to act as a gatekeeper of internal and external sustainability. In addition, employee well-being initiatives within the MNC, and the working

conditions at its subcontractors' sites are significant areas of interest among individuals engaged in sustainability work.

Environmental sustainability, including aspects such as waste minimization, energy savings, and the use of chemicals and other raw materials, plays an ambivalent role. Although it does not appear primarily to be affected by the MNC's internal capabilities (absorptive capacities), particular rules and regulations (normative pressures) guide its attitude towards its environmental strategy. Whereas Essay 2 also highlights the impact of both mimetic and normative pressures, Essay 4 pinpoints the importance of coercive pressures. It rather appears as if the imitation of best practices and the social pressures may be linked to adherence to the same set of rules and regulations in a similar institutional setting.

As the findings on environmental sustainability in the light of the prevailing literature (e.g. Chen et al., 2009) imply, industry and location play a significant role in MNC operational sustainability. It is shown how the existing literature focuses on both aspects, and this is clearly confirmed in this thesis. Thus, the composition of operational sustainability is a function of factors close to the core business. In a product-focused manufacturing environment such as the one faced by MNC B, in which raw materials and their processing play a significant role, sustainability is clearly linked to environmental aspects such as adherence to certain chemical guidelines and the use of higher-quality cotton in the production of garments. Social sustainability, in turn, plays a more significant role in service settings such as that in which MNC A operates, where working conditions at the subcontractors' sites and internal well-being programs foster product development, which is at the core of this business.

Hence, the triple bottom line of sustainability as such does not play a universally applicable role in MNC sustainability, but each of the factors carries its own weight in the purchasing function, depending on the location and the industry. This finding is in line with the fact that the focus in the literature on international business with regard to the MNC as a whole is on social sustainability, whereas in the literature concerning purchasing and supply chains, and specifically the purchasing function, it is on environmental sustainability. The first three essays call for more nuanced studies of MNC sustainability, not only on the operational, but also on the individual level.

Drivers influencing MNCs operational sustainability

This thesis shows that the main drivers behind the adoption of sustainability are external. As reported in Essay 2, mimetic and normative pressures affect both environmental and social sustainability. Essay 4 confirms and extends this finding to include the impact of coercive pressures: not only do rules and regulations play an essential role in mitigating risks, customer demands also constitute a clear external force driving operational sustainability in the MNCs purchasing function.

Essay 3 reveals that the ability to exploit knowledge affects social sustainability in MNCs, but the function itself and the inherent capabilities have no further impact in terms of establishing operational sustainability. This finding is taken further in Essay 4, according to which the individuals within the function and the organization as a whole have an even more significant role as drivers of operational sustainability. This contradicts prevailing studies on MNC sustainability that predominantly consider it on the organizational level (e.g. Kolk, 2010).

A critical consequence of the involvement of individuals, however, is the potential confusion about what sustainability means to the organization in question. Although there seems to be a shared understanding between the sustainability management team and its collaboration partners located in the respective functions, such as purchasing, it is shown in Essay 4 that the message gets distorted across national borders. Thus, even if headquarters have carefully designed sustainability policies in place, the subsidiaries may not be aware of them and thus not engage in sustainability practices.

The different environments of headquarters and the respective global subsidiaries also influence the way sustainability strategies are designed and initiatives are planned. MNCs appear to follow a clear risk-management approach in considering all regulatory environments and designing sustainability guidelines that follow the strictest local requirements of the markets in which they operate. Consequently, it is the external regulatory framework and potential customer demands that drive sustainability practices and guidelines, which are designed by a dedicated sustainability-management team, approved of by management boards, and ultimately executed by the individuals in the functions. The closer a subsidiary is to its parent, both relationally and socially, the higher is the likelihood of successfully implementing sustainability practices within the organization (Kostova, 1999).

In sum, the rules and regulations of the operating environment are external drivers of operational sustainability in MNCs, serving a risk-management purpose, as are the changing demands of customers who expect more than mere compliance, and increasingly pay attention to initiatives beyond the necessary (Chen et al., 2009). Internally, however, functional capabilities are less influential as driving forces, and the emphasis is rather on individual perceptions of what sustainability is and how it should be executed beyond the following of organizational guidelines. Operational sustainability is consequently not static, but rather requires dynamic adaptation to changing demands. In other words, sustainability is driven by constant changes in the institutional environment and in employees' perceptions. Consequently, regulatory compliance for risk mitigation, competitive practices, and the satisfaction of customer demands are key elements of operational sustainability. Figure 4 summarizes the drivers of operational sustainability in MNCs.

