

Three Essays on Collective Forms of Organizing for Production and Innovation

THÈSE N° 8093 (2017)

PRÉSENTÉE LE 10 NOVEMBRE 2017
AU COLLÈGE DU MANAGEMENT DE LA TECHNOLOGIE
CHAIRE DE STRATÉGIE ET INNOVATION D'ENTREPRISE
PROGRAMME DOCTORAL EN MANAGEMENT DE LA TECHNOLOGIE

ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE

POUR L'OBTENTION DU GRADE DE DOCTEUR ÈS SCIENCES

PAR

Joana RODRIGUES PEREIRA

acceptée sur proposition du jury:

Prof. Ph. Wieser, président du jury
Prof. C. Tucci, directeur de thèse
Prof. V. van de Vrande, rapporteuse
Prof. C. Abecassis-Moedas, rapporteuse
Prof. D. Foray, rapporteuse



ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

Suisse
2017

To my family, Ana, Juvenal, Alvaro, Beatriz, and Rita, for their love and encouragement

To my partner Pedro for his relentless support

Acknowledgements

Firstly, I wish to express my gratitude to my supervisor Prof. Christopher Tucci for his encouragement to pursue my ideas and passions. His contagious humor, valuable knowledge, and immense kindness made my Ph.D. a truly enriching experience both at professional and personal levels. Besides my advisor, I would like to thank my thesis committee: Dr. Celine Abecassis-Moedas, Prof. Vareska van de Vrande, Prof. Dominique Foray, and Prof. Philippe Wieser for their availability and insightful comments.

I want also dedicate a special thank to Dr. Tilo Peters for his support, coffee breaks, excellent food, and for asking “why not the Azores?” I also want acknowledge Dr. Gianluigi Viscusi for our joined work in the fourth chapter of this thesis; and Prof. Vareska van de Vrande for her support and constructive feedback throughout these years.

I am grateful to my friends Giada, Monica (for the morning coffees), Giovanni, Giuseppe, Philipp (for the great time we spent together), Claudia, Reinier, Fabiana, Charles, Maryam (for the lunches we took together), and Abhik (for the “good mode”). Thanks also to all other CDM colleagues: Olivier, Albina, Allan, Mary Jean, Heidi, Lorenzo, Deep, Amin, Viet, Florian, Stefano, Argyro, Nettra, Mervegül, Mohamad, Toni, Markus, Quentin, Maxime, Corinne, Camille, Simone, Emilio, Orion, and Shira. I am grateful for the moments we spent together. Finally, I acknowledge the administrative staff, IT team, and the entire community of the College of Management of EPFL for their direct or indirect contribution to this dissertation.

I want to thank the family that accommodate me in Lausanne at the beginning of the Ph.D., Elizabeth and Peter Gappmaier. They made me feel at home since the first day.

A special thank to Prof. Celine Abecassis-Moedas for her immensely valuable support before and during the Ph.D. and for teaching me that “life is a marathon.”

Last but not the least, I would like to thank my family, Ana, Juvenal, Beatriz, Rita, and Alvaro, for their unconditional support and love, and Pedro for his care, encouragement, and everything: Obrigado.

Abstract

This dissertation focuses on collective forms of organizing that through crowds or communities undertake production or innovation activities. Such organizations deviate from the traditional notions of hierarchy, authority, and control; however, they are still able to engage in production and innovation activities, directly competing with bureaucratic organizations. Specifically, this dissertation focuses on communities for production and crowds for innovation, adopting different theoretical angles.

The first chapter of this thesis introduces the concept of collective organizations for innovation and production. I present a framework that comprises both traditional and modern collective organizations, such as producer cooperatives, user communities, crowdsourcing, and the most recent distributed ledgers, the base of cryptocurrencies.

Chapter two and three concentrates on communities for production, more specifically, on the producer cooperatives' cooperative-commercial hybrid nature. While chapter two focuses on the influence of organizational hybridity on market strategies and competitive behavior; chapter three analyzes the conditions under which hybrid organizations affect market competitive dynamics and institutions. These chapters speak not only to the literature on communities for production but also to other hybrid organizations, which instantiate different and potentially conflicting logics under the same organizational roof.

Chapter four (with Gianluigi Viscusi and Christopher Tucci) focuses on crowds for innovation, investigating the differences between crowds and communities, and the various types of crowds' governance modes—*crowd-driven*, *crowd-based*, and *crowded*. This chapter not only defines what is a crowd organization but also provides guidelines about how firms can govern crowds for knowledge generativity—spontaneous innovation.

Keywords: collective organizations, crowd organizations, hybrid organizations, organizational theory, institutional theory, innovation management, and competitive dynamics.

Résumé

Cette thèse explore les organisations collectives qui innovent ou produisent au travers de communautés ou *crowds*. Ces formes d'organisations se distinguent des notions traditionnelles de bureaucratie, d'autorité et de centralisation. Néanmoins, elles restent compétitives tout en entreprenant des activités généralement prodiguées par des entreprises bureaucratiques. Plus précisément, cette thèse traite de la production par les communautés et l'innovation par les *crowds* sous différentes approches théoriques.

Le chapitre un est une introduction au concept d'organisations collectives pour l'innovation et la production. Un *framework* est présenté afin de décrire les organisations collectives traditionnelles et modernes. Que ce soit des coopératives de producteurs, à des communautés d'utilisateurs en ligne, au plus récentes appelées *distributed transaction ledgers* qui sont la base de la *cryptocurrency*.

Les chapitres deux et trois se concentrent sur la production par des communautés, plus précisément, sur la nature hybride, coopérative-commerciale, des coopératives de producteurs. Alors que le chapitre deux analyse comment l'hybridité organisationnelle influence les stratégies du marché et le comportement concurrentiel. Le chapitre trois se concentre sur les conditions et facteurs que des organisations hybrides peuvent exploiter afin d'influencer la compétitivité du marché et les institutions. Ces chapitres parlent non seulement d'organisations qui ont des objectifs coopératifs et commerciaux, mais aussi des organisations hybrides qui ont des logiques différentes et potentiellement conflictuelles sous le même toit organisationnel.

Le chapitre quatre (avec Gianluigi Viscusi et Christopher Tucci) traite de l'innovation par le *crowd* et ses différences avec les communautés en ligne. Puis, des modes de gouvernances sont définis dans la gestion du *crowd* pour l'innovation. Ainsi, ce chapitre apporte une définition aux *crowd organisations*, mais également fournit des directrices pour gouverner l'innovation spontanée grâce au *crowd*.

Mots-clés: organisations collectives, organisations de foules, organisations hybrides, théorie organisationnelle, théorie institutionnelle, gestion de l'innovation et dynamique concurrentiel

Contents

Chapter 1 Introduction to Collective Forms of Organizing	13
1.1 Collective organizations framework	14
1.2 Structure and contributions	17
Chapter 2 Organizational Hybridity Influence on Market Strategies and Competitive Behavior.....	19
2.1 Introduction.....	19
2.2 Literature Review.....	21
2.2.1 Hybrid organizations' competitiveness	22
2.2.2 Institutional complexity, market strategies, and competitive behavior	24
2.3 Methodology	25
2.3.1 Empirical setting	25
2.3.2 Case selection	26
2.3.3 Data Collection	27
2.3.4 Data Coding	29
2.3.5 Data analysis	32
2.4 Results.....	33
2.4.1 Players' market strategies	33
2.4.2 Players' competitive behavior	39
2.5 Discussion	43
Chapter 3 Competing under Institutional Complexity: a Multi-case Study Design	47

3.1	Introduction.....	47
3.2	Literature Review.....	49
	3.2.1 Hybrid organizations and markets' competitive dynamics	49
	3.2.2 Hybrids and institutions.....	51
3.3	Methodology.....	52
	3.3.1 Context and cases description.....	52
	3.3.2 Data Collection	55
	3.3.3 Data Coding and analysis	57
3.4	Results.....	59
	3.4.1 The Cooperative Union's influence on market competitive dynamics	59
	3.4.2 The Cooperative Union's influence on market institutions	66
3.5	Discussion.....	70
Chapter 4 Online Crowd Organizations: Towards a Definition.....		75
4.1	Introduction.....	75
4.2	Theoretical Background.....	76
	4.2.1 Physical and online crowds	76
	4.2.2 Online crowds' characteristics.....	78
	4.2.3 Crowds and communities	80
	4.2.4 Crowds' typology	81
4.3	Online Crowd Organizations	83
	4.3.1 Online crowd organizations membership.....	84
	4.3.2 Online crowd organizations emergent norms	85
	4.3.3 Online crowd organizations output.....	86
	4.3.4 Online crowd organizations governance mode and generativity.....	87
4.4	The framework: online crowd organizations typology.....	90
4.5	Discussion and conclusions	93
Chapter 5 Conclusion.....		97
References.....		99

Curriculum Vitae.....109

List of Figures

Figure 1:1 Collective organizations framework.....	15
Figure 2:1 Chronological representation of player’s competitive moves	41
Figure 3:1 Players’ average milk price in cents per year	62
Figure 3:2 Chronological representation of player’s pricing competitive moves and response order	68
Figure 4:1 Knowledge generativity frontier.....	89
Figure 4:2 Online crowd organizations types	90

List of Tables

Table 2:1 Cases description	26
Table 2:2 Data sources	27
Table 2:3 Interview Protocol.....	28
Table 2:4 Player's competitive moves per market and type	32
Table 2:5 Player's competitive Strategies Quotes	34
Table 2:6 New products/packaging launched between 2010 and 2014	34
Table 2:7 Players' proactiveness and responsiveness	40
Table 2:8 Actions strategic relevance per player	40
Table 2:9 Player's market orientation	41
Table 2:10 Responsiveness measures	41
Table 3:1 Players milk collected in % of total island production per year	53
Table 3:2 Player's description.....	55
Table 3:3 Data sources information	57
Table 3:4 Market player competitive moves by market and type.....	58
Table 3:5 Player's pricing competitive moves.....	62
Table 3:6 Total ex-post responses to players' actions	63
Table 3:7 Players' products launched from 2010 to 2015	65
Table 4:1 Online Crowds and Online Communities	81
Table 4:2 Online Crowds' Typology	83
Table 4:3 Online crowd organizations typology	92
Table 4:4 Online crowd organizations	93

Chapter 1 Introduction to Collective Forms of Organizing

More than 20 years ago, Daft and Lewin (1993) expressed their concern about the risk of obsolescence of organizational theory. The reality nowadays may not be that different. Existing approaches did not adapt to the fundamental changes that occurred in organizational forms and managerial practices since the last quarter of the 20th century (Walsh, Meyer, and Schoonhoven 2006). Amongst these new forms of organizing, there are crowds and communities, which are some of the most under-studied populations in the organizational field (Chiles, Meyer, and Hench 2004).

The development of communication and information technologies enhanced the proliferation of organized online crowds and communities. Such collectives can undertake production and innovation activities outside the limits of the firm (Afuah and Tucci 2012; Jeppesen and Frederiksen 2006). In these organizations, concepts as peer-control, disaggregation, task self-selection, and virtual collaboration are replacing the traditional notions of bureaucratic control, top-down monitoring, and formal contracts, reshaping organizations as we know them (Daft and Lewin 1993; Walsh, Meyer, and Schoonhoven 2006).

Nowadays, the rise of crowds and communities is often connected with the development of information and communication technologies (see Baldwin and von Hippel 2011; Jeppesen and Frederiksen 2006; Tucci and Viscusi 2015). However, the phenomenon of people getting together to perform an activity is not new. In the past, people have done it but in different manners. For example, what would be the offline analog to Wikipedia? People would physically collect articles or books in a library, adding them to the library collection. How is this organization different from producer cooperatives where each member provides the raw material to run a production facility? Fundamentally, cooperatives are the traditional offline version of these now emergent online communities and crowds. While in a production economy, collective forms of organizing focused on production activities, as is the case of producer and consumer cooperatives (Sexton and Iskow, 1988; Kenworthy 1995; Hicks and Kenworthy, 1998; Cook, 1995); in a knowledge economy, collective forms focus on

aggregating and developing knowledge, as is the case of user communities and crowdsourcing activities. In this dissertation, I focus on a subset of these “collective organizations” that populate our modern societies. Specifically, I investigate both traditional producer cooperatives and contemporary online crowds, adopting different angles and theoretical perspectives.

1.1 Collective organizations framework

Collective forms are organizations that through crowds’ or communities’ collective behavior engage in production or innovation activities. In the following paragraphs, I further define the collectives and the activities of such organizations, providing a framework.

Communities and crowds are two different types of collectives that present distinctive characteristics and dynamics. A crowd is a large gathering of serial and heterogeneous individuals with a shared goal (Le Bon 1896; Lang and Lang 1968; Marshall 1998; Sartre 1960; Viscusi and Tucci 2015).¹ Since crowds occur in physical or virtual public domains, individuals who share the same goal can easily join it. In this way, crowds can achieve high or even unlimited growth rates; however, they can also dissipate quickly as soon as the crowd attains the goal (Viscusi and Tucci, 2015; Lang and Lang, 1968; Canetti, 1962). Communities are collectives of homogeneous individuals that share the same goals, norms, values, and beliefs (Adler 2015; Young 1994). People in communities tend to nurture a sense of belonging and develop dense interpersonal ties, based on stable identities (Adler 2015; Clark, 1973; Hillery 1955; Wellman 1979). In this case, the barriers to entry are higher, growth rates more limited, and boundaries more stable than in crowds. Due to these differences, the way that crowds and communities produce or innovate also differs.

The increasing attention dedicated to these collectives is due to their ability to conduct production and innovation activities beyond the frontiers of the firm (see Adler 2015; Boudreau and Lakhani 2009; Henkel and Hippel 2004; Jeppesen and Frederiksen 2006). On the one side, production activities entail a physical or virtual process to manufacture a product or a service for consumption. In such activities, the input and the output are standardized, tangible, and quantifiable. On the other side, innovation entails knowledge creation, which results from linkages between components and methods that might integrate products, services, or processes in the future (Afuah 1998), being more intangible and difficult to quantify.

¹ Serial means that members are interchangeable—their order of participation is irrelevant (Sartre, 1960; Viscusi and Tucci, 2015)—, and anonymous.

The following framework comprises the dimensions collectives, crowds and communities, and activities, production or innovation, capturing the different types of collective organizations (see Figure 1:1).

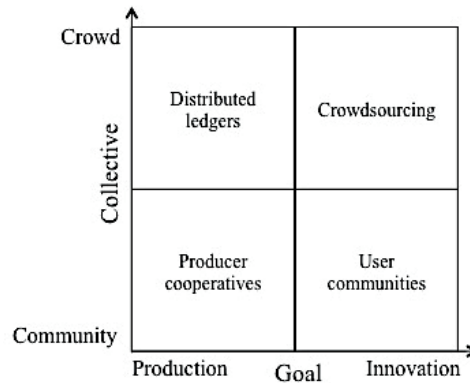


Figure 1:1 Collective organizations framework

Producer cooperatives are the most representative case of **communities for production**. Traditional producer cooperatives entail collectives of individuals that usually cohabit in the same area and share common economic, social, and cultural goals (ICA 2014). To achieve such goals, cooperative members pool standardized resources in a centralized structure, engaging into production activities of consumable products or services (Shaffer 1987; ICA 2014; Normak 1996; Bijman 2007). For example, in dairy producer cooperatives, one of the most common types of cooperatives, members aggregate their milk productions in a centralized facility dedicated to producing dairy products for consumption.

Regarding **communities for innovation**, the most illustrative example is user communities. Such communities are ‘places’ where users with similar needs, problems, or interests can interact, exchange, and build knowledge (Jeppesen and Frederiksen 2006; Preece 2000; Tardini and Cantoni 2005). Therefore, user communities are usually suitable grounds to share information, receive feedback, and disseminate innovations (Lee and Cole 2003; West and Lakhani 2008). Lego’s *ReBrick* is an example of such communities. In this online platform, passionate Lego fans suggest innovative sets and also vote for the most impressive games, being a valuable source of innovation for the Lego Group (Hienerth, Lettl, and Keinz 2014).

Distributed ledgers illustrate well the concept of **crowds for production**. Distributed ledgers comprise a collective of anonymous and dispersed members, known as “miners,” where members adhere to a protocol for validating blocks of transactions, based on a peer-to-peer mechanism. The output of this crowd of “miners” is a standardized service for individuals or

firms that aim at concluding a transaction. For example, the blockchain, the primary technology for cryptocurrencies, is an openly distributed ledger that record anonymously and permanently transactions amongst parties. In this case, the crowd of “miners” adheres to a protocol, and through their CPUs capacity, they validate and verify the transactions.

In **crowds for innovation**, more specifically crowdsourcing for innovation, the collective answers to an open call to perform tasks or activities (Afuah and Tucci, 2012). In this case, the crowd is an aggregation of more or less heterogeneous individuals (Estéllés-Arolas and Ladron-de-Guevara 2012) located across a multitude of places (Afuah and Tucci, 2012). Innocentive is an example of a platform that manages crowds for innovation. This innovation intermediary helps companies to access crowds’ knowledge to solve problems innovatively (Viscusi and Tucci 2015).