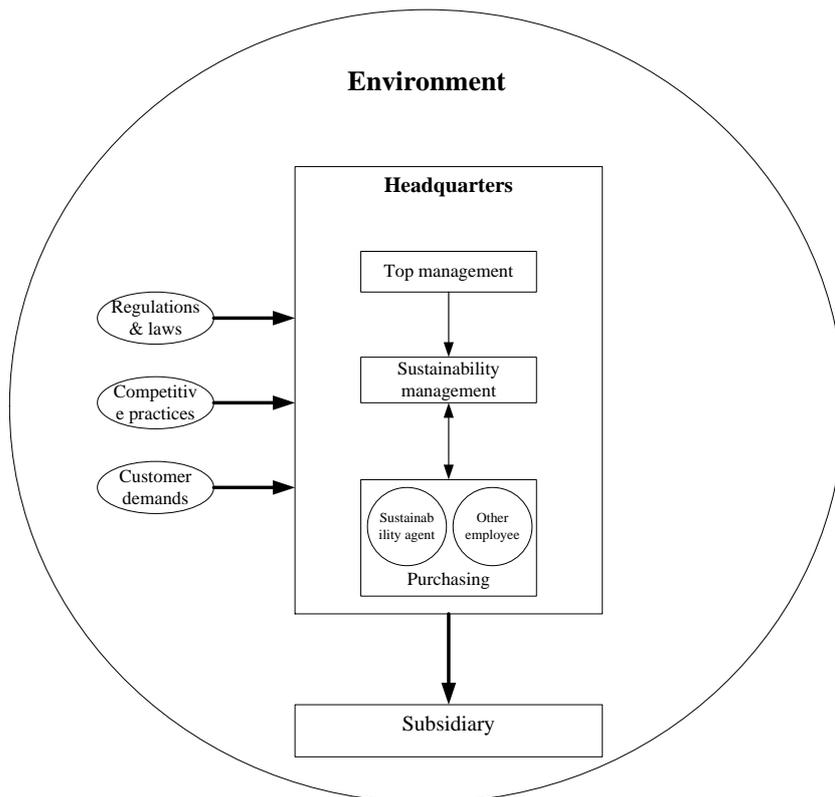


Figure 4. The drivers of operational sustainability in MNCs

Contributions and Implications of the Study

This thesis makes a variety of contributions. First, it reveals the importance of the individual in establishing sustainability. Whereas prevailing discussions on sustainability in MNCs predominantly take place on the corporate level, this operational-level investigation highlights the critical role of the individual in driving sustainability. The current system involving the use of agents within the functions to develop the sustainability policy does not facilitate the buy-in of all individuals involved in its execution. Given the apparent lack of a common understanding of what sustainability is, this buy-in may be the key success factor driving operational sustainability.

The second contribution relates to the common understanding of what sustainability is in an MNC. Although such understanding may be established at MNCs' headquarters, the successful transfer of sustainability-related practices requires relational and social contexts (Kostova, 1999) to be clearly accounted for. This may be easier in certain industry settings, such as manufacturing. Even more importantly, this study highlights that distance in terms of geography and role impacts employees' decision making and subsequent buy-in through their bounded rationality (Simon, 1991).

The third contribution lies in the finding that functional capabilities, such as absorptive capacities (Cohen and Levinthal, 1990), play a minor role in driving sustainability in MNCs, whereas external institutional pressures (DiMaggio and Powell, 1983) are still a major driving force. In fact, capabilities are more important on the individual level in terms of enhancing the opportunity to arrive at a common understanding of sustainability and facilitate adaptation to changing institutional environments, whereas their role on the functional level is less prominent.

The final contribution relates to the theoretical and methodological triangulation of operational sustainability in MNCs, which is a topic that has not yet been thoroughly explored. In an attempt to create a broad theoretical base, this study therefore connects the literature on international business and general management, the literature on sustainability and business ethics, purchasing and supply-chain management, and the literature on learning, and sociological pressures and practices. On the methodological level, it embraces both quantitative and qualitative research. This is a combination that facilitates a more rigorous understanding of the phenomenon in question in first drawing upon existing theories to potentially explain operational sustainability in MNCs and thereafter exploring the setting in the two case companies.

The managerial implications of this study extend to two levels: the MNC as a whole and the individuals within it. The MNC as a whole could benefit from **fully implementing** sustainability practices and thus potentially going beyond mere communication in policy development to avoid risks and thus to comply with rules and regulations, as well as to gain a competitive edge and fulfill customer demands. Although these benefits are critical to MNCs, they require a dynamic setup to create new practices. In fact, continuous monitoring of the changing institutional environment with regard to sustainability requirements should take place on all levels of the MNC and not be limited to sustainability management.

The individual in the MNC should play a more prominent role in establishing and driving sustainability to foster a shared understanding of the day-to-day practices. Although the value of sustainability initiatives and practices may be clear to the “sustainability agents” within each function, and to management in general, other employees, who comprise most of the organization executing such practices, may be unaware of it. Thus, particular attention should be paid to capability development in the individual to foster a common understanding of sustainability.

Findings of this study indicate that individuals’ bounded rationality plays a critical role in the adoption of sustainability practices, policies, and ultimately performance. It may be valuable to understand whether monitoring of changing institutional environments would result in dynamic compliance. More generally, and given the imbalance between the three components of sustainability identified in this study, there is a need for more research taking a holistic, triple-bottom-line perspective that would not limit the sustainability focus. Although economic sustainability appears to be a precursor to the consideration of social and environmental sustainability, future studies should investigate the two latter components in combination to enhance understanding not only of their joint impact, but also of their impact on each other.

Finally, future research should move beyond the snapshot stage in which specific settings are addressed. Sustainability considerations have clear implications for foreign-direct-investment decisions, which could be captured in further longitudinal studies. Only when the complexity of MNC sustainability and its dynamic nature are understood will research efforts in the field of international business move towards theory building in specific areas, such as headquarters-subsidiary relationships.

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The impact of the Financial Fair Play regulation on the European professional football leagues

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Abstract

The dissertation presents analysis results of the Financial Fair Play regulation which has been gradually introduced by UEFA since 2010. The crucial element thereof, a break-even constraint, restricts the financial losses that top European football clubs can incur. Putting the regulation into institutional context, the dissertation utilises both theoretical and empirical tools to show that it has contributed to change of distribution of power within European football and strengthening of top clubs dominance.

Keywords: Financial Fair Play, UEFA, football, sport economics, professional team sports, competitive balance, regulations impact assessment, economic model of sports league, Poisson model, Arellano-Bond model

Introduction

In 2009, UEFA, an international organisation governing European football, declared a plan to introduce Financial Fair Play (FFP) regulation. The crucial element thereof is a limit put on the possibilities of covering losses of clubs with an use of external resources. The latter include funds of owners ('sugar daddies'). The mechanism in question has been introduced gradually. In 2014, the compliance with the regulation of financial statements of clubs (from 2011/12 and 2012/13) were evaluated for the first time.

Specific rules of FFP are set by subsequent editions of UEFA Club Licensing and Financial Fair Play Regulations (UEFA 2010, 2012b, 2015a). In particular, so-called break-even regulation states that, beginning in 2013/14 season, clubs participating in lucrative European club competitions have to prove that their first-team-related⁹ costs cannot exceed revenues directly resulting from football operations¹⁰ by more than 5 million euro, spread over three previous seasons. The latter value has been initially set at 45 million and planned be to gradually limited to previously mentioned 5 million. Furthermore, the coverage of such losses can be only made using unconditional and irreclaimable external funds. In practice, therefore, break-even rule is to be understood as a restriction on the value and form of funds that can be transferred to the strongest European clubs by their owners or other related parties, when they are meant to cover the cost of running a first team or building it through purchase of players ('transfers').

Whereas the name of the regulation refers to equity, the official aims, enumerated in the Art 2 of the regulation (e.g. fostering sustainable growth of football; UEFA 2010, 2012b, 2015a) rather consider efficiency (Szymanski, 2014). Nevertheless, public statements of

⁹ First team is to be understood as a professional men's team, playing in the most prestigious competitions, not subject to age restrictions.

¹⁰ Both costs and revenues taken into account defined precisely by the UEFA Regulations. Furthermore, transactions with related parties have to be included in the calculations using their fair value.

people directly involved in the creation of the FFP suggest that one of the motives that led to its introduction was creation of a 'level playing field' (UEFA, 2012a), in particular by restricting the spending possibilities of new owners of European clubs, including those who originated from different countries (Peeters, Szymanski, 2014). The representatives of UEFA (including the president, Michel Platini, (BBC Sport, 2009) have suggested that the introduction of FFP had been inspired by clubs themselves and the regulation-making process allowed for participation of the stakeholders.

As suggested by UEFA (2015b), the introduction of FFP has had significant financial consequences – reduction in both liabilities and losses of clubs. Additionally, total salaries of players have been decreased as well. The importance of the regulation has been further emphasized by often references to it made by officials, reporters and experts. As pointed out by one of the most vocal analysts of the regulation, lawyer Daniel Geey, 'it struck (him) how mainstream the discussion about FFP has now become; (Geey, 2014). Therefore, one should not be surprised by the number of publication analyzing the regulation both from economic (see e.g. D'Andrea, Masciandaro, 2016, for a comprehensive review) and lawyers. In particular, doubts regarding the compliance of FFP with the EU law have been voiced (see e.g. Peeters, Szymanski, 2014). As the opponents of the regulations argue, one of the aspects of the regulation that has to be taken into account is its influence on the competitive balance in European football.

In this context, it is crucial to point out that a substantial number of experts, economists, lawyers, as well as football fans, have accused UEFA of introducing a regulation that limits competition by strengthening a group of few strongest European clubs (or, 'petrifying the hierarchy'; see e.g. D'Andrea, Masciandaro, 2016). Furthermore, it is suggested that the regulation is harmful for players, since it effectively restricts their freedom to choose an employer (a club) and has a negative impact on wage level. With the latter, one has to bear in mind that it was one of the official aims of the introduction of the regulation.

Another important aspect of the context of the FFP introduction is the institutional incoherence of the European football. In particular, the conditions differ internationally due to multilevel structure of lawmaking. Firstly, national football associations or leagues (in no small part due to different historical paths and political powers of particular stakeholders to the current state of the institutional frameworks) have allowed for significant variation in rules regarding: distribution of income from sales of the TV rights to the clubs, employment of players (e.g. allowing for particular clauses in contracts or allowance for third-party ownership of players certificates), recruitment of youth or restrictions regarding ownership structure of a club. Secondly, differences in national institutional systems on economic-wide level (e.g. tax and bankruptcy laws) have direct consequences for ability of football clubs to compete with each other as well. On the other hand, the international sport governing bodies, like UEFA or FIFA, have been responsible for introducing regulations for clubs based in different countries without taking the existing incoherence into account. FFP can be considered as one of such instances.

Nevertheless, as for 2016, when the dissertation was completed, published economic analyses were either purely theoretical (see e.g. D'Andrea, Masciandaro, 2016, for a review) or simulation-based (Peeters, Szymanski, 2014). One of the reasons was undoubtedly a relatively short period of time since the introduction of the regulation. Only in 2016 Birkhäuser *et al.* (2017) published a first version of results of empirical analysis of impact of the regulation.