In this thesis, I focus primarily on communities for production—producer cooperatives—and crowds for innovation—crowd organizations. Despite the extensive literature on cooperatives’ governance form and economic nature (Cook and Chaddad 2004; Hansmann 1999; Karantininis 2007; Ménard 2007), very little is known about how their cooperative-commercial hybrid nature affects their competitiveness and the competitive dynamics of the markets in which they operate. Chapter two and three of this dissertation focus on these research questions, contributing to the literature on cooperatives, institutional theory, and competitive dynamics.

Chapter four focus on crowds for innovation. While there is a stream of research that focuses on communities for innovation (Baldwin and von Hippel 2011; Jeppesen and Frederiksen 2006; Lettl, Herstatt, and Gemuenden 2006), fewer are the studies focusing on crowds for innovation. Studies on this literature stream concentrate more on crowdsourcing activities, vaguely defining crowds, and rarely addressing the governance modes to access their knowledge (Brabham 2013; Wexler 2011). Chapter four speaks to these omissions, focusing on the differences between online crowds and communities, and on the governance modes to organize crowds for innovation. This same chapter contributes to the literature on crowdsourcing, organizational forms, and innovation management.

In the following section, I present more detailed summaries of the chapters that compose this dissertation.

1.2 Structure and contributions

In chapter two, I focus on communities for production, investigating whether—and if so, how—producer cooperatives' hybrid nature influences market strategies and competitive behavior. Following a comparative case study design, this chapter compares and contrasts the market strategies and competitive behavior of a hybrid organization—a Producer Cooperative that instantiates both cooperative and commercial logics—and a similar non-hybrid organization. The results reveal that hybrids that instantiate conflicting logics may experience a *strategy lock-in*, meaning that different logics prescribe different strategies, leading to dual market strategies. The results also suggest that despite this, hybrids can manage to be aggressive competitors *vis-à-vis* non-hybrids, relying on *soft decoupling* mechanisms. Such mechanisms use symbolic competitive moves as a flexible and reversible way of signaling conformity to commercial constituents in order to gain credibility and reputation. This paper fosters our knowledge about cooperatives and hybrid organizations in general, analyzing the role of institutional forces in shaping organizations' strategic choices.

- *Pereira, Joana. 2017. Organizational Hybridity Influence on Market Strategies and Competitive Behavior.*

Chapter three also investigates communities for production, adopting a competitive dynamic perspective. In this study, I analyze how and under which conditions cooperative-commercial hybrid organizations influence the competitive dynamics and institutions of the markets in which they operate. The methodology follows a qualitative multi-case study design in the context of the São Miguel dairy market, where hybrids and non-hybrids have been competing for more than 60 years. The results show that hybrids due to their instantiated logics tend to display a competitive behavior that deviates from the non-hybrids' one. Hybrid's "atypical" behavior, when associated with a relevant market share, may increase market competition. Therefore, markets where hybrids and non-hybrid compete may present higher competition levels than markets with similar structure and characteristics but where all players display a similar behavior. I refer to this effect as a *competitive microcosm*. The results also reveal that hybrids have higher incentives to defy market institutions when such institutions clash with hybrids' endorsed logics. In these situations market power function as a mechanism to trigger institutional change. This paper adds to the literature on cooperatives influence on competition, and also on organizational responses to institutional complexity, bridging institutional and market levels of analysis.

- *Pereira, Joana. 2017. Competing under Institutional Complexity: a Multi-case Study Design*

Chapter four focuses on crowds for innovation, investigating the differences between online crowds and communities, and the governance modes that firms can apply to organize crowds (with Gianluigi Viscusi and Christopher L. Tucci). In this chapter, we define crowd organizations *as made up of loosely-coupled, serial, and equally aligned agents that achieve their goals through emergent norms, thus, enacting generativity*—the capacity for spontaneous innovation. We also propose a *knowledge generativity frontier*, which is a graphical representation of the inherent trade-off between the degree of governance centralization, and the crowd’s capacity for knowledge generativity. Based on that, we provide a framework with three main types of crowd organizations: *crowd-driven*, *crowd-based*, and *crowded*. This framework enhances our understanding of how firms or other external agents can strategically access crowd’s knowledge and capacity to generate innovation spontaneously. We also discuss the implications and risks of misunderstanding the type of crowd organization the firm aims to activate, and the impact on explorative/exploitative innovation outputs.

- *Pereira, J., Viscusi, G., and Tucci, C. 2017. Online Crowd Organizations: Towards a Definition.*

Each chapter of this dissertation is a stand-alone research paper; therefore, each chapter presents an introduction, literature review, methodology, results, and discussion.

Chapter 2 Organizational Hybridity

Influence on Market Strategies and Competitive Behavior

2.1 Introduction

Cooperatives have been an important part of the global economy for more than 150 years (Karantininis 2007). In Europe, there are 250,000 cooperatives and 163 million cooperative members, which represent one-third of the EU population. Cooperatives constitute very significant market shares in several sectors, such as agriculture, banking, energy, and housing. For example, cooperatives' market share represents 83% of the agriculture market in the Netherlands, 79% in Finland, and 55% in Italy (European Commission 2017; World Bank 2007). Despite the relevance of this organizational form in several sectors in developed economies (Hansmann 1999; Normak 1996), managerial researchers have dedicated little attention to this form.

Producer cooperatives are hybrid organizations in the sense that they respond to multiple internal and external institutional pressures, combining in the core of their activities aspects of different logics (see Battilana and Dorado 2010; Battilana and Lee 2014; Haveman and Rao 2006). The logics that producer cooperatives integrate are the cooperative logic that entails the principles of democracy, equality, and solidarity toward their members and communities; and the commercial logic that implies producing and selling products or services with an economic return.² In increasingly pluralistic institutional environments, all organizations in a lower or higher degree need to adapt their responses to different and potentially conflicting demands imposed by multiple logics and constituents (Greenwood et al. 2011; Kraatz and Block 2008). Therefore, organizations that accommodate conflicting logics in the core of their activities, as producers cooperatives, are adequate cases to study how organizations respond

² Institutional logics are socially established prescriptions that guide and shape actors' actions in their activity settings (Friedland and Alford, 1991; Ocasio, 1997; Suddaby and Greenwood, 2005; Thornton, 2004).

to conflicting internal and external institutional pressures (Battilana and Dorado 2010; Dunn and Jones 2010; Jay 2013; Kraatz and Block 2008; Pache and Santos 2013; Reay and Hinings 2009).

Studies in the intersection of institutional and strategy theories defend that institutional environments influence organizations' strategic choices (Delmas and Toffel 2008; Friedland and Alford 1991; Greenwood et al. 2011; Hoffman 2001). For example, Delmas and Toffel (2008) focus on the adoption of environmental practices across multiple facilities; and Kostova and Roth (2002) study the adoption of quality control practices across multinational subsidiaries. Such studies focus on a particular practice across multiple locations, which constitute a limited representation of organizations' strategic choices and institutional complexity. Such narrow approaches fail to provide a holistic perspective on how complex institutional environments shape organizations' strategies and competitiveness (e.g., Delmas and Toffel 2008; Kostova and Roth 2002). Moreover, these studies assume that organizational fields present dominant logics, what constitutes a lean perspective on the complexity of institutional environments where organizations operate (Friedland and Alford 1991). Hoffman (2001) already called attention for the need to conduct in-depth case studies to understand holistically and vertically how institutions shape organizations strategies. This chapter answers this call through a comparative case study, where organizations that compete in the same field but face different institutional pressures—hybrid and non-hybrid—are compared and contrasted regarding market strategies and competitive behavior. This study, thus, investigates whether—and if so, how—organizational hybridity influences market strategies and competitive behavior.

The results of this comparative case study suggest that hybrid organizations that instantiate conflicting logics might experience a *strategy-lock in*, meaning that when different logics prescribe different strategies to follow, hybrids tend to present dual market strategies. For hybrids, favoring a particular strategy over the other means endorsing a specific logic over the other. Therefore, pursuing dual market strategies is also a mechanism to avoid mission drifts. The results also suggest that despite the *strategy lock-in*, hybrids can manage to be aggressive competitors *vis-à-vis* non-hybrids, relying on *soft decoupling* mechanisms. Such mechanisms use competitive moves as symbolic signals to show conformity to commercial constituents, as consumers and distributors.

This chapter fosters our knowledge on producer cooperatives, hybrids, and organizational answers to institutional complexity. Moreover, this study answers the call for more holistic

studies on the role of institutional forces in shaping organizations' strategic choices (Hoffman 2001).

2.2 Literature Review

Institutional logics are “formal and informal rules of action, interaction, and interpretation that guide and constrain decision makers” (Thornton and Ocasio, 1999; p. 804). They define broader cultural templates that provide actors prescriptions about what constitutes an appropriate behavior (Friedland and Alford 1991; Thornton 2004). At the organization level, institutional logics are legitimate guidelines for action (Ocasio 1997; Thornton 2002). Thornton (2004) explained that once institutional logics achieve dominance, they “affect the decision of organizations ... by focusing the attention of executives toward the set of issues and solutions that are consistent with the dominant logic and away from those issues and solutions that are not.” (p. 12–13). By bounding the range of legitimate actions, institutional logics constrain and guide organizations’ forms, practices, and strategic choices (Friedland and Alford 1991; Reay and Hinings 2005).

Institutional theory has been employed to understand questions of strategy, precisely the role of institutions in explaining similarities and differences in organization’s strategic choices (Delmas and Toffel 2008; Greenwood and Hinings 1996; Hambrick and Finkelstein 1995; Ingram and Simon 2000). For example, Delmas and Toffel (2008) show that the structure of the organizations is crucial to explain differences amongst managerial practices in response to institutional forces. Other scholars also show that trust and identity (Kostova and Roth 2002), structure of ownership (Goodrick and Salancik 1996), as well as geographic closeness to other organizations (Davis and Greve 1997) are other factors that explain differences amongst organizations’ responses to institutional pressures. While, on the one hand, such studies advance our knowledge about why and how organizational responses adapt to institutional pressures (Delmas and Toffel 2008), on the other hand, their narrow focus and underlying assumptions leave fundamental questions unanswered.

Studies in the intersection of strategic management and institutional theory tend to emphasize on the adoption of a single practice across multiple locations. For example, Delmas and Toffel (2008) focused on U.S. industry facilities implementation of the ISO 14001 compared to the adoption of other local environmental protocols.³ Similarly, Kostova and Roth (2002) focused

³ ISO 14001 is Environmental Management System Standard international protocol.

on quality control practices adoption across multinational subsidiaries across several countries. By reducing strategic choices to one single practice, such studies fail to understand not only the processes by which institutional environments influence organizations' strategies from bottom to the top line of their activities, but also how complex institutional settings affect organizations competitiveness, market strategies, and competitive behaviors. Researchers already highlighted the importance of conducting in-depth case studies with small samples to understand holistically such mechanisms (Hoffman 2001). Additionally, such studies follow the assumption that institutional forces are unified inside organizational fields; consequently, each group of organizations operating in the same field/location should face the same institutional pressures. Therefore, to guarantee variance in institutional pressures, authors study practice adoption across different locations. The assumption that fields have dominant logics it is surprising since such studies advocate that they derive from Friedland and Alford's (1991) premise that organizational settings are formed by multiple logics and therefore to different and competing groups of institutional constituents. Such assumption fails to answer the question why organizations that operate in the same institutional field still present heterogeneous strategic choices (see Greenwood and Hinings 1996; Hambrick and Finkelstein 1995). Another interesting factor omitted in such literature (excepting in Greenwood et al. 2010; Lounsbury 2007) is the influence of non-market institutions on strategic choices, as is the case of family, religion, or cooperative logics (Greenwood et al. 2010).

The literature in the intersection of strategic management and institutional theory dedicated little attention to hybrid organizations. Such organizations accommodate different institutional logics and respond to diverse groups of constituents, each exhibiting different prescription about legitimate practices and strategic choices (Battilana and Dorado 2010; Battilana and Lee 2014; Haveman and Rao 2006; Hoffman 2001). This paper addresses these omissions through a comparative in-depth case study, investigating whether the presence of multiple institutional logics influences organizations' competitive ability.

2.2.1 Hybrid organizations' competitiveness

In increasingly pluralistic institutional environments, all organizations in a lower or higher degree need to adapt their responses to different and potentially conflicting demands imposed by multiple internal and external constituents (Greenwood et al. 2011; Kraatz and Block 2008). While individually, each logic offers a coherent set of prescriptions about the legitimate goals and means to pursue these goals, in combination different logics lead to incompatible guidelines and demands (D'Aunno, Sutton, and Price 1991; Oliver 1991; Scott

1994). However, for hybrid organizations, which instantiate different and potentially conflicting institutional logics within their core activities (Battilana and Dorado 2010; Battilana and Lee 2014; Haveman and Rao 2006), such adaptation presents constant internal and external challenges. This is the case for social enterprises, which mix elements of social and commercial logics in their goals, activities, structures, and strategies (Battilana and Lee 2014; Pache and Santos 2013). Other examples are public-private organizations (see Bruton et al. 2015; Jay 2013) or even producer and consumer cooperatives (Ashforth and Reingen 2014; Cornforth 2004; Schneiberg, King, and Smith 2008).

Researchers defend that the combination of conflicting logics carries unique challenges to organizations in responding to their institutional environments. Since hybrids combine elements from different logics, they are simultaneously sites of creativity and organizational innovation (Chen and O'Mahony 2007; Jay 2013; Reay and Hinings 2009), and also of extreme change and dispute (Battilana and Lee 2014; Greenwood et al. 2011; Kraatz and Block 2008).

Institutional tensions emerge not only from outside but also from inside the organization (Hoffman 2001). Ultimately, institutional logics are internally represented by people; this tends to create different groups that fight for dominance (Glynn 2000; Pache and Santos 2010; Heimer, 1999; Zilber, 2002). These subgroups hold competing expectations about appropriate organizational dimension such as mission, strategy, structure, amongst others (Besharov and Smith 2014; Glynn 2000), leading to a constant discussion over these dimensions. For example, on the Battilana and Dorado's (2010) case of BancoSol, a microfinance organization that instantiates both banking and development logics, there were two separated groups formed by former bankers and social workers. Each group advocated goals and practices consistent with the logics they were embedded in. While bankers defended standardized administrative procedures, social workers wanted more flexible approaches to meet beneficiaries' unique needs. Also Ashforth and Reingen (2014), in their case about a food cooperative, realized that its dual nature led to constant conflicts, debates, and spiraling emotions. Studies in organizational identity also highlight these inherent tensions. Such studies suggest that the combination of multiple identities under the same organizational roof leads to direct inter-personal conflicts, tensions (Besharov and Smith 2014; Glynn 2000; Pratt and Foreman 2000), and instability (Battilana and Lee 2014; Greenwood et al. 2011; Kraatz and Block 2008). Hybrids that serve different groups of constituents, as beneficiaries and consumers, face increased challenges regarding how to allocate limited resources amongst their activities and groups of constituents (see Battilana et al. 2015; Moizer and Tracey 2010). For example, in the case of producer cooperatives, they need to dedicate resources to their

beneficiaries, which are the producers/suppliers, but they also need to allocate resources to their commercial activities, since customers expect competitive price and quality (see Battilana et al. 2015). The expectation is, therefore, that those hybrids' internal conflicts over organizational dimensions and resources allocation may constrain their competitiveness *vis-à-vis* purely commercial competitors that do not face this type of challenges.

2.2.2 Institutional complexity, market strategies, and competitive behavior

Hybrids are exposed to different logics and therefore to the inter-institutional inconsistencies that those logics present. Such exposure not only increases their awareness of alternative possibilities but also broadens the portfolio of options from which they can strategically select and combine elements (Pache and Santos 2013; Greenwood et al. 2011). In this sense, hybrids might also access a broader portfolio of strategies and competitive moves. Competitive moves are organizations' detectable moves initiated to protect or increase competitive advantage (Smith et al. 1991, p.: 61). The sequence of competitive moves—*competitive repertoire*—ultimately characterize players' market strategies (Smith and Ferrier 2001). Therefore, if hybrids access a broader portfolio of competitive moves from which they can combine and recombine elements, it is thus expected that they present different strategies from non-hybrids. Furthermore, Jay (2013) defended that hybrids merge goals and means of the logics that they instantiate, what leads to the emergence of new synthesized goals. Since goals require suitable strategies (Chaffee 1985), therefore, different goals may require different strategies. Also, Porter (1980) reinforced that firms with diverse origins and “personalities” may present different strategies. In the same fashion, Chen (1996) defended that organizations with different motivations sense different incentives and different perceptions about whether a particular move constitutes a gain or a loss. This line of reasoning sustains the argument that hybrid organizations might present different market strategies than non-hybrids; however, we are left with no clue about the extension and the nature of this difference, or even if the differences persist over time.

Organizations' competitive behavior reflects how organizations compete, including actions or responses, or strategic or tactical moves. Competitive behavior is highly related to organizations' access to resources (Chen 1996; Chen and Hambrick 1995; Ferrier 2001; Ferrier and Lee 2002; Ferrier, Smith, and Grimm 1999; Miller and Chen 1996). Organizations need resources to perform competitive moves (Ndofor, Sirmon, and He 2011), such as launch new products, new marketing campaigns, change the product/service price, etc. (Porter 1980). Still, some competitive moves are more resource intensive than others, as is the example of strategic moves that involve more rare and difficult to imitate resources, as opposing to

tactical moves that entail more general resources (Miller and Chen 1994; Porter 1980). In any case, every competitive move performed in the market requires resource investment; therefore, it is expected that organizations with more resources present higher competitive propensity (number of competitive moves) and also proactiveness (first mover) (Miller and Chen 1994). Scholars offer different visions regarding hybrids ability to access relevant resources. While some defend that hybrids are less efficient in obtaining critical resources because external constituents perceive them as risky (DiMaggio and Powell 1983; Meyer and Rowan 1977); others state that hybrids are more efficient in attracting resources since they speak to different audiences (Pache and Santos 2013). This literature lack of consensus leaves us with no clue about whether hybrids can present higher or lower competitive propensity and proactiveness when compared to non-hybrids.

This paper speaks to the discussion about whether the coexistence of various institutional logics influences organizations' ability to compete in the markets in which they operate. More specifically, how does the presence of multiple institutional logics influence organizations' market strategies and competitive behavior?

2.3 Methodology

This study follows a comparative multi-case study design where I compare and contrast the market strategies and competitive behavior of a hybrid and a non-hybrid during five years (from 2010 to 2014). Through the most-similar case sampling technique, I compare two cases that are similar in several aspects, except the variable of interest, which are the logics that the organizations instantiate (see Gerring 2007). This methodology is adequate to conduct exploratory studies that involve understudied complex social phenomena (Strauss and Corbin 1990; Yin 2009).

2.3.1 Empirical setting

The empirical setting is the dairy market of São Miguel, a Portuguese island. São Miguel dairy market represents 15% of the national milk production, being one of the biggest production areas of the country. In total, there are four main players operating in this market: a cooperative and three other private corporations. This market works as the following, the suppliers, who are milk producers sell their milk to one of the four players. These players, who possess industrial facilities, transform the milk into three main products: cheese, UHT milk, and butter. In the case of the Cooperative Union, the suppliers are also the members and

the owners of the cooperative. Dairy farmers can choose to which buyer they can sell their milk. The main deciding factors for suppliers encompass price of the milk, bonus for quality and quality, and physical proximity to the collection points. Dairy farmers can change buyer as they wish, the market is very flexible in this regard.

Three main reasons explain why this empirical context is suitable for such study. First, hybrid and non-hybrid organizations with similar activities and size compete side-by-side in this market, which allows direct comparisons between organizations. Second, the fact that the players operate in a quasi-isolated context makes it possible to assume that they are all exposed to the same conditions and external shocks, what reduces endogeneity. Finally, the dairy market in São Miguel is vital for the local economy and is also very competitive; both arguments contribute to the quantity and richness of the data.

2.3.2 Case selection

This study compares and contrasts two cases: the Cooperative Union and the Multinational Subsidiary. Both cases operate in the same location—São Miguel—; present similar size concerning sales, employees, and quantity of milk processed in their industrial facilities; and produce the same products (see Table 2:1). Despite these similarities, both players are different in the way they instantiate the institutional logics in their goals, activities, and structures.

Figures	Cooperative Union	Multinational Subsidiary
Foundation year	1954	1948
Sales in millions ^a	82.961	87.932
Number of employees ^a	244	270
Number of farmers	674	360
Milk processed in their facilities (% of total milk of the island) ^a	31%	35%
Main Products (% of total production) ^a	UHT milk (55%) Cheese, butter, others (45%)	Cheese (90%) UHT milk, Butter, others (10%)

^a 2014 data for Sales, Number of employees, Milk processed in their facilities and Main Products

Table 2:1 Cases description

The Cooperative Union is a hybrid organization since it instantiates both cooperative and commercial logics in its goals, activities, and structures (see Ashforth and Reingen 2014; Battilana et al. 2012; Schneiberg et al. 2008). The Cooperative Union goal is to maximize members' benefits (cooperative logic) while being economically sustainable (commercial logic). To achieve such goal, the Cooperative Union buys milk from members/suppliers for the highest price possible to increase their benefits and sells products with competitive price

and quality to its consumers. Concerning internal structure, the Cooperative Union also blends commercial and cooperative logics throughout several dimensions. For example, regarding decision-making, the board can take a specific set of decisions, while the assembly democratically votes to the other set of subjects. Regarding board composition, three out of the four affiliates of the Cooperative Union board are farmers that alongside with their responsibilities on the cooperative also run their farms. The other member is a professional manager. Such dimensions show that both cooperative and commercial logics are imprinted in the Cooperative Union board and therefore on activities (see Battilana et al. 2015; Marquis and Tilsik 2013 for the role of social imprint on hybrids' social mission).

The Multinational Subsidiary endorses mainly commercial logics across such organizational dimensions. For example, its goal is to maximize profits, selling products with an economic return. Its structure is primarily hierarchical, and professional managers compose its board. The Multinational Subsidiary is a typical case of a purely commercial oriented organization.

2.3.3 Data Collection

This paper explores several data sources what allows for data validation and triangulation, which will provide a stronger basis for emerging constructs and relationships (Eisenhardt 1989; Yin 2009). The data sources are archival records, in-depth interviews, and other documentation (see Table 2:2).

Source	Quantity
Archival records	430
In-depth Interviews^a	45
Cooperative Union ^b	8
Multinational Subsidiary ^c	8
Other players, field specialists, and producers	29
Other Documents	234
Articles from Specialized magazines	97
Firms reports, websites, own magazines, presentations	44
Others (presentations, spreadsheets, reports)	93

^a The interviews with the main players took on average 50 minutes. ^b I interviewed the Cooperative Union board members and department directors, and also two presidents of 1st tier cooperatives that are part of the Union. ^c The interviews were conducted with the Industrial directors, milk collection director, marketing director, and also with the presidents of the two small cooperatives that supplies the Multinational Subsidiary.

Table 2:2 Data sources

Archival records. The archival records contain local press articles about the studied phenomenon from 2010 to 2014. This period represents a stable phase in this market, meaning that not very strong external shocks occurred, which makes it suitable to investigate such

research question. The directors of the local newspapers authorized a direct search in their databases for the following words: players' names, brands that they produce, and other keywords such as *agriculture, cheese, milk, butter, powdered milk, milk price, private labels*. After scrutiny of the searching results, I selected and coded 430 articles.

In-depth Interviews. The interviews encompass open-ended and follow-up questions, following a semi-fixed protocol (Spradley 1979) (see Table 2:3). The interviews with the main market players were fully transcribed and coded. In total, I conducted 45 interviews with the main players, field experts, farmers and other cooperatives⁴ (see Table 2:2).

Main topics
1. Firms history (foundation, mission, main events);
2. Governance structure (ownership, structure, decision-making);
3. Strategy (strategic focus, competitive advantage);
4. Activities (products, production);
5. Value chain (producers, local market);
6. Competition (who are the competitors, competition intensity);
7. Clarification about specific competitive moves.

Table 2:3 Interview Protocol

Other documents. I collected other documents from several sources. They encompass governmental studies, internal presentations, firms' websites, product portfolios, balance sheets, local specialized magazines (issued by the local Agriculture Associations), and quantitative data from local and international institutions databases (INE, SREIA, European Milk Observatory). I analyzed and coded a total of 234 documents, images, videos, and spreadsheets (see Table 2:2).

I am aware that the *archival data* was conceived with other purposes than the ones of this study, meaning that it may omit relevant facts, and present reporting bias. Therefore, when the information was dubious or incomplete, I use the interviews to get more information about the events. However, the interviews are less reliable to record past events, and can also lead to reflexivity, response bias, and imprecisions due to poor recall. Still, interviews constitute a rich source of information, providing causal inference explanations. The interplay of these three data sources strengthens the construct validity (Strauss and Corbin 1990; Yin 2009).

⁴ These cooperatives are 1st tier milk aggregators, it means that their principal activity is to collect milk from their members and sell it to the players with industrial facilities that can transform it into dairy products. Five 1st tier cooperatives form the Cooperative Union.

2.3.4 Data Coding

In the first stage, the goal is to characterize player's market strategy. Therefore, the initial coding categories emerged through the interaction among the initial pilot study, the data collected (archival records, in-depth interviews, and other documents) and literature (see Miles and Huberman 1994; Strauss and Corbin 1990). Coding categories follow a descriptive fashion, where data is grouped into big categories, entailing little interpretation (Miles and Huberman 1994). Later on, I subdivided the main categories into sub-categories, which were more inferential and interpretative (see Miles and Huberman 1994).

The main author and a research assistant conducted the following procedure: first, the researchers independently coded a subset of the data and discussed the main and sub categories; second, they created a coding book with final categories and sub-categories; finally, they coded all data according to the coding book through the N-Vivo software. The main coding categories and sub-categories are:

Consumer Market. Information about the products (existing and new products), formats, sales, clients, marketing campaigns, distributors, distribution channels, changes in prices, new commercial agreements, private labels production, markets where they compete, etc. In this node is included all information about players' strategic positioning on the consumer market (cost leadership, differentiation, etc.), and why they have this positioning.

Factor Market. Information about milk suppliers' (cooperatives, number, characteristics, and contracts), collection points, relationships with other local players and suppliers, price strategy in the factor market, quality requirements, etc. This category is relevant because the raw material in this market represents 70% to 80% of the total cost structure of the players; therefore competitive moves on the factor market affect their competitive advantage. Additionally, since the Cooperative Union beneficiaries are the farmers/suppliers, every time it moves on this side of the market reveals its behavior towards beneficiaries, which is relevant for the study.

Investments. Information about investment either related to capacity increases, efficiency (energy and process), or new technologies. Since these investments in most of the cases affect both sides of the market, the factor and the consumer, we decided to code as a separate category.

Organizational Dimensions. Information about governance, structure, decision-making, goals, mission, and activities.

Background information. Information about shareholders, revenues, historical facts, and employees. This category also includes information about the creation and evolution of the business and product portfolio.

We also coded for external shocks. In this type of case study, the limits between phenomenon and empirical setting are not strongly delineated (Yin 2009), and this category functions as a control for spurious causal effects (see Gerring 2007). Contextual factors encompass new laws, competition rules, technological change, government regulations and deregulation, lobbies by third parties, milk commodity market prices at the national and international level, shocks in related industries that may affect the focal industry, and significant fluctuations in the capital market.

The second coding stage aims at describing how players compete in form. In other words, it focuses on players' competitive behavior (Chen 1996; Chen and Hambrick 1995; Ferrier 2001; Ferrier and Lee 2002; Ferrier, Smith, and Grimm, 1999; Miller and Chen 1996; Smith et al. 1991). At this stage, the coding was inspired in a structured content analysis method (see Ndofo et al., 2011) through the following steps. First, I used the *archival records* and the *in-depth interviews* to identify player's competitive moves chronologically. Such moves are specific and detectable competitive events taken in the attempt to attack or respond to competitors, as for example new products, price changes, new marketing campaign, investments, etc. (Porter 1980; Smith et al. 1991). It is impossible to examine every competitive move that happens within an organization. However, due to the importance of the dairy industry for the local economy and the extensive information existing about this industry, I can claim that I cover all players' public, market-oriented decisions observed by consumers, competitors, and industry constituents. At this stage, I ended with a chronological list of all detectable competitive moves and related information. In the second step, the main author and the research assistant used a pre-designated coding structure to analyze the content of each competitive move, inspired by the literature of competitive dynamics (see Chen and MacMillan 1992; Ferrier, Smith, and Grimm 1999; Miller and Chen 1994; Smith et al. 1991). The competitive moves were coded accordingly with the following pre-structured dimensions:

Competitive moves typology. Pricing actions (price increasing, price decreasing), marketing campaigns, new product, new packaging, new commercial contracts, certifications, capacity investment, supplier contract, and signaling actions (see Chen and MacMillan 1992; Ferrier et al. 1999; Miller and Chen 1994; Smith et al. 1991).

Market orientation. The competitive moves were coded as factor market moves or as consumer market moves. The factor market moves are the ones related mainly to changes in

the raw milk price or supplier agreements, and the consumer market encompasses all sort of marketing moves (marketing campaigns, new commercial contracts, new products, etc.).

Competitive propensity. The competitive moves can be actions or responses. Players perform actions to increase their competitive advantage, and responses to a counter move in answer to an action of a competitor. When the text presented keywords that designate a response: “*in responding to,*” “*in reacting to,*” or “*after x*” the code was Reaction, otherwise Action (e.g., Chen, Smith, and Grimm 1992; Ferrier et al. 1999; Smith et al. 1991).

Action’s strategic relevance. Competitive actions can be strategic or tactical (Porter 1980; Smith et al. 1991). Strategic actions comprise the employment of particular and rare resources, being difficult to implement and reverse. They reflect a major long-term change in the business, a major and irreversible departure from industry norms, and are difficult to imitate (ex: capacity expansions, new product/service, alliances, mergers, and acquisitions, etc.). Tactical actions are short-term, fine-tune strategic moves that implicate general resources; they are easy to implement and imitate (ex: price changes or advertisement campaigns) (Miller and Chen 1994; Porter 1980; Smith et al. 1991).

Response speed. The elapsed time in days between an action and a response (Chen and MacMillan 1992; Smith et al. 1991). Specifically, response speed measures the number of days between the report in the newspapers of a specific action and respective responses (Chen and MacMillan 1992; Ferrier, Smith, and Grimm 1999; Smith et al. 1991).

In total, we detected and coded 123 competitive moves (see Table 2:4). It is important to highlight that the moves of the four players in the market were coded and included. It is important because of the coding action/response. For example, if we ignore a player, we would not be able to accurately code action or response, because an action could be a response to an action to the omitted player. The main author and a research assistant coded the competitive moves (Ndofor, Sirmon, and He 2011), presenting intercoder reliability of 0.93.⁵

⁵ The intercoder reliability is high because first, the code follows a structured fashion where the dimensions are pre-established; second, since the main author as asked clarifications about the players’ competitive moves during the interviews the data was complete and rich what lead to fewer doubts.

	Cooperative Union	Multinational Subsidiary	Market Total^a
Consumer market	23	25	63
Certification	2	4	7
Commercial agreement	3	5	13
Marketing Campaign	2	9	11
New product	8	6	16
Prize	8	1	16
Factor market	12	14	55
Milk price adjustments	12	12	53
Producer contracts	-	2	2
Investments	2	1	5
Total	37	40	123

^a Market Total encompasses all competitive moves performed by the four players competing in this market

Table 2:4 Player's competitive moves per market and type

2.3.5 Data analysis

In a first phase of the data analysis, I performed a within-case analysis. I developed players' competitive profile, encompassing their market strategies and competitive behavior. The analysis of the competitive behavior included competitive intensity (total number of competitive moves), proactiveness (total number of actions), responsiveness (total number of responses, likelihood of responding to a competitor's action), strategic orientation (strategic relevance of the actions), and market orientation (consumer or factor market). Such approach allows for the emergence of the unique pattern of each case (Strauss and Corbin 1990). Furthermore, I applied explanation-building techniques to explore a set of causal links, which help to explain why and how players present such strategies and behavior.

In a second phase, I employed an in-depth comparative cross-case analysis, where I compared the patterns identified in the cases to analyze variations and similarities in their market strategies and competitive behavior (Eisenhardt 1989).

After the first draft of the analysis and results, I interviewed the players again. They confirmed the main results, complementing them with further details and anecdotes. Simultaneously, I compared the findings with the literature, entering in the dialogue between theory and data; at this stage, for example, I included the literature on reputation and signaling to illuminate our understanding of the patterns uncovered.

2.4 Results

2.4.1 Players' market strategies

The Cooperative Union follows two main market strategies: the first focused on cost-leadership and the second on differentiation (see Porter 1991). The cost-leader product, UHT milk, represents 55% of the Cooperative Union's production; while the cheese and butter, the differentiated products, represent 45%. The Multinational Subsidiary focuses mainly on differentiated products, cheese, which represents 90%, of its production (see Table 2:1).

The Cooperative Union main business is the UHT milk, which represents 55% of its total production (see Table 2:1).⁶ The UHT packaged milk, when undifferentiated, is a commodity, which competition is based on lowering costs (see Porter 1991). In such low-cost segments, economies of scale are significant; this explains the Cooperative Union ambition to grow in scale (see Table 2:5 for quotes). Simultaneously, the Cooperative Union is also investing on a differentiation strategy through the diversification of their product portfolio toward branded differentiated products (see Porter 1991). From 2010 to 2014, the Cooperative Union has launched five new products and three new packaging under their brand umbrella (see Table 2:6). These products are considered high-value-added differentiated products. Some examples are new formats as cheese slices or butter cuvette, or gourmet and light versions of cheeses and butter.