Furthermore, the literature has not examined the context of introduction of the regulation. Namely, between adoption of plans of introduction (September 2009) and its effective coming into force two years have passed. Moreover, at the request of clubs, the moment of introduction had been postponed (BBC Sport, 2010). While taking the declaration of Platini

regarding the role of clubs in the, one can presume that at least some of the (most influential) clubs could have adjusted their strategies in 2009 already. One should point out, however, that lack of formal analysis of this issue might be a result of a dominance of static models within the sports economics literature, which might result from the complexity of dynamic models.

Scope of the research

The analyses conducted while working on the dissertation had been designed to fill the gaps explained in the introduction above. The main research objective of the dissertation, therefore, was to analyse the impact of the FFP introduction on the European football market in the period 2009-2015. In particular, the competitive balance at the continental level has been examined. Although UEFA avoids referring to the concept of competitive balance (which constitutes one of the foundations of the sports economics) officially, the before mentioned doubts of legal and economic nature mean that this issue is of crucial significance for the general appraisal of the FFP. Moreover, in order to conduct the research, a construction of a theoretical, dynamic league model has proven to be indispensable. The model is a substantial extension of the existing ones, proposed within the literature. Furthermore, properties of the league model has been tested through a statistical analysis of dynamics of competitive balance within and between European football leagues in period 2004-2015.

The conducted analyses referred to the research thesis according to which *the introduction of Financial Fair Play has resulted in change of the competitive balance in the European football*. In particular, an expected result was that the distribution of sport strength of teams in European football has become more asymmetric. Three hypotheses have been tested:

1. The competitive balance in the European football has changed due to the adoption of new strategies by the clubs, informed beforehand about the introduction of the so-called break-even condition within the FFP regulation.
2. The break-even condition has led to an decrease in competitive balance between European league, in particular by strengthening the dominating position of some of them.
3. The break-even condition has strengthened the dominance of particular clubs within national leagues.

Institutional context

In the first of three chapters included in the dissertation, the European football market has been described, in particular the economic interpretation thereof and institutional framework have been presented. Among the explained characteristics, especially one can be highlighted as both less known to general public and vital for understanding FFP – accounting rules regarding transfers of players used by a great majority of clubs (see e.g. Szymanski, 2013). In particular, in accounting terms, an incoming transfer of a player means addition of a new tangible asset – registration rights to a player – to a balance sheet of a club. Its value - the payment to the selling club - along with large part of additional costs (e.g. agent fees) is not included in the P&L straightforwardly, but amortised over the length of a player's contract. On the other hand, the sale of a player is reflected in P&L as a difference in received payment and outstanding accounting value. This strengthens the importance of the dynamic context of the FFP introduction, since it can be argued that players can be perceived by the clubs not only as the most significant production factor, but also as assets to be used for speculative purposes.

Furthermore, the FFP regulation, its rules, introduction process and official aims have been explained, as well as the legal and economic arguments for and against it. Moreover, the results of a comparative analysis of European football leagues have been discussed, with a special focus on the strongest ones ('top five') – English, French, German, Italian and

Spanish. In particular, due to global interest from fans and investors, relatively flexible governance rules and balanced mechanism of sharing income from TV rights sales, English league encloses the highest number of strong teams. On the other hand, none of these has been able to dominate the local market as much as FC Barcelona, Real Madrid and Bayern Munich in their respective leagues. Considerably lower potential of the French league (at least partially resulting from inflexible institutional framework) has coincided with dominance of one club at a time over several seasons and, lately, strong dependence of the strongest team on external funds. Italian league, after series of doping, corruption and financial governance scandals has lost its strong international position. Relative lack of transparency of its internal regulations, favouring historically dominating clubs, as well as entanglement of football in political and business networks, have been gradually reduced over the last years, further contributing to weakening of traditionally (but previously inflated) powerful elite. German league seems not to have fulfilled its potential over the years. To a great extent, this can be contributed to an inflexible institutional framework (for example, '50+1' rule, effectively ruling out takeovers of clubs by wealthy owners), which at the same time has favoured the dominating Bayern.

One has to note that lately, EU institutions, FIFA, UEFA and the national leagues themselves have introduced reforms and rules that can be interpreted as narrowing institutional differences between the top five. Often, when the change was introduced from within (e.g. a collective sale of TV rights in Spain), a reasoning included the need to compete with other top leagues (also within the FFP context). Nevertheless, when FFP was introduced, the institutional incoherence was substantial. Based on the first chapter, the thesis and hypotheses have been formulated.

A dynamic league model

In the second chapter of the dissertation, a theoretical sports league model have been presented. Along with the discussion of the proposed model, existing literature on league models, with a particular focus on the FFP appraisal, has been presented.

The model has been based on the dynamic programming problem. The clubs are assumed to maximize either net present value of future profits or, as 'utility-maximizers' interested in sport success (or 'quality-maximizers'), the (discounted) quality level of their teams. The latter are constrained by the external budget considerations (either resulting from FFP or, before its introduction, exogenous factors – interpreted as the will of owners). All clubs decide upon employment of one production factor – talent – that can be understood as an overall quality of players employed. The talent can be traded between the clubs through 'transfers'. The clubs incur costs – talent wages and transfer payments. The transfer market mechanism allows for setting the price of talent that results in equality of talent sales and purchases of all the clubs combined. Clubs revenues are positively related to their levels of strength – talent employed. Apart from being able to generate income through quality of own team (due to attracting fans to the stadiums and sale of tickets, winning prizes in official competitions, attracting more lucrative commercial contracts, obtaining greater shares in revenues from TV rights sales etc.), each club's revenues are positively related to the quality of teams competing in the same national league (which can be explained e.g. by improvement in quality of national competitions, which attracts greater interest in all the clubs, including from global TV audiences). The clubs differ in adopted aims, market potential (i.e. ability to generate revenue for a given team and league quality) and pre-FFP budget constraints.