⁶ UHT milk means ultra-high-temperature processed milk.

Player	Quotes
Cooperative Union	<i>Our main business is the UHT milk. We always believe that our strategy is the UHT milk, and we need to grow on the UHT milk. From this factory, leaves, every week, around 100 containers and this cannot be done by hand [referring the big investment on the full automatization of the UHT milk production line]". (Cooperative Union general manager)</i>
	<i>The cooperative is still accepting new members. The Cooperative is a growing Union that never says 'no' to new members. To maintain or even increase our activity and workforce sustainably, we need raw material. This is fundamental. (Cooperative Union President)</i>
	<i>I think the Cooperative needs to be updated and need to follow the market trends, trying to increase the value added of the products, find new markets, and invest in our Azorean brand. We cannot stay only in the regional and national market. (Cooperative Union board member)</i>
Multinational Subsidiary	<i>Our core product is the cheese, which is the product with higher-value added; it's the "noble" product. The other products, milk and butter, they are not main products, because other countries can produce them in large quantities at better prices. (Multinational Subsidiary industrial director)</i>
	<i>Our brand is the number one cheese seller in Portugal in the "flamengo" segment. Our goal is to defend this leadership through a strategy focused on sustainable value creation, which allows us to keep investing in the growth of our brand. (Multinational Subsidiary national CEO)</i>
	<i>Our strategy is a strategy of value creation. Our brand is a premium brand regarding price and value proposition in the market. Around 48% of the Portuguese families consume our cheese, meaning that half of the fridges in Portugal have our cheese inside. In the last year, we made some strategic adjustments to reinforce our current strategy, which is based on the communication of the origins of our brand. We want to reinforce what differentiates our brands from others in the market, which is the Azorean origin. (Multinational Subsidiary human resources director)</i>

Table 2:5 Player's competitive Strategies Quotes

Year	Cooperative Union	Multinational Subsidiary
2010	Chocolate Milk (packaging)	Gourmet slices (product)
	Four new functional kinds of milk (product)	
2011	Butter in cuvettes (packaging)	
2012	Fruit Juice (packaging)	
2013	Light cheese (product)	Light Cheese -30% (product)
	Gourmet slices (product)	Cheese slices for sandwiches (product)
		Grated cheese (product)
2014	Butter half salt (product)	Butter (product)
	Gourmet butter (product)	Cheese with fine herbs slices (product)

Table 2:6 New products/packaging launched between 2010 and 2014

The Multinational Subsidiary shows a different market strategy, focusing mainly on a differentiation strategy through high value-added products. This player defines itself as a "cheese maker" (see Table 2:5); however, it also produces UHT milk and butter, but still with a higher value-added positioning. To reinforce its strategy, the Multinational Subsidiary launched six new products from 2010 to 2014 (see Table 2:6).

The data demonstrate that the focus on a differentiation strategy is a trend in this local market. Several factors have contributed to this trend. First, the increasing competition at national and international level mainly in the lower value-added segments has forced players to move to

more differentiated segments. Second, to compete in lower value-added segments players need to achieve economies of scale. Attending the fact that the island geography restricts the quantity of the milk produced; cost-leadership strategies based on economies of scale will be unviable in the medium-long term. Finally, the island insularity contributes to increased transportation costs, which constitutes a severe competitive disadvantage for the players operating in this market.⁷ These three reasons explain why differentiation is a trend in this market and all players are investing on it. However, despite this trend, the Cooperative Union is still pursuing a dual strategic orientation focused both on cost-leadership and differentiation. Why is the Cooperative Union pursuing a dual market strategy, while the market trend points towards a differentiation strategy?

2.4.1.1 Commercial goals and the differentiation strategy

To fulfill its mission, the Cooperative Union pursues a commercial activity, which constitutes its main source of revenue. Higher is the commercial activity performance; higher are the revenues and the benefits for the members, which is ultimately the Cooperative Union *raison d'être*. In this regard, the Cooperative Union might not be different from the Multinational Subsidiary, in the sense that the members are the shareholders that want to have profitability on their assets. The interviewees recall this relationship, defending that the Cooperative Union's goal is to sell its products—UHT milk, cheese, and butter—in the “best way possible,” which means adding value to the products.

Our mission consists of collecting the milk from our members, sell it in the best way possible, and remunerate our members also in the best way possible. This is our mission, and we differ in that from other players. We indeed cannot have losses, because we need to have a sustainable business model, but our model focuses on increasing members' remunerations, which is the reason why we exist. (Cooperative Union general manager)

We have launched innovative products during the last years to meet consumer needs and increase product value. How can we increase products value? If I sell the whole cheese, it is one price; if I slice it, I have increased the value of the cheese, since I also had to invest in a slicing machine. The sliced cheese arrives at your table with a different format and convenience; this increases the value of the product. This is just one example. (Cooperative Union board member)

In this context, selling products “in the best way possible” is intrinsically linked to high value-added products, which are the cheese based products. As exposed in the preceding section, the differentiation strategy is a trend in the market where the Cooperative Union operates. The intensification of the competition in the lower value-added segments, the geographic limitation, and the insularity competitive disadvantage, has contributed to the decrease in

⁷ São Miguel is located 1,360 km (850 miles) from its main market, the Portuguese mainland.

profitability of the lower value-added segments. Therefore, to succeed in its commercial activities and increase members' benefits, the Cooperative Union needs to pursue a differentiation strategy, investing in high value-added products.

2.4.1.2 Cooperative principles and the cost-leadership strategy

Alongside the commercial goals, the Cooperative Union also pursues cooperative principles that simultaneously guide and constrain its activities. The most relevant principle is the "cannot say no." This policy prevents the Cooperative Union both from refusing milk from members and also from dismissing members.

We could do it [reduce the number of suppliers/members], but we have here a strong social reason to not do it. We are a cooperative; we cannot dismiss our members. Another industry can do that easily, but we are a cooperative, and we need to maintain the cooperative principles. This is the reason we do not do that. For example, the situation that is happening now with the oversupply, all players in the region limited the production of the farmers, but we did not. [...] Our posture is related to our cooperative principles. (Cooperative Union general manager)

We present other difference [when compared to commercial organizations] that is important to highlight. When you have a business in carpentry, you buy the amount of pines and cedars that you need to build a certain amount of furniture. If you are not building furniture, you do not buy pines or cedars. We, as a cooperative, we cannot say to our members "dear friends, we have an oversupply, keep your milk, and in some months we talk again." (Cooperative Union general manager)

The fact that the Cooperative Union cannot refuse milk or dismiss members limits its ability to adapt to the market seasonality.⁸ When there is undersupply of milk in the factor market, this is not a problem; however, the same does not hold when there is oversupply. When there is oversupply, the production increases and the prices decrease both in the factor and consumer markets. Such situation pushes the Cooperative Union to produce more UHT milk, which is the market segment more sensitive to prices and with higher turnover.

The dairy industry is volatile, there are months where things are going well, there is an undersupply of milk, and some months after happens the opposite situation and there is a massive oversupply of milk. We need to live with that. (Cooperative Union general manager)

The UHT milk is a product that we can sell faster in the crises. If we decrease the price of the UHT milk, we can sell it faster. The cheese is not like this. The UHT milk presents a higher turnover. In the UHT milk segment, you decrease the price and you increase a lot the turnover, in the cheese is not the same because if you decrease the price, the turnover does not increase that much. Apparently, the consumer is more sensitive to the UHT milk price than to the cheese. (Cooperative Union board president)

The Cooperative Union enforcement of its cooperative principles leads to an oversupply problem. The solution to drain the milk surplus is to increase the production of low-value-

⁸ The milk factor market is seasonal in the island. During spring and summer there is usually an oversupply, and during fall and winter, there is an undersupply.

added products, which are more price sensitive and present higher turnovers. An alternative would be only to produce cheese, however, from the moment the Cooperative Union collects the milk to the time that they sell the cheese, there is an interval that varies from three to nine months. While the big dairy farmers would be able to wait for the remuneration, the small farmers would be bankrupt by then. Therefore, the enforcement of the principles of solidarity and equality push the Cooperative Union towards a cost-leadership market strategy.

There are other cooperative principles such as the “benefit maximization” and the “equality” principles that also indirectly push the Cooperative Union towards a cost-leadership strategy. The Cooperative Union goal is not to maximize profits, but instead to maximize members' benefits. The Cooperative Union transfers the operating margins to members through higher prices for their milk. In consequence, this transference will lower the profit, and consequently, the retained capital for further investments in differentiated strategies. Additionally, the Cooperative Union also enforces the cooperative principle of equality among members; meaning that it accepts members of all sizes, which increases quality control and milk collection costs. Such factor contributes to the cost increases and profit decreases and, therefore, limits the capital for investment.

Our goal is not the results; all companies want results, but what we want is to transfer value to the producers; it means increasing the value of the milk. Because if we have their politics (other players), or the one they want to have, we are the ones not allowing them. We would get good results at the end of the year, but this is not how we work. Our cooperative goal is to transfer the value for our members, and they can get more money and improve their lives. (Cooperative Union board member)

The Cooperative always pays the best price possible for the milk and always matches the consumer market with the production, and we transfer the results. Since in 2011 the markets were stable, we also maintained the prices in the factor market until we increase them in September. We always balance these two markets and also keep some margin for future factory investments. (Cooperative Union board president)

The comparison between the Cooperative Union and other competitors, mainly the Multinational Subsidiary, regarding access to resources was a recurrent topic during the interviews. More specifically, the interviewees highlighted their lack of resources to invest in extensive marketing campaigns, mainly TV ads, and also their product development strategies that rely mostly on internal resources, which also evidenced a lack of resources.

[About marketing campaigns] Currently, we are present in all distributors. It is true that we do not have the resources to do as “A,” or “B,” or like “C,” they can have permanent TV ads.⁹ We do not have resources for that; we do muppies, for example. At the end of the day, what we do when we launch a product, or we want to promote a product, we focus on the

⁹ Fictitious names

region that we think is the most important, and we invest more on that. (Cooperative Union general manager)

The difference regarding investment is big [the difference between the Cooperative Union and the main competitors in the market]. To create new products we use our internal resources (employees). We also can launch these products with competitive prices, but when we launch these products regarding marketing, we cannot invest heavily on marketing as they do. What do we do? We launch a good cheese, we have flyers, degustation, but we do not do big TV campaigns. The Multinational Subsidiary is doing for six months campaigns both for cheese and milk; we cannot do that. (Cooperative Union board president)

The Cooperative Union's lack of resources limits their ability to invest in marketing and also in product development, which are the main drivers of a differentiation strategy (Porter 1980). This situation leads to a loop difficult to revert. Lower the level of resources to invest in differentiation strategy; more dependent the Cooperative Union is on cost-leadership strategies, which in return decreases, even more, its profits, and consequently its ability to retain resources for investment. This paradox is inherent to hybrids that address separate groups of beneficiaries and customers (see Battilana et al. 2015).

The evidence shows that the Cooperative Union's cooperative principles push directly and indirectly toward a cost-leadership strategy. On one side, the principle "cannot say no" contributes to an oversupply problem, leading to a focus on higher turnover segments (cost-leader). On the other side, its principles of "benefits maximization" and "equality" limits the Cooperative Union's access to resources to invest in marketing campaigns or new product developments, which indirectly pushes it towards a cost-leadership strategy.

2.4.1.3 The strategy lock-in

While the commercial goals push towards a differentiation strategy, the cooperative principles push directly and indirectly for a cost-leadership strategy. When questioned about their strategic choices, the board members were clear about their preference for the differentiation strategy.

Where do we have added value, in cheese or milk? It is evident that it is in the cheese; cheese is way more valuable than milk. However, there is no market; we would sell all the cheese we could, and we would not produce UHT milk at all. See, what do we carry to Lisbon? It is water! Milk is like water. See, I go to Spain to get the packaging to bring it here; afterward, I carry it again with "water" inside. The milk is around 80%, 90% of water. At the end of the day, I am carrying water. When I am carrying cheese it is not the same thing; cheese is concentrated milk; however, to do that I need to have a market for it. (Cooperative Union general manager)

Our goal is always to increase products' value added. The product that has the higher value added is the cheese; it also has the lower transportation cost. We work the market to sell as much cheese as we can, and the surplus goes to UHT milk. (...) Unfortunately, our growth is around 60%-40%, 60% for UHT milk and 40% for cheese. (Cooperative Union board president)

The goal of the Cooperative Union would be to focus only on cheese and related products, which tend to be the higher value-added product. However, since it cannot sell only cheese and at the same time it cannot reduce its operational size (due to the “cannot say no” principle), the Cooperative Union is forced to pursue both strategies. While it might be normal in other industries to follow simultaneously different market strategies, in this industry, this is not the elected approach for the reasons already cited.

At this point, it is possible to answer the question why the Cooperative Union is pursuing a dual market strategy, while similar players follow only one strategy. The Cooperative Union seeks simultaneously cost-leadership and differentiation strategies under the same brand umbrella because the different logics that it instantiates prescribe different strategic choices. In this way, the Cooperative Union is experiencing a strategy *lock-in* (see Arthur 1989), which means that an organization follows a particular strategy because conflicting internal logics (cooperative and commercial) are pushing it towards opposing strategic choices, which culminates in two different market strategies.¹⁰ Favoring one strategy over the other means endorsing one logic over the other. Therefore, pursuing dual strategic positioning is also a mechanism to avoid mission drifts (see Ebrahim, Battilana, and Mair 2014 for mission drift).

2.4.2 Players’ competitive behavior

The Cooperative Union and the Multinational Subsidiary competitive behavior regarding competitive intensity, proactiveness, and market orientation are overall similar; some differences are salient concerning strategic relevance and responsiveness.

The Multinational Subsidiary and the Cooperative Union performed respectively 40 and 37 competitive moves from 2010 to 2014 (see Table 2:4), as well as 31 and 33 actions. More specifically, the Cooperative Union was the first mover in 89% of the times it has moved in the market and the Multinational Subsidiary in 78% of the times (see Table 2:7). This result is consistent with the literature on competitive dynamics, in the sense that competitive intensity might be related to player’s size, small firms tend to perform fewer competitive moves, and large players tend to present more intense competitive activity (see Chen and Hambrick 1995). Additionally, these results also spark discussion whether hybrid organizations can be as competitive as similar non-hybrids. The fact that both players present similar competitive

¹⁰ Other schools of thought used the term lock-in. In economics, lock-in refers to when “increasing returns can cause the economy gradually to lock-in into an outcome not necessarily superior to alternatives” (Arthur 1989, p. 128). In finance literature, there is also the term *capital gain lock-in effect*, which reflects the desire to keep appreciated assets “to defer taxes on gains already accrued” (Auerbach 1991, p.167).

intensity and proactiveness means that the Cooperative Union was able to be very competitive, being able to attract resources effectively. Therefore, the results demonstrate that the Cooperative Union and the Multinational Subsidiary present a very similar competitive behavior regarding of intensity (total number of competitive moves) and proactiveness (first mover).

	Cooperative Union		Multinational Subsidiary		Market Total	
	Absolute	Relative	Absolute	Relative	Absolute	Relative
Action	33	89%	31	78%	100	81%
Response	4	11%	9	23%	23	19%
Total	37^a	100%	40^a	100%	123	100%

^a In this table investments are considered action

Table 2:7 Players' proactiveness and responsiveness

	Cooperative Union		Multinational Subsidiary		Market Total	
	Absolute	Relative	Absolute	Relative	Absolute	Relative
Strategic	15	45%	16	52%	40	40%
Tactical	18	55%	15	48%	60	60%
Total	33^a	100%	31^a	100%	100	100%

Table 2:8 Actions strategic relevance per player

The results also show that the Cooperative Union and the Multinational Subsidiary competitive moves on the consumer market represent barely 2/3 of their total number of competitive moves (see Table 2:9). This result surprises because it is expected that the Cooperative Union present at least a balanced weight between factor market (which represent their beneficiaries and the cooperative logic) and consumer market (which represent their consumers and commercial logic) (see Battilana et al. 2015).

Regarding responsiveness, the Multinational Subsidiary is the most responsive player with the higher number of responses. The latter responded to 13% of the actions taken in this market, presenting 9 replies in total (see Table 2:10), while the Cooperative Union answered only to 6% of the actions taken in this market. However, the Multinational Subsidiary is the slowest respondent, taking on average 8 days to respond to competitors' actions (see Table 2:10). These results articulate with the literature on competitive dynamics, in the sense that organizations with local decision-making and simpler hierarchies are faster in taking decisions than organizations highly hierarchical (Smith et al. 1991).