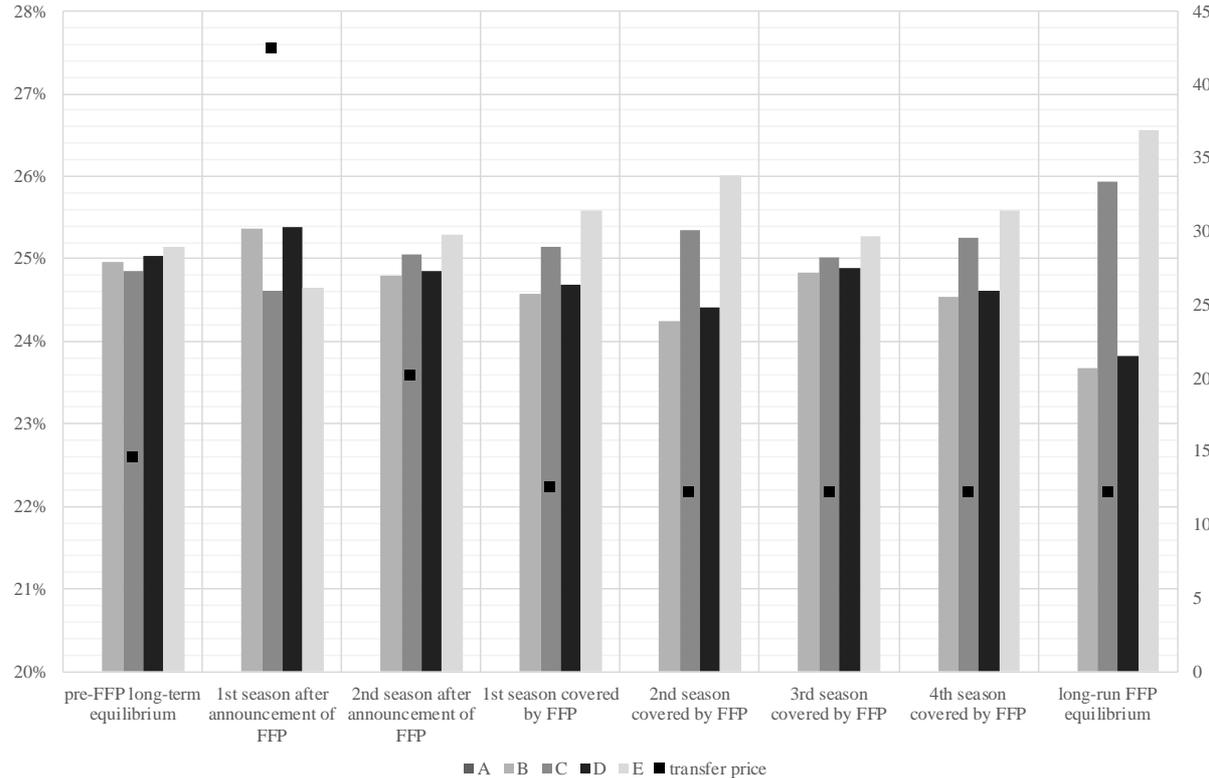
The essence of the analysis is the transition of clubs from the pre-FFP long-term equilibrium to a new one (with more strict limits on acceptable losses), in a situation when the clubs obtain information on the forthcoming institutional regime change beforehand. Therefore, the dynamic setup allows for analysis of adaptation of clubs strategies based on

expectations of both the change of legal framework and its consequences for the transfer market (i.e. the change of transfer prices).

Alas, the complexity of the proposed model, resulting from its dynamic form, clubs heterogeneity, grouping of clubs in several national leagues, external effects reflected within the revenue function, change of the structure of the optimization problem and endogenous character of the (international) transfer market do not allow for finding analytical solutions of the model. Therefore, within the dissertation the numerical results for selected parametrisations have been presented.¹¹ Furthermore, due to nonlinearity of the problem, the number of teams analysed had to be restricted – to eight quality-maximizing teams (distributed uniformly along four national leagues) and twelve profit-maximizing teams (with eight distributed uniformly along the four national leagues with quality-maximizers and four competing in a separate league).

The most important results of the analysis are presented in the charts 1 (which presents total share of talent employment of leagues and can, therefore, be interpreted as an illustration as between-league competitive balance) and 2 (which presents ratio of talent employment of the weaker quality-maximising team in each league to the stronger one and can, therefore, be interpreted as an illustration as within-league competitive balance).

Chart 1. Share of leagues in talent employment and transfer price dynamics.



Explanation: Transfer price is measured on the secondary axis.