	Cooperative Union		Multinational Subsidiary		Market Total	
	Absolute	Relative	Absolute	Relative	Absolute	Relative
Consumer	23	66%	25	64%	63	53%
Factor	12	34%	14	36%	55	47%
Total	35^a	100%	39^a	100%	118	100%

^a The total number of moves for the Cooperative is 35 because there are 2 investments that are not considered in this table, the happens in the for the Multinational Firm (1 investment), and Local firm and the (2 investments)

Table 2:9 Player's market orientation

	Cooperative Union	Multinational Subsidiary	Market average
Likelihood to respond to a competitor action	6%	13%	-
Response speed	7.5	8.2	9.6

Table 2:10 Responsiveness measures

The competitive behavior analysis of the Cooperative Union and the Multinational Subsidiary reveals that both are indeed very similar regarding competitive propensity, market focus, and strategic relevance (see Figure 2:1). Attending the fact that the Cooperative Union presents different market strategies (cost-leadership and differentiation) and organizational form (hybrid) compared to the Multinational Subsidiary, such similarities are at best intriguing.

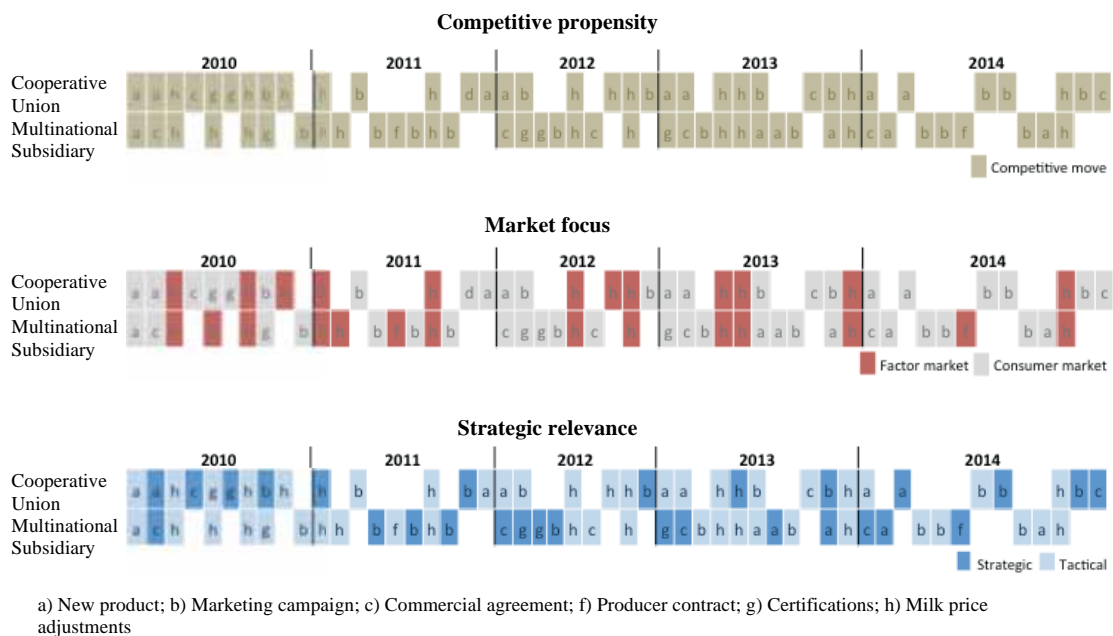


Figure 2:1 Chronological representation of player's competitive moves

It is indeed surprising that the Cooperative Union's competitive behavior focuses more on the consumer market than on the producer one, which represents its beneficiaries. This result is even more surprising considering that during the interviews expressions such as "*the members are our reason to exist*," "*our main goal is to serve our members*" or even "*we are not like private corporations*" were a constant. One might argue that this disproportional focus on the consumer market is a signal of mission drift (see Ebrahim, Battilana, and Mair 2014). The Cooperative Union might be privileging the group of constituents that provide revenues (consumers) over beneficiaries (members) (see Battilana et al. 2015; Oliver 1991). Assessing whether there is mission drift is a difficult task; however, there is evidence that the Cooperative Union has maintained a balance between its cooperative and commercial logics. First, the conflicting logics that the Cooperative Union instantiates are reflected in its market strategies, as exposed in the earlier section. Second, the Cooperative Union is the market player that better remunerates its suppliers/members, what reinforces its focus on the beneficiaries. Third, the Cooperative Union board is unbalanced towards cooperative board representatives, what also enhances its cooperative logic imprinting and orientation (Battilana et al. 2015).¹¹ If we are not in front of a mission drift, this means that regarding competitive behavior the Cooperative Union has managed to "look like" a commercial organization. Means that while internally the Cooperative Union is experiencing the trade-offs inherent to its hybrid nature, externally, it has managed to send a different message to the market.

2.4.2.1 *Soft decoupling*

The evidence supports that the Cooperative Union competitive behavior mimics commercially oriented organizations while being a hybrid. The Cooperative Union was able to partially "decouple" its competitive behavior from its organizational form (see Meyer and Rowan 1977 for decoupling). The Cooperative engages in such "decoupling" activities to increase credibility. Such behavior is consistent with existing literature, which underlines the impact of credibility for hybrid organizations (see DiMaggio and Powell 1983; Meyer and Rowan 1977).

During the interviews, the Cooperative Union's desire to increase credibility toward market constituents, more specifically toward distributors and consumers, was evident. Competitive moves such as commercial agreements, new products (to diversify the portfolio), and prizes served this purpose well.

¹¹ The Cooperative Union board is composed of one manager, and four members nominated by the cooperative members.

[About a commercial agreement with a “big fast food chain”] Regarding volume, this agreement is not very relevant; however, it is very prestigious for us. The fact that this client is buying our products is indeed very prestigious for us. When we negotiate with a distribution chain, it is important to them that we work with other big clients. These types of agreements are not “bad” for our business, but more than this [revenues], they are signals that we send to the market. This means that we can work with clients that have very high-quality standards. When we negotiate with distribution chains, this is an important weapon to increase our negotiation power. (Cooperative Union general manager)

This is the spirit of this team; we have realized that this is the right path to follow; with a broad range of products, we can penetrate in several markets. On top of that, the big distribution chains perceive us differently. One thing is a company that has three products to present to the big distributors; another thing is a company with ten different products. (Cooperative Union board president)

The prizes are important for us, mainly when we are negotiating for higher prices. We need to convince that the product is good, and the prizes are important for that. For example, the prize “taste of the year 2014” (direct translation) was very important for us. When we win prizes, we confirm that our products have quality. Another thing that is important for us is the certifications; these are also very important for national and international distributors. (Cooperative Union board president)

This evidence supports that the Cooperative Union use competitive moves as symbolic actions to send signals to the market with the aim of increasing credibility and legitimacy (see Meyer and Rowan, 1977). In this context, the Cooperative Union’s tactical moves, which dominate its competitive portfolio (See Table 2:8), are used as symbolic signals to the market.

The Cooperative Union through repeated games (over 60 years) has learned how to decouple its competitive behavior from its organizational form, through symbolic competitive moves. The Cooperative Union mimics the behavior of commercially oriented organization, although being a hybrid. In this paper, such strategy is called *soft decoupling*. In the past, Meyer and Rowan (1977) refer to decoupling as the creation of gaps between symbolically adopted formal policies and tangible organizational practices. However, while institutional decoupling requires enforcement of policies that are not indeed implemented, in a *soft decoupling* strategy there is no misleading enforcement (see also Slavova and Karanasios 2014). In this case, the “endorsement” is “softer” and achieved through intense competitive activities and symbolic signals.

2.5 Discussion

This paper investigates whether—and if so, how—the presence of multiple institutional logics influences organizations' market strategies, competitive behavior, and ultimately their competitiveness in the market in which they operate. The results reveal that organizations that instantiate conflicting logics might experience tensions at the market strategy level. As

exposed in this paper, different logics might push toward different strategic options, which lead to a *strategy lock-in*. This means that hybrids pursue a particular strategy because conflicting internal logics push toward different strategic choices. Favoring a strategy over the other translates to enhancing a logic over the other. Therefore, pursuing dual strategic positioning can function as a mechanism to avoid mission drifts. This paper also reveals that in the long run hybrid organizations can learn how to separate their internal paradoxes from their competitive behavior. They can apply *soft decoupling* strategies through intense competitive activities and symbolic competitive moves, what allows them to gain credibility near to market constituents.

The results demonstrate that the presence of multiple institutional logics influences organizations' market strategies. This is likely to happen to organizations that endorse logics with conflicting prescriptions about appropriate strategies to follow. These hybrid types might find difficulties in conciliating both goals strategically, experiencing a *strategy lock-in* (see Arthur 1989). This paper also showed that market strategies are unequivocally related to the balance or imbalance of instantiated logics. This means that favoring a strategy over the other results in enhancing a certain logic over the other. I propose, therefore, that the higher the degree of conflict amongst instantiated logics, the higher the likelihood of an organization experiencing a *strategy lock-in*. These results harmonize with the literature on organizational responses to institutional environments, which states that the exposure to several logics also leads to the exposure to a broader portfolio of strategic choices. Therefore, organizations in these conditions tend to present different strategies when compared to organizations that operate in less intense institutional environments (Greenwood et al. 2011; Pache and Santos 2013). This result is not surprising for young hybrids; however, the case presented here, the Cooperative Union, is a mature one. Regarding that, research defends that hybrids eventually reach a synthesis among the logics they instantiate (Jay 2013), or one logic achieves dominance over the other and hybrids drift toward legitimized forms (Kraatz and Block 2008; Scott 1994; Simons and Ingram 1997). This is not what we see in this case, the hybrid is still experiencing the tensions of conciliating conflicting logics in the core of its activities, and such tensions reflect in their market strategies.

Regarding competitive behavior, the existing literature on institutional theory points in both directions. On the one hand, organizations that deviate from institutional prescription are less efficient in gaining access to critical resources (DiMaggio and Powell 1983; Meyer and Rowan 1977); but on the other hand, hybrids can attract resources from different institutions since they address a larger group of constituents (Pache and Santos 2013). The results showed that regarding competitive behavior, both cases presented very similar profiles. This might

indicate that hybrids are indeed able to attract resources from different constituents, increasing their chances to survive (Pache and Santos 2013).

The results demonstrate that hybrid organizations might be able to decouple their competitive behavior from their organizational form, in what I call *soft decoupling*. I propose in this paper that hybrids that integrate commercially oriented logics tend to employ *soft decoupling* strategies to mimic purely commercial-oriented organizations in order to signal legitimacy to market players. Such terminology resembles Meyer and Rowan (1977) concept of institutional decoupling. For these scholars, decoupling happens when organizations show compliance with practices of a specific logic, while they are implementing practices of another logic, which aligns with their organizational goals. In this paper, the *soft decoupling* strategy is more nuanced and less risky than institutional decoupling. First, it does not entail the adoption of policies, remaining at the signaling level; and second, there is no risk of formal control and scrutiny. The real risk is the one of having its reputation damaged near market constituents.

The literature on institutional complexity and hybrid organizations focuses on how organizations react to institutional demands. Meyer and Rowan (1977) brought the concept of decoupling; Oliver (1991) of compromising strategy; Greenwood and colleagues (2011) of combination of conflicting logics (see also Binder 2007; Lounsbury 2007; Tracey, Phillips, and Jarvis 2011); and more recently, Pache and Santos (2013) introduced the term selective coupling strategy. While all these strategies refer to organizational elements, such activities, structure, ownership, governance, monitoring, etc. (see Pache and Santos 2013); *soft decoupling* strategies apply to competitive behavior. While hybrids can send symbolic signals to the market through specific competitive moves that can be easily malleable or changed; organizational structure elements and activities (the one often referred in institutional decoupling) are hard endorsement signals that last through time and are more difficult to revert (see also Slavova and Karanasios 2014). Therefore, hybrids can use a *soft decoupling* strategy to mimic commercial organizations to increase credibility and legitimacy near market constituents (see DiMaggio and Powell 1983; Meyer and Rowan 1977), such as consumers and distributors. However, we do not know whether such strategy is adequate to attract resources from other institutional constituents, as financial, governmental and non-governmental institutions that might require a different type of enforcement.

This paper also suggests that some competitive moves are performed with the goal to send symbolic signals to the market. This result is consistent with the literature on competitive dynamics, which defends that players' competitive moves are powerful "signals" used to

improve their competitive position (Chen and MacMillan 1992; Ferrier, Smith, and Grimm 1999; Smith et al. 1991). Still, such competitive moves also convey information about organizations' competencies, influencing external constituents' evaluation (Basdeo, Smith, and Grimm 2006). The same literature also defends that the orchestration of competitive actions and responses, which ultimately characterize organizations' market strategies, affect organizations' reputation in the market, mainly under high levels of market ambiguity (Rindova, Ferrier, and Wiltbank 2010). As relevant constituents face a lack of information about organizations' functioning, they take strategy elements to make decisions about resource allocation (Rindova, Ferrier, and Wiltbank 2010). Since hybrids indeed tend to face a high level of ambiguity since they integrate unestablished forms, their market strategies and competitive behavior might constitute a major vehicle to send signals to the market constituents and respond to institutional pressures (see Delmas and Toffel 2008; Pache and Santos 2011).

Future research will need to examine whether such propositions can be generalized. Specifically, how different types of hybrid organizations, for example with the various degrees of divergence between logics, compete in the markets. It would also be interesting to study whether different field characteristics such as fragmentation or concentration competition intensity, influence the strategies that hybrids adopt to get credibility from institutional constituents (Meyer and Rowan 1977; Pache and Santos 2013).

Market strategies and competitive behavior do not occur in an institutional vacuum. They are shaped and guided by intra-organizational and institutional tensions. Research in this field will help to comprehend the impact of institutional forces on the way hybrids and organizations in general compete.

Chapter 3 Competing under Institutional Complexity: a Multi-case Study Design

3.1 Introduction

Hybrid organizations, which incorporate features from dissimilar institutional logics (Battilana and Dorado 2010; Haveman and Rao 2006), are gaining relevance in modern societies. Nowadays, complex institutional environments impel organizations to respond to all sorts of contradictory demands from different groups of constituents (Greenwood et al. 2011; Kraatz and Block 2008; Meyer and Rowan 1977). Examples of hybrid organizations are social enterprises that instantiate social and commercial logics (Battilana and Dorado 2010; Battilana and Lee 2014), and also cooperatives that integrate cooperative and commercial logics (see Ashforth and Reingen 2014; Battilana and Dorado 2010; Battilana and Lee 2014; Haveman and Rao 2006). As the number of hybrid organizations increase, more usual is the scenario in which hybrids and non-hybrids compete in the same market. For example, in the renewable energy sector in Germany (Community Power 2017) and UK (Balch 2015), cooperatives and community-owned projects are starting to compete with privately-owned enterprises. Specifically, in Germany, renewable energy cooperatives already account for 34% of the total clean energy capacity installed in the country (Community Power 2017). Another example is the Bolivian microcredit market in which microcredit social enterprises, such as BancoSol, compete with Bolivians commercial banks that have now also entered in the microcredit segment (Battilana and Dorado 2010; Schipani 2012).

For a large subset of hybrid organizations, the instantiation of different logics in their core activities also means serving diverse groups of constituents (Battilana et al. 2015; Battilana

and Dorado 2010; Haveman and Rao 2006)¹². In the case of producer cooperatives, the groups are the producers, who are the beneficiaries and owners, and the consumers, who buy the cooperative's products or services. In a situation where hybrids and non-hybrids operate in the same market, they address the same groups of constituents and compete for the same resources, interacting and influencing each other (Smith and Ferrier 2001).¹³ How can a commercially oriented organization compete with hybrids to which suppliers or consumers are the beneficiaries? How does this affect market dynamics? This rationale leads to the ultimate question of how and under which conditions hybrid organizations influence the competitive dynamics and institutions of the markets in which they operate.

Institutional scholars indeed predicted the scenario where hybrid and non-hybrid organizations interact in the same environment. Previous studies suggest that organizations that operate in complex institutional fields—where multiple and sometimes conflicting institutional logics co-exist—experience institutional pressures differently and in varying degrees. Organizational characteristics such as positioning in the field, structure, governance, ownership, and identity influence the way that organizations react to institutional pluralism (Greenwood et al. 2011). Therefore, while some organizations embrace the institutional tensions in the core of their activities such as hybrid organization, others prioritize the logics and somehow reconcile the tensions. This paper speaks to this literature addressing two main issues. First, institutional scholars defend that institutional environments influence field level structures, shaping organizations' practices and structures (Friedland and Alford 1991; Greenwood et al. 2011). Similarly, strategic management researchers suggest that institutional environments are determinant for the success or failure of organizations' strategies in the market (Hoffman, 2001; Ingram and Silverman, 2002). While there are some clues that institutional logics influence field structures and organizations' strategies, little is known about the mechanisms that unfold such relationships. Second, institutional theory scholars focus on how field logics influence intra-organizational structures and practices (Friedland and Alford 1991); however, it has failed to address inter-organizational feedback loops, resulting from organizations responding to institutional pressures and each other responses (Greenwood et al. 2011; Pache and Santos 2010). This paper speaks to this literature stream, focusing on how the co-existence of organizations that experience and respond differently to

¹² Groups of constituents are groups that provide resources to the organization. For example, suppliers provide the raw material, and consumers economic rents. In the case of hybrid organizations, sometimes one or more groups of constituents are beneficiaries, but this does not mean that all constituents are beneficiaries.

¹³ When I refer to resources, I refer to rents from consumers and raw material from suppliers.

institutional pressures—hybrids and non-hybrids—influence the dynamics of the markets in which they operate, bridging institutional field-level and market level of analysis.

The methodology follows a qualitative multiple case study design in the context of the São Miguel dairy market. In this setting, a producer cooperative—the cooperative-commercial hybrid—and pure commercially oriented players—non-hybrids—have been competing for more than 60 years. The data sources are archival records, in-depth interviews, and other documentation.

The results reveal that hybrids due to the logics that they instantiate tend to display a competitive behavior that deviates from one of non-hybrids. Hybrid's "atypical" behavior, when associated with a relevant market share, may increase market competition. Thus, markets where hybrids and non-hybrid compete may present higher competition levels when compared to markets with similar structure and characteristics but where all players display a similar behavior. Higher the degree of incompatibility between hybrids' endorsed logics and other players' logic, higher the hybrids' influence on competition. I refer to this effect as *competitive microcosm*. The results also reveal that hybrids have a higher incentive to defy and change market institutions when those clash with hybrids' endorsed logics. In these situations, market power function as a mechanism to trigger market institutional change.

This paper contributes to the literature on organizational reactions to institutional complexity, bridging institutional and inter-organizational levels of analysis. It also suggests that market competitive dynamics does not occur in an institutional vacuum, showing that the diversity of organizational responses to institutional pressures affects market competitive dynamics.

3.2 Literature Review

3.2.1 Hybrid organizations and markets' competitive dynamics

Hybrids are organizations that exist in the intersection of different institutional spheres, combining at the core of their activities different and often conflicting institutional logics (Battilana and Dorado 2010; Battilana and Lee 2014; Haveman and Rao 2006). Institutional logics are broader cultural templates that define appropriate practices, forms, goals, and means to achieve such goals, constraining and guiding organizations' actions (Friedland and Alford 1991; Kraatz and Block 2008; Thornton and Ocasio 1999). Therefore, hybrids straddle elements from different established logics under the same organizational roof. Health organizations that combine the professional care and the business logics (see Reay and

Hinings, 2009); biotechnological firms, which embed market and technology logics (Powell and Sandholtz 2012); and also cooperatives that instantiate both cooperative and commercial logics (see Ashforth and Reingen 2014; Battilana and Lee 2014) are other illustrations of hybrid organizations.

A large subset of hybrids addresses different publics with different demands (Battilana et al. 2015). For example, for working integration social enterprises, the goal is to help unemployed individuals hiring them. The beneficiaries are the employees, the work suppliers, and the consumers are the people who buy the products/services that these organizations sell (see Battilana et al. 2015; Pache and Santos 2010). The same happens with producer cooperatives. The producers are the beneficiaries, which are also the suppliers, and the consumers the people who buy their products or services (see Hansmann 1999; Normak 1996). These hybrid organizations that address two different groups have different logics towards these groups. In the case of producer cooperatives, it endorses a cooperative logic towards its suppliers and a commercial logic towards its consumers. Such logics towards consumers or suppliers will dictate their goals towards these groups. For example, if the beneficiaries of the hybrid are the consumers, the hybrid will offer products or services at a lowest price possible to benefit these same consumers; while if the beneficiaries are the suppliers, the hybrid will pay the highest remuneration possible to benefit the suppliers. In situations that hybrids and non-hybrids compete in the same market, hybrids' beneficiaries can be the consumers or the suppliers of the non-hybrids. How to compete with a player that deliberately wants to set the lowest price possible to consumers or the highest remuneration possible to suppliers?

When organizations compete in the same market, they interact and influence each other performance (Smith and Ferrier 2001). Organizations' competitive moves such action and responses initiated to protect or improve relative competitive position will influence competitors' moves, strategies, and market's competitive dynamics at an aggregate level (Smith et al. 1991). Organizations do not compete in a vacuum; organizations that operate in the same market influence each other, mainly because they are competing for the same resources. Competing with organizations that instantiate different logics and therefore have different goals will also affect the way organizations influence each other (see Chaffee 1985; Chen 1996). However, we do not know the nature and extension of such interactions. Such rationale leads to the question of how and under which conditions hybrids influence competitor' strategies? Moreover, how do hybrids affect the competitive dynamics of the markets where they operate and under which conditions?

Some researchers have already noticed that hybrids that compete with non-hybrids might experience some retaliation from incumbent non-hybrid organizations that integrate legitimized forms (Battilana and Lee 2014). For example, traditional organizations from the charity sector have publicly announced their opposition to social enterprises (Murray 2012). This contestation is an indicator that somehow hybrids might affect the incumbent organizations; however, we have no clue about the extent and the conditions that this might happen. This paper aims to address this discussion.

3.2.2 Hybrids and institutions

Neo-institutional scholars defend that institutions shape organizations, but organizations also shape back their surrounding environments. More specifically, this argument supports that institutional logics influence organizations' responses but, still, organizations are not entirely determined by these logics. They can strategically combine elements from their surrounding institutional environments accordingly with their interests. Since each organization exerts this strategic selection to match their interests, this will lead to variation, organizational action, and continuous change at the institutional level (Greenwood et al. 2011; Kraatz and Block 2008; Scully and Meyerson 1996). In this perspective, organizations' actions and cumulative responses to institutional demands lead to institutional change. Such changes are now faced as a social construction instead of an exogenous force that shape the field (Scott 2001). Similarly, research on hybrids has widely acknowledged the importance of hybrids for innovation and institutional change (Padgett and Powell 2012). Since hybrids incorporate different logics in their core activities, they deeply experience the incompatibilities amongst the logics they instantiate. As a result, hybrids members try to synthesize the logics and address the inconsistencies, what may lead to innovative practices and new meanings (Jay 2013). As new organizations enter in a field, new ideas and social circumstances emerge. When this phenomenon assumes a significant size and influence, institutional change may occur, leading to the installation of new logics or reprioritization of the existing ones (Seo and Creed 2002). For example, social enterprises leaders often engage in institutional change campaigns to shape their environments. Their goal is to raise the legitimacy for the sector, what later on enables the emergence of other social enterprises (Battilana and D'Aunno 2009; Tracey, Phillips, and Jarvis 2011). Existing literature has focused on new sectors, such as social enterprise, but what about sectors or industries where hybrids are in a sustained competition with non-hybrids? Are hybrids able to shape practices and institutions, where they are not the dominant form? There is a need for systematic attention on the conditions under which hybrids can influence institutions in the markets or environments where they

operate. This paper answers the call to study the organizational responses' feedback effects at intra- and inter-organizational levels (see Greenwood et al. 2011).

3.3 Methodology

This research investigates how hybrid organizations influence the competitive dynamics and institutions of the markets in which they operate and under which conditions. To explore this question, I conducted an exploratory qualitative multi-case study design (see Strauss and Corbin 1990; Yin 2009). The following paragraphs characterize the context and explain how data was collected, coded, and analyzed.

3.3.1 Context and cases description

This study's setting is the São Miguel dairy market. São Miguel is an Azorean island that represents 1% of the landmass of Portugal; however, its milk production represents 15% of the national production. In São Miguel, a cooperative union—the cooperative-commercial hybrid—competes side-by-side with three other pure commercial organizations—non-hybrids—for more than 60 years.

Cooperatives emerged in São Miguel around 1927. The first cooperative manifestations aimed at collecting the families' milk leftovers to produce butter and cheese. The cooperative movement got stronger after the last quarter of the 20th century when Portugal joined the European Union. This political move led to improved hygiene, production, and security requirements in the food supply chain that were hard to meet for a market based on archaic production practices. The investments required to conform to these new regulations were far more than what most Azorean farmers could afford. Farmers' cooperatives were able to undertake these investments, not only to support farmers' production practices but also investing in dairy production facilities. Since that time, cooperatives have become a substantial part of São Miguel economic life.

Nowadays, the dairy market in São Miguel has achieved maturity, five small cooperatives allied to form a Union that in 2015 collected around 47% of the total milk produced in the island (see Table 3:1). The Cooperative Union competes with three other players in the market: the Multinational Subsidiary, the Local Firm, and the Specialist.¹⁴

¹⁴ I have adopted fictitious names to preserve the identity of the organizations under study.

	2010	2011	2012	2013	2014	2015
Cooperative Union	41.3%	42.3%	44.1%	46.1%	46.7%	47.2%
Multinational Subsidiary	39%	38%	37%	36%	35.7%	36.3%
Local firm	18%	18%	17%	16%	16.3%	15.2%
Specialist	2%	1%	1%	1%	1.3%	1.3%

Table 3:1 Players milk collected in % of total island production per year

In São Miguel, there are around 1400 dairy producers that sell their milk to one of the four buyers in the market. The market players collect and process the milk to produce cheese, UHT milk, and butter. At the industrial level the competition is local since players cannot buy milk outside the island due to its highly perishable nature, but on the consumer market, the players compete at national and international level. The players sell between 84% and 91% of their production in the national market (outside the island), and between 2% to 16% to international markets.¹⁵ Cheese is the most exported product, and the UHT milk is mostly consumed in the national market. In the following paragraphs, I briefly describe the market players, which are the cases under analysis in this study.

The Cooperative Union. The Cooperative Union is a second-tier market producer cooperative (union of cooperatives) founded in 1954 as a result of a merger of five smaller producer cooperatives. The Cooperative Union's goal is to maximize member benefits through the commercialization of dairy products. The hybrid nature of the Cooperative Union is observable across several dimensions. First, the Cooperative Union goal is to maximize members' benefits through a commercial activity. Such goal entails the endorsement of principles such as democracy, equality, and solidarity toward their members and communities—cooperative logic; and the production of products with economic return—commercial logic. Second, the Cooperative Union also displays a hybrid governance mode. While at the smaller cooperatives' level one member represents one vote, like in traditional cooperative forms, at the Cooperative Union level each cooperative accounts for a percentage of votes, depending on the quantity of milk that they supply to the Cooperative Union, which resembles investor approaches. Finally, the Cooperative Union also adopts a hybrid arrangement at the board level. Four members compose the board; three are elected by the members and are usually farmers, while one is a professional manager.

Nowadays, the Cooperative Union collects around 47% of the total milk produced in São Miguel. It processes 70% of the collected milk in its facilities and sells the remaining 30% to the Specialist. The Cooperative Union produces UHT milk, which is its primary product, as

¹⁵ The Specialist is an exception since it sells 100% of its production to another subsidiary of the same group, located in Portuguese mainland.

well as cheese, butter, and other less representative products such as creams and juices. The Cooperative dedicates around 20% of its production to private labels and the remaining to its brand. The Cooperative Union brand encompasses all lines of products, from low-value-added UHT milk to high-value-added cheese and butter. The Cooperative Union employs 244 people and collects milk from 674 suppliers. It accepts suppliers of all sizes; thus attracting the smaller farmers who only have a few cows. This explains the high number of suppliers (see Table 3:2).

Local Firm. A Portuguese family with a long history in the dairy industry created the Local Firm in 1992. This family still owns the majority of the firm's capital and controls the executive board. Board members and employees talk about the Local Firm as a family-owned enterprise. The Local Firm primarily produces cheese and powdered milk, but also butter as a way to commercialize the excess from the cheese production. The Local Firm primary focus is on private labels, only 12% of its output is dedicated to its brand. Amongst the four players operating in São Miguel, the Local Firm is the one with highest international orientation, 16% of its sales are to international markets and the remaining to national market (the domestic market has no relevance). The Local Firm employs 181 people and collects milk from 300 farmers, representing 15% of the milk produced in São Miguel (see Table 3:2).

Multinational Subsidiary. A Portuguese family built the Multinational Subsidiary's industrial facilities back in 1948, due to the milk production potential of the region. In 1996, a multinational group acquired 51% the industrial plants located in São Miguel, and in 2002 the remaining 49%. The multinational group bought the industrial facilities but has maintaining employees, suppliers, and also the cheese brand, which is still the strongest brand of the multinational in Portugal. The Multinational Subsidiary produces mainly cheese, but also a smaller portion of UHT milk and butter. Its brand is highly associated with high value-added products, displaying a distinct positioning in the market. The Multinational Subsidiary addresses 40% of its production to private labels and the remaining to its brand. The local board takes all decisions regarding local operations. However, the decisions on all the other areas take place at the national and international levels. The Multinational Subsidiary accounts for the highest volume of milk processed on the island (35%); it employs 270 people and collects milk from 360 suppliers (see Table 3:2).

Specialist. A multinational food player created the Specialist industrial facilities in 1971. The factory was built with the unique goal to produce powdered milk, and this holds until today. The Specialist sells its full production to other subsidiaries of the same group. From the outset, the Cooperative Union owned 10% of the factory, and since then the Cooperative

Union is the primary milk supplier of the Specialist, supplying 88% of the milk it processes. Nowadays, the plant employs 78 people and processes 18% of the milk produced in São Miguel (see Table 3:2).

	Cooperative Union	Local firm	Multinational Subsidiary	Specialist
Foundation year	1954 ^c	1992	1948	1971 ^d
Sales in millions ^a	83.0	34.2	87.9	33.6
Number of employees ^a	244	181	270	78
Number of suppliers ^a	674	300	360	4
Milk processed in their facilities ^{a,b}	31.1% ^d	15.5%	35.0%	18.0% ^d
Main Products (in order of importance)	UHT milk, Cheese, and Butter	Cheese, Powdered milk	UHT milk, Cheese, and Butter	Powdered milk and Butter

^a Data concerning 2014. ^b % of the total milk produced in the island. ^c The Cooperative Union was founded in 1954, but only started operations in 1959; ^d 88% of the milk processed by the Specialist is collected and sold by the Cooperative Union

Table 3:2 Player's description

Four main factors explain the choice for this empirical context and case selection. Hybrids and non-hybrids have competed side-by-side in this market for a long time. The São Miguel dairy market is highly competitive, with players presenting an intensive competitive portfolio yet interacting often with each other, what makes it an ideal setting to study competitive dynamics (see Smith and Ferrier 2001). The fact that the players operate in the *quasi*-isolated context of the Azores allows us to assume that they are all exposed to the same conditions and external shocks; this reduces endogeneity. Moreover, the fact that the dairy market in São Miguel is crucial to the local economy causes institutions to focus on it; this results in consistent, rich, and abundant data.

3.3.2 Data Collection

The data collection encompasses three phases. In 2014, I conducted exploratory interviews with local and international experts in cooperatives, local agriculture associations' representatives, and also with Cooperative Union board members and farmers. The goal was to understand what is a cooperative, how it works and how it influences the communities and the markets in which they operate from several perspectives. In this phase, I conducted 14 interviews that lasted between 32 and 105 minutes. The data collected in this phase allowed me to understand what were the Cooperative Union's goals and strategies. At this phase, there were indications of the Cooperative Union's influence on the local market dynamics.

During the second stage (2015), I collected a combination of archival and interviews data to get a deeper awareness of the field. I also started to interview all the other players in the market, namely Multinational Subsidiary, Local Firm, and Specialist, in addition to some field experts. For this included 17 interviews with durations between 37 minutes and 1 hour. The interviews followed a semi-flexible structure with follow-up questions on the topics discussed (Spradley 1979). Questions focused on the organizations' history, evolution, products, strategy, and competition.

The two largest newspapers authorized me to directly search in their archival databases for the following terms or phrases: names of the four focal firms, their brand names, "agriculture", "cheese", "milk", "butter", "powdered milk", "milk price", and "private labels". This resulted in a selection of 526 press articles concerning the four players and the dairy market from 2010 to 2015. The data collected in this phase provided the framework for the primary constructs of the paper.

Finally, in a third stage (2016), building upon the initial analysis, I collected additional data on the cases under study by conducting more interviews with firms' directors, technical supervisors, and other employees. Also, I interviewed local and national field experts for further validation of the main findings. This resulted in 14 interviews that lasted between 25 and 133 minutes. I also collected additional documentation, such as press articles from local Agriculture magazines (issued by the local Agriculture Associations—Associação dos Jovens Agricultores de São Miguel, Associação Agrícola), firms' reports and periodicals, balance sheets, and other local, national, and international reports related to the dairy market (e.g., from INE and SREIA). This added 246 documents to the database. This additional phase of data collection was important to confirm and complement the findings.

In this paper, I recurred to numerous data sources of evidence to enable corroboration and triangulation of the data, what provides a stronger basis for emerging constructs and relationships (Eisenhardt 1989; Yin 2009). In the end, the database comprised 45 interviews, 526 press articles, and 246 other documents (see Table 3:3).