Explanation 2: League A consists only of profit-maximising teams, which leads to its low share in employment of talent. League E is characterized by the highest market potential, league C by the second-highest (and relatively greater disproportion of market potential between the two quality-maximising teams). League B and D have lowest market potential and considerable within-league disproportion (greater for D due to one time having greater potential). Owners in leagues B and D are more generous than the ones in leagues C and E, leading to a reduction in pre-FFP imbalance

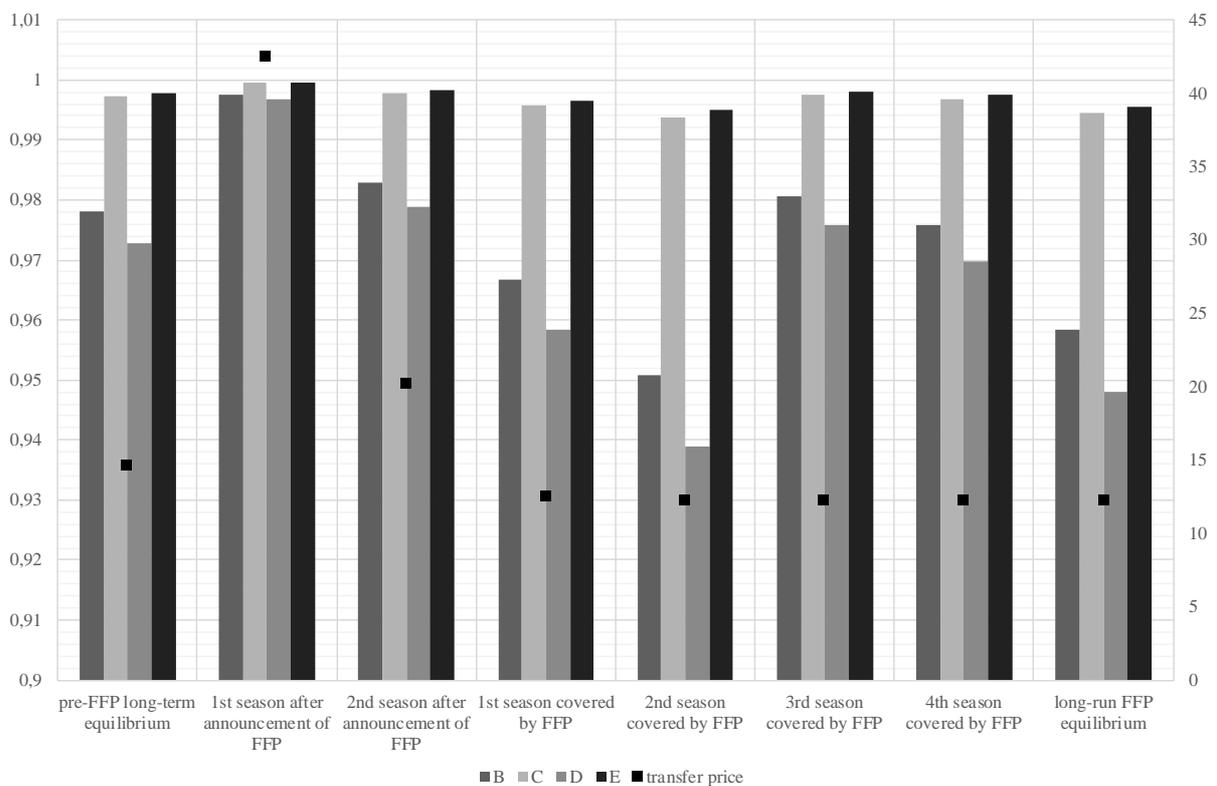
¹¹ Along with proofs of the stability of presented solutions.

between the leagues.

The analysis (see comparison of long-term equilibria pre-FFP and post-FFP) suggests that introduction of FFP can lead to a decrease in competitive balance, as long as the payments from the owners reduced the inequality resulting from differences in market potential (i.e. the former and the latter were not positively correlated). In accordance with expectations, introduction of FFP results in decrease of talent price in the transfer market.

Nevertheless, in seasons after introduction of the regulation, even before its coming into force, the talent price surges substantially. The reason for this is the sudden increase in talent demanded by the quality-maximizers. Even though they rationally expected a fall in price in the following season (not yet covered by FFP) – so, a fall in value of their assets – the more stringent restrictions under FFP regime made the increased expenditure on talent an optimal decision (i.e. the first two seasons after the announcement were the ones, during which the clubs could have exploited the payments from owners to a greater extent than under FFP). Therefore, the competitive balance (especially the one between leagues) was expected to decrease even before introduction of the regulation.

Chart 2. Ratios of talent employment within leagues and transfer price dynamics.



Explanation: Transfer price is measured on the secondary axis. For the ratio (weaker to stronger quality-maximising team within a league), 1 means perfect competitive balance.

Furthermore, both within and between-leagues competitive balance gradually oscillated to a new long-term equilibrium. Significantly, during initial seasons, the differences in quality could significantly exceed both the pre-FFP and post-FFP ones.

Empirical analysis

In the third chapter the empirical results have been presented. In particular, the distribution of talent for clubs competing in thirty three strongest UEFA national leagues¹² during period consisting of eleven seasons (2004/05-2014/15) have been estimated. As a point of reference for the period after the announcement of FFP, five seasons before the announcement of the regulation have been included in the sample. The data utilised came from the highest levels of national league competitions as well as continental ones – UEFA Champions League and UEFA Cup (until 2008/09), later transformed into UEFA Europa League.