Sources	Quantity
Archival records (press articles from 2010 to 2015)	526
Interviews	45
Cooperative Union	8
Multinational Subsidiary	8
Local Firm	8
Specialist	4
Other players, field specialists, and producers	17
Other Documents	246
Articles from Specialized magazines	107
Firms reports, websites, own magazines, presentations	46
Others (presentations, spread sheets, reports)	93

Table 3:3 Data sources information

3.3.3 Data Coding and analysis

The data coding encompasses two stages. In the first stage, I went over the data executing a descriptive coding (Miles and Huberman 1994, p. 57). Throughout this phase, first coding dimensions emerged from a data-literature interaction (see Miles and Huberman, 1994; Strauss and Corbin, 1990). The main categories were *Product & Market Strategy*, *Supply & Factor Market*, *Competition & Cooperation*, and *Background Information*. These primary categories followed from a descriptive fashion, while subcategories involved more interpretation (see Miles and Huberman 1994).

The main author and a research assistant independently coded a subset of the information, and after several rounds of interaction, they agreed on coding guidelines, subsequently coding all the data according to such guidelines. The main author used N-Vivo software to organize and code all the information collected.

In the second coding stage, I went through the archival records tracing all organizations' competitive events chronologically. These competitive moves are public moves implemented by the player observable by the market constituents (Porter 1980; Smith et al. 1991). Only those competitive moves mentioned in the local newspapers are considered significant and important. This is an established methodology in the competitive dynamics literature (Chen 1996; Chen and Hambrick 1995; Ferrier 2001; Ferrier and Lee 2002; Ferrier, Smith, and Grimm, 1999; Miller and Chen 1996; Smith et al. 1991). After identifying all detectable competitive moves, the competitive moves were transferred to an excel sheet (lines) and coded in the following dimensions (columns):

Competitive moves typology. I coded moves as a new product, commercial agreements, prize, marketing campaign, certifications, milk price adjustment, producer contract, and investment (see Chen and MacMillan 1992; Ferrier, Smith, and Grimm 1999; Miller and Chen 1994).

Consumer or factor market. The interviewees repeatedly talk about two levels of competition, factor market, and consumer market. The factor market relates to changes in the price of raw milk or changes on producer contracts. The consumer market encompasses all sort of marketing moves (marketing campaigns, commercial agreements, new products, etc.).

Action or Response. When a player is the first to move, I coded as action, when the player was responding to other's player actions, I coded as a response (see Ferrier, Smith, and Grimm 1999; Smith et al. 1991).

Ex-post scope. The *ex-post* scope measures the number of competitors that replied to the action (scored from 0 to 3) (Chen, Smith, and Grimm 1992).

Response order. This code only applies to responses. Response order represents the order in which a player responds to another player's action. A player can be first respondent (1), second respondent (2), or third respondent (3) (see Smith et al. 1991).

In total, the author and the research assistant detected and coded distinct 150 competitive moves (see Table 3:4) with an intercoder reliability of 0.92.¹⁶

Market Orientation	CM type	Cooperative Union	Local firm	Multinational Subsidiary	Specialist	Total
Consumer Market	New product	8	2	6	-	16
	Commercial agreement	4	5	5	-	14
	Prize	9	8	2	-	19
	Marketing Campaign	3	-	15	-	18
	Certifications	2	1	4	-	7
Factor Market	Milk price adjustments	15	19	16	19	69
	Producer contract	-	-	2	-	2
Investment	Investment	2	2	1	-	5
Total		43	37	51	19	150

Table 3:4 Market player competitive moves by market and type

In the first part of the analysis, all the players' competitive moves and interactions were chronologically ordered. This allowed for a focus on the central interaction moments for each player. The third round of interviews focused on clarifications about those interaction moments. With such data, I developed a within-case analysis to preserve each case's unique pattern (see Strauss and Corbin 1990). After, I proceeded a cross-case comparative study, where I compared and contrasted cases' patterns (Eisenhardt 1989). This allowed for the

¹⁶ This intercoder reliability is high because the code follows a structured fashion where the dimensions are pre-established. Interviewees were asked to clarify about the players' competitive moves during the interviews, so the data was complete and rich; this led to fewer uncertainties.

construction of detailed explanations and refinement of underlying mechanisms. Simultaneously, I compared the findings with the literature ensure a coherent dialogue between theory and data.

3.4 Results

3.4.1 The Cooperative Union's influence on market competitive dynamics

The Cooperative Union's milk collected market share in São Miguel increased from 2010 to 2015. In 2015, the Cooperative Union received around 47% of São Miguel milk supply (see Table 3:1).¹⁷ This signals that the Cooperative Union is investing in a growth strategy. As a result of such growth, the Cooperative Union started to be, using the interviewee's words, a "respected" player in the market; they were the ones setting the milk price in the factor market.

A factor that triggers this situation is the supplier mobility that exists in this market. In São Miguel, suppliers have the mobility to sell their milk to any of the players operating in the market, since buyers have milk collection points all over the island.¹⁸ Suppliers are able, therefore, to switch buyers according to price changes. A supplier can change of buyer within a lead-time of six months; however, the contracts between players and retailers are annual. If player's supply decreases suddenly, they incur in the risk of not being able to fulfill such contracts, thus risking reputational damage in the market. Given this negative consequence of losing suppliers, when the Cooperative Union increases the milk price in the factor market, the other competitors need to match such prices. This dynamic allied to the Cooperative Union's increased market share of milk collected explains how it becomes a price setter in the market.

We have a lot of impacts [on the milk price] because we started to be respected. Since 2009/2008 we began to set the milk price on the island due to our growth. By respected I mean that when we establish the price of the milk, we force the other players to pay the same or almost the same. From 2010 to 2015, when the other players did not match our price, the producers moved to the Cooperative Union, and we grew even more. At that time everybody was undersupplied, so everybody needed to pay more for the milk. (Cooperative Union Board President)

¹⁷ The percentage milk collected is different from that of milk processed in the Cooperative Union's facilities (See Table 3:1). This discrepancy results from the Cooperative Union reselling the raw product to the Specialist.

¹⁸ The Specialist, however, is excluded from this list because it only accepts large suppliers, and, more recently, it has not increased its number of farmers.

Sometimes, we pay more than the other players; sometimes, we do not, however, if we do, we force others (competitors) to pay the same price that we pay. I do not know if you have understood. I mean that from some years, we are the ones that set the milk price on the island. (Cooperative Union Board Member)

The other players are bigger than us and usually, the most major player, the most powerful, is the one dictating the rules. It has always been like that. The biggest dictate the rules and the smaller follow the rules or disappear. Historically things work like that. Thus, we are a smaller player out of the four operating on the island, despite the fact that regarding cheese production we are the second biggest before the Multinational Subsidiary and after the Cooperative Union, the Specialist does not produce cheese. [...] We do follow (imitate) the biggest players because we do not have dimension and autonomy to dictate the milk price; therefore, we accept that because we are smaller. (Local Firm board member)

The Cooperative Union is the one setting the milk price and then us [Multinational subsidiary] and the Local firm. Both of us [Multinational subsidiary and the Local firm], we follow the Cooperative Union when the price increases, however when the price decreases we tend to be the leaders. (Multinational Subsidiary Milk Collection director)

3.4.1.1 *Players' behavior in the milk factor market*

The milk factor market suffers some fluctuations in price during the year. In spring and summer, the grass is more nutrient rich and abundant. Thus, in the summer months, milk production increases and prices in the factor market decrease. In the cooler months, the opposite happens. Such fluctuations influence the consumer market. When the prices in the factor market decline, national and international players can produce at more competitive prices. This means that dairy product prices decrease in the consumer market. Azorean players, on the consumer side of the market, compete with all these national and European competitors; therefore, they need to adapt to such fluctuations. If Azorean dairy firms do not adjust to market changes, they risk losing market share in the consumer market; however, they still present different response behaviors to such market dynamics.

Players' competitive behavior in the factor market reveals how they adapted to the market dynamics. Regarding price increases, the Cooperative Union raised the price nine times and decreased six. The Local Firm increased ten times but decreased seven times; the Multinational Subsidiary increased nine times but decreased seven times, and finally, the Specialist increased eight times but decreased ten times (Table 3:5). The Cooperative Union is not the player that raised the price more times, but it is the one that decreased it fewer times. Also, the analysis of the annual average milk price per year from 2010 to 2015 reveals that the Cooperative Union consistently pays the higher price in the factor market (see Figure 3:1). This analysis shows that the Cooperative Union's goal is to keep the milk price high, avoiding price decreases.

The analysis of the competitive behavior regarding actions—first mover—and responses—followers—also helps to elucidate about the player's behavior in the factor market. The

Cooperative Union was the first mover in price increases six out of nine times, and follower in price decreases four out of six times, indicating that the Cooperative Union is a first mover in price increases and a follower in price drops. The Local firm is also mainly a first mover in milk price increases and a follower in price decreases; however, its behavior is not as accentuated as the Cooperative Union's one. The Multinational Subsidiary displays a radically different behavior being a follower in price increases and first mover in price decreases (see Table 3:5).¹⁹ The Cooperative Union is the first to increase the price and the last to decrease it. This analysis complements the previous one, showing that the Cooperative Union keeps the milk price as high as possible for the longest period possible since it is the first player to increase the price and the last to decrease. The quotes from the interviewees reinforce this line of evidence.

Our goal is always to be the first to increase milk prices [in the factor market] and the last to decrease milk prices. (Cooperative Union Board President)

This is how I read the market, you should also take a look, our responses are mainly in the price increases, and their responses (Cooperative Union) are mostly in price decreases. This does not happen always, but the trend is that they raise the price before us, because as soon as they understand that the price is increasing in Europe they increase, and we eventually react later. (Multinational Subsidiary Marketing Director)

The Cooperative Union is the first one raising the milk price most of the times; in the price decreases is the opposite. The Cooperative Union, because it is a cooperative adopts different policies, because they are focused on the members while we are a private firm. We don't want to see our producers unhappy; off course we don't want that. However, our goal is to be profitable; there are no private organizations that don't think like us. (Multinational Subsidiary production technician)

My perception is that the Cooperative Union plays a major role in setting the milk price. I would say that we follow the Cooperative Union around maybe 70% of the time, perhaps...I know that is significant. It means that what the Cooperative says is like 'law' in this market. See that, the Cooperative Union, as the name indicates, is a cooperative where the members are the owners. We here are a private firm that buys (the milk), they also purchase the milk, but they are buying it from their members. Here, we buy from producers that are not 'ours'; there the producers are the owners. They need to maintain the owners with a high level of satisfaction. We also want our producers satisfied and motivated, but our connection with farmers is different from theirs. Therefore, they are in a better position to set the price. (Local firm board member)

¹⁹ The Specialist exhibits a behavior that is distinct from one of other players' because it does not compete in the same market. The Specialist follows the trends of the powder milk market commodity and also is dependent on its corporate group internal dynamics since its production is all sold to other subsidiaries of the group.

	Cooperative Union	Local firm	Multinational Subsidiary	Specialist	Total
Milk price adjustments (0 base)	-	2	-	1	3
Milk price increase	9	10	9	8	36
Action (1 st mover)	6	6	1	6	19
Response (follower)	3	4	8	2	17
Milk price decrease	6	7	7	10	30
Action (1 st mover)	2	3	5	6	16
Response (follower)	4	4	2	4	14
Total	15	19	16	19	69

Table 3:5 Player's pricing competitive moves

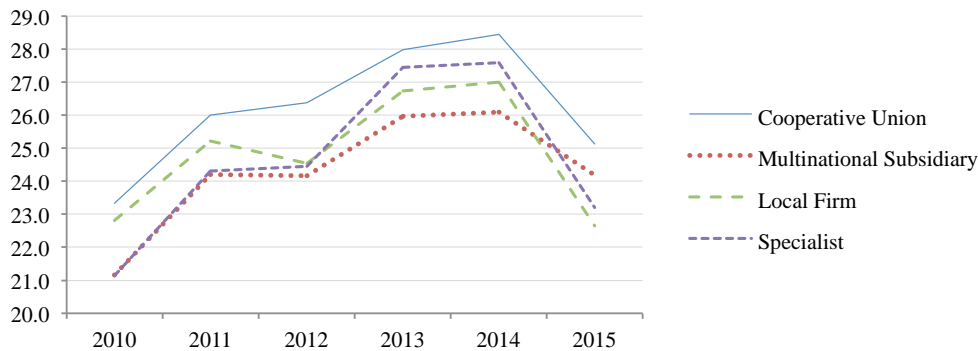


Figure 3:1 Players' average milk price in cents per year

The Cooperative Union behavior in the factor market is to keep the milk price as high as possible for the longest period possible. Cooperative Union's behavior is in line with the cooperative principle of increasing members' benefits. Considering that members are the cooperative's milk suppliers, the higher the price it pays for milk, the higher its members' incomes get (see Parliament, Lerman, and Fulton 1990). The other players, the purely commercial firms, endorse different logic towards factor market/suppliers. Their goal is to keep the cost of supply as little as possible to maximize profits—the milk supply is the biggest slice of the cost structure of these market players. Therefore, the behavior of the Cooperative Union in the factor market contrasts with that one of other commercial oriented players. The Cooperative Union presents an "atypical" behavior from what one would expect from an industrial organization.

3.4.1.2 The competitive microcosm

In the studied market, suppliers can relatively quickly change buyers, the decision regarding which buyer to sell to is highly price-oriented. Therefore, if commercial players do not follow

the Cooperative Union pricing behavior, they risk losing part of their supply both in a short and medium term. This potential downside of price erosion leads to a sustained increase in milk prices in São Miguel. The interviewees referenced this situation innumerable times. For them, the milk prices in São Miguel are "higher than other markets," "higher than the real value of the milk" and the Cooperative Union is "increasing the competition in the market."

Imagine that the price of milk increases, our producers will start to complain that we are not paying enough; they will leave us to go to the Cooperative Union if it accepts them. If the Cooperative Union takes them, we will lose a part of our supply that is essential to our strategy. Most times, the first producers to leave us are the producers with higher quality, the best suppliers, so we are losing the milk with the highest quality. Additionally, if a farmer leaves us for the Cooperative Union, it will be difficult to return to us. Therefore, if we want to grow ... the milk pricing policies are essential for us to our long-term vision. (Multinational Subsidiary Production Director)

The milk price is the main reason for farmers to change buyer. If we decrease the price of the milk and the Cooperative Union does not, it is normal that farmers change, as they will receive more for their milk. (Local Firm Production Director)

The Cooperative Union defends its role in the market; I do understand that I don't disagree. They try to protect and increase farmers' income, or at least to offer the highest price for the milk. However, this implies that the players in São Miguel—we, private firms—need to pay higher prices for the milk compared to other markets. (Multinational Subsidiary Production Technician)

The Cooperative Union, which presents a different social object than us, it tries to hold the price high and maintained it higher for a long time, which forces us to pay more than the real value of the milk. (Local Firm Board Member)

On the one side, we started to have more difficulties in buying milk, and on the other side, we began to have more competition [on the consumer market], since the Cooperative Union also sells in our markets and started to increase a lot the competition. (Local Firm Board Secretary)

The analysis of the Cooperative Union's competitive behavior regarding *ex-post* scope—the number of responses to a given competitive move (see Chen, Smith, and Grimm 1992)—, reinforces the argument that the Cooperative has an upward influence on the factor market. The Cooperative Union's price-increasing competitive moves led to 15 responses from competitors (see Table 3:6). This influence aligns with the literature in that actions that having a competitive impact and representing a threat to competitors' businesses are more likely to be noticed and also to trigger responses from competitors (Capron and Chatain 2008; Chen and Miller 1994). Therefore, the Cooperative Union has initiated competitive moves with high competitive impact, thus triggering rivals responses and increasing competition (Chen and Miller 1994).

	Cooperative Union	Local firm	Multinational Subsidiary	Specialist	Total
Milk price decrease	1	6	8	8	23
Milk price increase	15	5	4	12	36
Total	16	11	12	20	59

Table 3:6 Total ex-post responses to players' actions

The competition in São Miguel factor market is higher than would be expected in an oligopsonistic market, where the suppliers are many and *quasi*-undifferentiated. Markets with a small number of competitors tend to have fewer competitive moves and also tend to develop tacit or explicit collusive behaviors (Scherer and Ross 1990). This is not the case of this market. The market presents a relatively intense competitive dynamic, wherein 33% of the actions lead to at least one response. Additionally, the atypical behavior of the Cooperative Union also does not allow the prevalence of collusive behaviors concerning milk pricing—an essential competitive dimension on this market. Furthermore, the interview data reinforced the fact that the factor market dynamics are distinct from similar markets. Field specialists refer to the Azorean factor market as having "*particular local dynamics*" and also as a "*unique microcosm*."

The Cooperative Union, due to its cooperative logic, has been displaying an atypical behavior in the factor market. While the Cooperative Union wants to keep the milk price as high as possible for the longest period possible, other players, who endorse a commercial logic, aim at keeping their supply costs as low as possible. Since the Cooperative Union is the price setter in this market, due to its relevant market share, its atypical behavior has been impacted the factor market competition upward. This increase in competition is higher than would be expected in similar markets—oligopsonistic market structure and *quasi*-undifferentiated suppliers—but where players are all purely commercial oriented. This rationale explains the mechanisms that contribute to the particular dynamics of this market, which citing interviewees is like a microcosm, a small world with specific dynamics.