To conduct this part of the research, a double Poisson model based on Maher (1982) work has been utilised. The model consists of two equations, each explaining number of goals scored by both competing teams as a function of (unobservable) levels of attack and defence strength of the teams and, additionally, home advantage effect. Resulting estimates of the levels of strength were used to calculate theoretical win ratios for all the teams in a hypothetical ‘pan-European’ league in which they would compete with each other. Since the number of games played within European competitions is very low for the weakest leagues, within this step of analysis, the number of national leagues have been limited to 24 strongest ones. Resulting estimates have been utilised to calculate distribution of strength for each season included in the sample. To assess competitive balance dynamics, both between and within leagues, variance, skewness, win ratios for the strongest European teams and Gini coefficients have been examined. Furthermore, a dynamic Arellano-Bond model (1991) utilising panel data estimated in the previous step. The rationale for this part of the research has been to analyse the intertemporal relation between quality of teams that compete in national leagues, as well as the tendency for the dominance of small group of clubs to be maintained.

The most important results of the empirical analysis can be seen in tables 1-3. First of all, between-leagues skewness seems to have increased after announcement of FFP (though, confidence intervals estimated using a bootstrap method suggests that the difference is not significant). Secondly, if only top five leagues (English, French, German, Italian and Spanish) are analysed, significant increase in within-league skewness could be observed in the first two periods covered by FFP. Thirdly and most substantially, the strength of the best two teams in Europe increased from season 2010/11 (suggesting increased dominance in each season), with further improvement of the third-best team from season 2013/14. On the other hand, no visible changes in variance of the distribution took place.

¹² Thirty two European and the Israeli one.

Table 1. Skewness decomposition (24 leagues).

Season	Gini coefficient	Skewness	Within-league skewness	Between-league skewness
04/05	0,2131 (0,195-0,217)	-0,1886 (-0,29- -0,01)	0,080 (0,05-0,13)	-0,095 (-0,23-0,10)
05/06	0,1884 (0,164-0,189)	0,0062 (-0,04-0,27)	0,082 (0,07-0,15)	0,002 (-0,08-0,30)
06/07	0,2020 (0,182-0,207)	0,1068 (0,06-0,38)	0,084 (0,07-0,13)	0,146 (0,06-0,46)
07/08	0,1994 (0,178-0,203)	-0,0652 (-0,19-0,18)	0,059 (0,05-0,11)	-0,045 (-0,22-0,27)
08/09	0,1931 (0,171-0,195)	-0,0009 (-0,06-0,22)	0,093 (0,09-0,15)	-0,035 (-0,13-0,19)
09/10	0,1965 (0,175-0,200)	0,1438 (0,14-0,38)	0,103 (0,10-0,17)	0,100 (0,05-0,34)
10/11	0,1947 (0,174-0,197)	0,1564 (0,15-0,42)	0,082 (0,07-0,14)	0,173 (0,13-0,45)
11/12	0,1989 (0,178-0,202)	0,0658 (0,03-0,26)	0,087 (0,07-0,14)	0,033 (-0,04-0,24)
12/13	0,1890 (0,167-0,191)	0,1643 (0,14-0,40)	0,110 (0,10-0,18)	0,080 (0,02-0,32)
13/14	0,2149 (0,194-0,219)	0,1730 (0,13-0,42)	0,097 (0,09-0,15)	0,107 (0,03-0,37)
14/15	0,2172 (0,200-0,221)	0,0999 (0,04-0,29)	0,098 (0,09-0,15)	0,024 (-0,08-0,22)

Explanation: The skewness decomposition have been calculated using Western, Bloome (2009) method. The confidence intervals in parentheses are 90-percent normal intervals calculated using 1000 bootstrap replications.

Table 2. Skewness decomposition (5 leagues).

Season	Skewness	Within-league skewness	Between-league skewness
04/05	0,405 (0,32-0,81)	0,430 (0,39-0,73)	0,059 (-0,05-0,22)
05/06	0,442 (0,42-0,83)	0,494 (0,49-0,84)	0,008 (-0,04-0,06)
06/07	0,510 (0,46-0,96)	0,421 (0,40-0,73)	0,048 (-0,02-0,18)
07/08	0,449 (0,40-0,82)	0,191 (0,11-0,40)	-0,048 (-0,18-0,07)
08/09	0,482 (0,47-0,90)	0,445 (0,43-0,78)	0,003 (-0,04-0,05)
09/10	0,382 (0,27-0,76)	0,536 (0,54-0,86)	0,001 (-0,04-0,04)
10/11	0,396 (0,26-0,77)	0,356 (0,31-0,63)	-0,108 (-0,29-0,01)
11/12	0,720 (0,72-1,23)	0,660 (0,67-1,03)	0,035 (-0,03-0,16)
12/13	0,703 (0,72-1,16)	0,626 (0,63-1,00)	0,018 (-0,04-0,11)
13/14	0,505 (0,42-0,84)	0,438 (0,40-0,68)	-0,025 (-0,14-0,09)
14/15	0,631 (0,60-1,04)	0,527 (0,50-0,82)	-0,033 (-0,13-0,04)

Explanation: The skewness decomposition have been calculated using Western, Bloome (2009) method. The confidence intervals in parentheses are 90-percent normal intervals calculated using 1000 bootstrap replications.

Table 3. Top three European teams (theoretical win ratios for both 24 and 5 leagues).

Season	Top team (24 leagues)	Second-best team (24 leagues)	Third-best team (24 leagues)	Top team (5 leagues)	Second-best team (5 leagues)	Third-best team (5 leagues)
04/05	0,917 (0,89-0,95)	0,898 (0,87-0,93)	0,869 (0,84-0,88)	0,838 (0,80-0,88)	0,794 (0,75-0,83)	0,752 (0,70-0,77)
05/06	0,893 (0,86-0,92)	0,871 (0,84-0,89)	0,869 (0,85-0,89)	0,791 (0,74-0,82)	0,766 (0,72-0,79)	0,752 (0,72-0,78)
06/07	0,906 (0,88-0,93)	0,901 (0,89-0,93)	0,880 (0,86-0,90)	0,788 (0,73-0,82)	0,777 (0,74-0,81)	0,752 (0,72-0,78)
07/08	0,923 (0,90-0,95)	0,904 (0,88-0,93)	0,898 (0,88-0,93)	0,842 (0,80-0,88)	0,803 (0,76-0,83)	0,793 (0,76-0,83)
08/09	0,911 (0,88-0,94)	0,873 (0,84-0,89)	0,859 (0,83-0,88)	0,823 (0,77-0,87)	0,768 (0,71-0,79)	0,751 (0,70-0,78)
09/10	0,914 (0,89-0,94)	0,890 (0,86-0,91)	0,889 (0,87-0,91)	0,826 (0,78-0,86)	0,776 (0,72-0,79)	0,775 (0,74-0,81)
10/11	0,950 (0,93-0,97)	0,941 (0,93-0,97)	0,880 (0,84-0,89)	0,890 (0,85-0,93)	0,868 (0,84-0,92)	0,769 (0,70-0,79)
11/12	0,954 (0,94-0,97)	0,951 (0,94-0,98)	0,896 (0,86-0,92)	0,897 (0,86-0,93)	0,892 (0,87-0,94)	0,796 (0,74-0,82)
12/13	0,948 (0,93-0,98)	0,918 (0,90-0,95)	0,904 (0,88-0,94)	0,892 (0,85-0,94)	0,829 (0,79-0,87)	0,805 (0,77-0,85)
13/14	0,952 (0,94-0,97)	0,943 (0,93-0,96)	0,932 (0,91-0,95)	0,873 (0,83-0,90)	0,857 (0,82-0,88)	0,834 (0,80-0,85)
14/15	0,957 (0,94-0,98)	0,943 (0,93-0,96)	0,938 (0,93-0,97)	0,889 (0,85-0,92)	0,859 (0,82-0,90)	0,841 (0,81-0,90)

Explanation: The skewness decomposition have been calculated using Western, Bloome (2009) method. The confidence intervals in parentheses are 90-percent normal intervals calculated using 1000 bootstrap replications.

Analysis of Arellano-Bond model¹³ show that: a) a regression to mean takes place (in the sense, that the stronger a team was in one season, the weaker it would be in the next one), but this effect is significantly weaker in case of the strongest teams (the ones competing in Champions League). This suggests that ‘a petrification of elites’ in European football exists. Moreover, there is an effect of synergy between clubs competing in the same national leagues. In particular, the higher the level of the weaker teams, the greater the general quality of a league in following seasons (especially, of the other teams not competing in Europe; 10% of increase in quality of all the weaker teams contributed to ca. 4% improvement of weaker teams in the next season and 2-3% improvement of the better teams). On the other hand, quality of the best team is negatively related to the strength of the weaker teams in the following seasons (10% improvement led to 5% worsening). In sum, the results emphasize the importance of within-league competitive balance (as well as coexistence of both positive and negative externalities within leagues) for the dynamics of between-league distribution of power within European football. Furthermore, the analysis show that the average quality of European teams began to decrease from 2010/11, suggesting an increase in asymmetry of distribution of strength towards greater dominance of the best teams after announcement of FFP.

Conclusions

To conclude, the analysis has supported the research thesis and hypotheses. In particular, the dominance of few strongest clubs in Europe has strengthened in accordance with the expectations formulated on the basis of comparison of institutional systems of top European leagues. In particular, top clubs from leagues with lower internal competitive balance became stronger, while the English league characterised by intense competition of supported by wealthy owners became relatively weaker. The change of the distribution of power could be observed even before FFP came into force, which can be explained by the process of adjustments of strategies of clubs to the institutional framework.

The dissertation have provided additional arguments in the discussion on FFP. In particular, the regulation seems to have further strengthened the process of petrification of elites in European football. Significantly, the later process has existed before in no small part due to existence of Champions League - competition supervised and managed by UEFA (as shown e.g. by Schokkaert and Swinnen, 2013, as well as analysis conducted within the dissertation). The analysis, therefore, further strengthens the suggestions that due to synergies between competitive, financial and political powers of the strongest European football clubs, their dominance has been increasing (see e.g. Szymanski, 2011).

Furthermore, the analysis highlights the negative effects of negligence of general rules (e.g. competition policy), motivated by supposed specificity of particular industries (in this case, professional sports), allowing for unequal participation of stakeholders in the process of lawmaking and lengthening of the *vacatio legis* at the request of entities affected, especially when the initial institutional framework is both incoherent and unequal.

¹³ Due to its size, the results table has been omitted from this text.

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