3.4.1.3 *The competitive microcosm influence on consumer market strategies*

The factor market has important implications on returns and operating margins since the returns on consumer market depend on the cost of the resources to implement such policies, which, in this case, is raw milk (Barney 1986). These two markets are even more interrelated in industries where the primary raw material represents the largest slice of players' operational costs. Therefore, when the price of milk in the factor market increases or decreases, this will have a direct effect on operating margins and players' strategies in the consumer market.

The analysis reveals that commercial players are shifting towards a more differentiated strategy. Both the Multinational Subsidiary and the Local Firm are investing in differentiated products.²⁰ For example, the Multinational Subsidiary launched three new products in 2013 and 2 in 2014; these products are all positioned as differentiated products. The same is evident with the Local Firm, which initiated its differentiation strategy by launching two new products in 2014 (see Table 3:7). The interviewees attribute this shift in strategy to the intensification of the competition in the factor market.

The milk is our primary raw material and has a determinant influence on the profitability of our business. The price of milk in the Azores is not competitive nowadays when compared with the Portuguese mainland. This is a big concern for us because it decreases our competitiveness in the national market. (Multinational Subsidiary General Director in a press article published on November 20th, 2011)

[Interviewer: How does this (competition) affect your strategies?] We cannot buy milk somewhere else; imagine that the Cooperative Union announces an increase of 3 cents. We know that right now under the actual market condition this would not happen because there is an oversupply of milk in the island. But imagine a situation where there is undersupply of milk, we have two options, or we increase the price (of the products), and we try that the market responds to this increase, (...) or the market doesn't answer well, and in this case, we lose producers. (Multinational Subsidiary Milk Collection Director)

If we have increases or decreases in prices (milk prices), we need to adapt the prices in the consumer market. Or we raise the price, or we change the value proposition; this is the commercial part. (Multinational Subsidiary Milk Collection Director)

[Interviewer: How does this (competition) affect your strategies?] The strategy was... since we could not increase the volume, we were always increasing a bit, but not as much as we would like, we started to privilege the products with higher value added. (Local Firm CEO)

Year	Cooperative Union	Local Firm	Multinational Subsidiary
2010	Chocolate Milk 4 new functional milks	-	Terra Nostra Gourmet slices
2011	Butter in cuvettes	-	-
2012	Beverage new packaging	-	-
2013	Light cheese Cheese slices	-	Cheese light -30% Cheese slices for sandwiches Grating Cheese
2014	Butter half-salt Gourmet butter	Processed cheese Fresh cheese light	Butter Cheese with fine herbs slices
2015	-	-	-

Table 3:7 Players' products launched from 2010 to 2015

The results show that the Cooperative Union's market power and atypical behavior, attributed to its cooperative principles, has contributed to an increasing competition at local factor market. This increased competition leads to a “*competitive microcosm*” in which the competition increases more than what would be anticipated compared to markets with similar

²⁰The Specialist does not sell products directly in the consumer market. The Specialist produces mainly powdered milk that integrates other products.

characteristics (oligopsony structure and quasi-undifferentiated suppliers), but where players are all purely commercial oriented. The intensification of the competition on the factor market has affected commercial players' profitability and competitiveness, forcing them to move towards more differentiated strategies.

3.4.2 The Cooperative Union's influence on market institutions

Due to the inherent seasonal fluctuations in the milk factor market, players felt a need to moderate it. Therefore, players tacitly agreed the "seasonality rule," whereby milk price decreased by 2,5 cents on the first day of March and increase by the same value on the first day of September. All four players have followed this practice, and the system has been in place for more than 15 years.²¹ This practice became a regular practice for all players in the market, a rule of action, a granted prescription that has guided players' behavior on the factor market. Therefore, the "seasonality rule" has become an "institutionalized" practice in the Azorean factor market, using the words of the interviewees (see Friedland and Alford 1991; Ocasio 1997; Suddaby and Greenwood 2005; Thornton 2004 for institutional logics).

The seasonality rule prevailed despite the opposition from local agriculture associations and suppliers. Such market constituents defend that due to the development of new animal feeding techniques, the difference in production between summer and winter is not that big anymore. Therefore, they support that the difference between summer and winter prices does not reflect the reality of the market. However, since the market players have established a pattern and they see benefits from such a practice, this institution has survived throughout the years.

The seasonality was already a regular practice. The price (milk price) was established knowing that there was this seasonality rule. [...] What did we pretend with seasonality? We pretended to increase the production in winter and decrease in summer; there is a goal with that. (Multinational Subsidiary Milk Collection Director)

We used to have summer and winter prices. When we apply the summer rate, is not a price decrease, is a tabled price. This was an ancient practice when I started here 23 years ago; this had already existed. (Multinational Subsidiary Milk Collection Director)

For 15 years, on the first day of March, the price of the milk to the farmers decreased 2,5 cents and increased in the same value after in the first day of September. This seasonality in the milk price had always created problems for the producers. [...] Despite the fact that the Agriculture Associations have been consistently discussing and questioning this topic, the industry players never wanted to discuss it. (In press article published on March 24th, 2014)

²¹ There is contradictory information about when the seasonality rule started to be applied. In the press articles there is the information that it was 15 years ago; however, the interviewees pointed for 23 years. This contradictory information is typical in situations where there are no written rules. Since this is a tacit rule, it's hard to agree when it has started effectively.

3.4.2.1 *The Cooperative Union defies seasonality*

The analysis of the players' competitive moves in the factor market (see Figure 3:2) (Smith et al. 1991) shows all the steps in the process of seasonality deinstitutionalization. In 2010, all the players behaved in a usual manner, i.e., they decreased the milk price in March and increased in September. There were other price increases and decreases outside of these dates, but only minor and isolated price changes. The Cooperative Union started changing its behavior in 2011, when it maintained the price in March, while it should have decreased accordingly with the seasonality rule. In that year the Multinational Subsidiary and the Local Firm followed the Cooperative Union's behavior. However, the Specialist still applied the seasonality rule, decreasing the price it paid. In September 2011, however, all players increased the milk price. In 2012, the seasonality pattern with main price changes occurring in March and September repeats. In this year, the players, except the Cooperative Union that kept its position to defy seasonality, have decreased the price in March and increased in September. However, from 2013 the pattern of price changes disappeared. In 2013, 2014 and 2015 the changes in prices were distributed across the year, without a clear pattern. This means that the seasonality rule was deinstitutionalized and price changes were obeying to the real market fluctuations, instead of obeying rigid market tacit rules (see Figure 3:2).

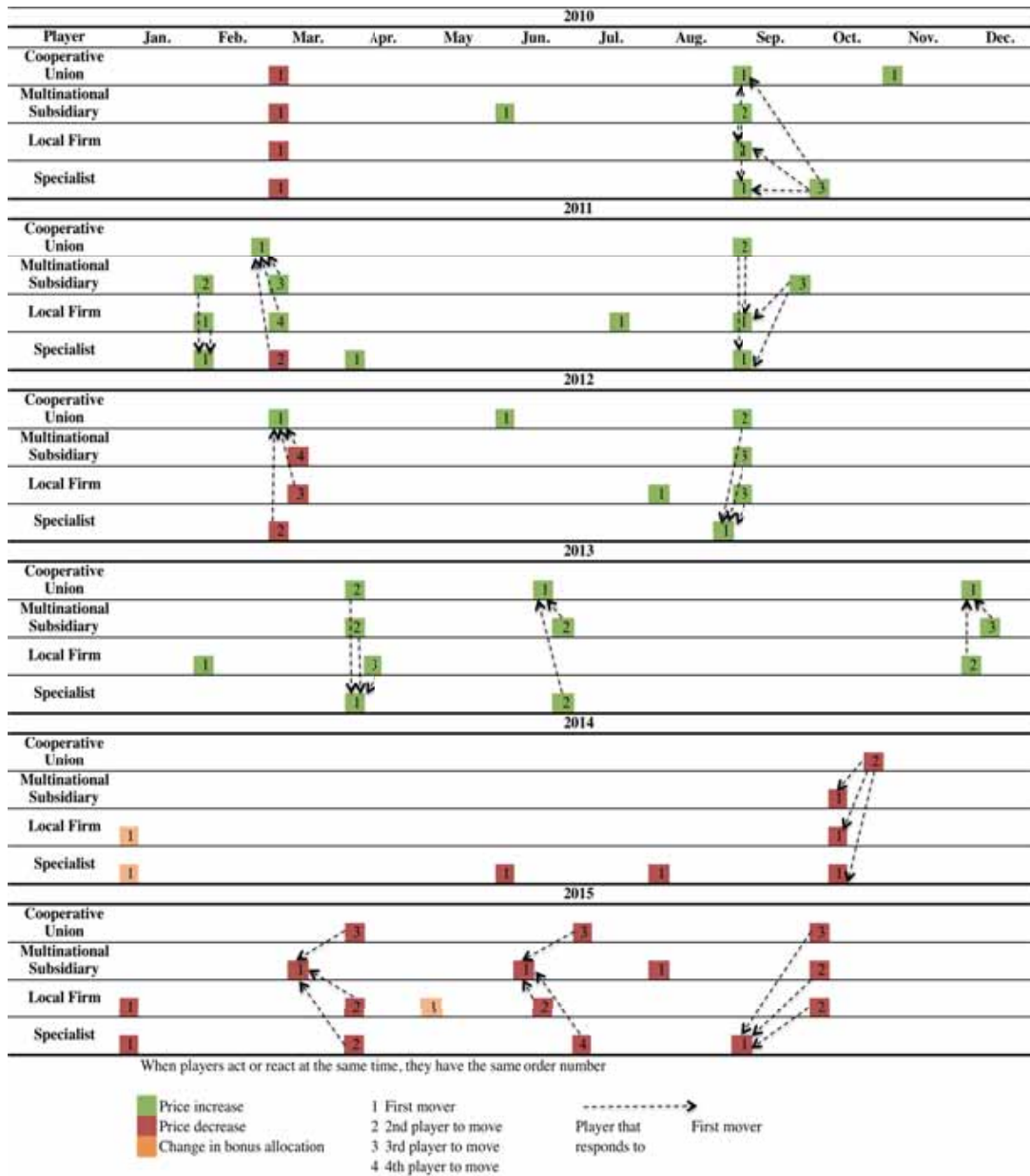


Figure 3:2 Chronological representation of player’s pricing competitive moves and response order

The Cooperative Union defeated the seasonality practice mainly due to its cooperative goals. The elimination of the artificial variance in the milk price through the year allows farmers to have more stable incomes, enhancing the survivability of the small and medium-size suppliers. This defiance was a defining move for the Cooperative Union, not only due to the positive impact on suppliers' incomes but also because it gained the trust from the agriculture-related constituents of the island.

We have tried in the past to level the milk price, but we do not always succeed (...) we made this effort, and now there is no difference between summer and winter prices, this is a fight that we won. At this moment, the whole market does not differentiate summer and winter prices, and it was a strategy started by us. They [other players] begun to approximate, and at this moment this is already finished (Cooperative Union General Secretary)

This was a strategic move [the defiance of seasonality] for the Cooperative Union not properly for the business itself, but for the social aspect, to balance the farmer's income through the year. Therefore, this move was attractive to the Cooperative Union because we have conquered farmer's trust, attracting more farmers for the Cooperative. As you know, farmers have this mobility. It was a strategic move by then, but after that it was institutionalized, and everybody started to follow us. But at that time, there was an undersupply in the market, and the other competitors followed us not to lose suppliers that would come to the Cooperative Union, that's the main reason why they [competitors] followed us. (Cooperative Union General Secretary)

When questioned about this behavioral change, commercial players stated that they needed to follow the Cooperative Union due to competitive reasons. The timing was crucial in this process. From 2010 to 2013 there was a big short in the milk market; therefore all players were fighting for suppliers. In Figure 3:2, we can see that from 2010 to 2013, the competitive pricing moves were almost all price increases, while from 2014 the situation changed. In this way, commercial players were forced to follow the Cooperative Union for fear they would lose access to supply. The Multinational Subsidiary was not in agreement with this behavioral change, while the Local Firm could understand it due to the volatility of the markets. Nevertheless, it never took the initiative to alter the situation before the Cooperative Union's action. Market conditions and the Cooperative Union's market power were key factors to trigger the deinstitutionalization of the seasonality practice.

We are in a competitive market, and since the competition changed the system, the seasonality pricing, we stopped applying it, although I am against that because we still produce more in spring than in winter (...). [Interviewer: But if you were against, why did you stop applying the seasonality practice?] Because this is a competition aspect that affects the prices, markets, and competition and we need to be aligned with that. The factor market is a free market; if the farmer thinks that it is better to abolish the seasonality... the seasonality is a mechanism to discipline the farmers. I understand that if I were a farmer, I would prefer having more freedom [regarding stable incomes]. If the producer thinks that this is the best way to go, so we follow this way. However, we needed to find other mechanisms to control production. (Multinational Subsidiary Milk Collection Director)

It was abolished [seasonality] because it was a thing that producers did not like and therefore the Cooperative Union stopped applying it, and we also decided to remove it. There were years when there was a high demand for the products, and it did not make sense decrease the price to the producer. This mechanism was adopted [seasonality] when it worked well when the market was less volatile, and every year the same trend happened, and there were not many price fluctuations. (Local firm CEO)

The Cooperative Union had incentives to defy and change a market institution that was in place for more than 15 years because such institution did not align with its cooperative principles. The results also suggest that the Cooperative Union had market power (price

setters) and the favorable market conditions were important triggers for this deinstitutionalization process.

3.5 Discussion

This paper investigates how hybrid organizations influence market competitive dynamics and institutions in the environments in which they operate and under which conditions. To investigate such question, I have followed the market dynamics of São Miguel dairy market, where a cooperative-commercial hybrid competes side-by-side with commercially oriented organizations. The results reveal that hybrids, due to the logics they endorse, tend to display a competitive behavior that deviates from the ones of non-hybrid organizations. The hybrid atypical behavior allied to its relevant market share contributed to the increase of the competition in the market. This increase is higher than would be expected in markets with similar characteristics but where all players display similar behaviors, for example, commercially oriented behavior. Higher the degree of incompatibility between hybrids' endorsed logics and competitors' logics, higher the hybrids' influence on competition. The results also reveal that hybrids have a higher incentive to defy and change market institutions when those clash with hybrids' endorsed logics. In these situations market power function as a mechanism to trigger market institutional change.

The hybrid under study is a cooperative-commercial hybrid that pursues its cooperative goals through commercial activities. Such hybrid endorses a commercial logic towards its consumers and cooperative logic towards its suppliers. The suppliers are therefore the beneficiaries. As seen in this case, the logic endorsed towards suppliers, which constitutes the factor market side, conflicted with the commercial logic endorsed by other players. While commercially oriented players aim at decreasing the factor market price, the hybrid, to beneficiate suppliers, wanted to increase the price as much as possible. Because the hybrid instantiates a logic that differs from the dominant logic in the market, it has adopted an atypical behavior that clashed with the other players' behavior, what increased competition. This increased competition, triggered by the hybrid atypical behavior and relative market share, is higher than would be expected in markets with similar conditions—quasi-undifferentiated suppliers and oligopsonistic structure—and where all players endorse similar instead of conflicting logics. I refer to this effect as a "*competitive microcosm*." A *competitive microcosm* emerges when market player's atypical behavior leads to an increase in competition level higher than would be expected in markets with similar characteristics and

where players display similar behavior. The higher the degree of incompatibility between hybrids' endorsed logics and other players' logics, the greater the influence of the hybrid on the competition. This effect is attenuated or aggravated by the market power of the hybrid.

These results can be generalized to other markets where hybrids and non-hybrids compete side-by-side. The results might also be generalized to hybrids to which the consumers are also the beneficiaries, like in the case of microcredit organizations (see Battilana and Dorado 2010). Such organizations' goal is to offer loans with the lowest interest rates possible, while commercial banks want to maximize their return through high-interest rates. In a case where both microcredit social enterprises and commercial banks compete in the same market, this conflict between market players' logics might trigger the same effect as we saw in the analyzed case.

The results also reveal that the increased competition on the factor market lead competitors to adapt their consumer market strategies, focusing more on differentiation. When organizations compete in the same market, their competitive moves will influence competitors' moves and strategies (Smith and Ferrier 2001; Smith et al. 1991). To increase beneficiaries' welfare, hybrids employ strategies that attack competitors' resources, increasing their costs and reducing the quantity they can profitably produce (see Capron and Chatain 2008). As margins shrink, opponents are forced to adapt their strategies to related markets. Therefore, hybrids might not only influence the competition in the market where their beneficiaries are but also indirectly affect the competitors' strategies in related markets. This rationale shows how hybrids' atypical behavior in the market escalates loops of feedback, affecting other players' responses. Such results advance our knowledge about how loops of organizational responses to institutional complexity influence each other's responses in the field (Greenwood et al. 2011; Pache and Santos 2010).

The Cooperative Union defied and changed a market institution that was in place for more than 15 years because such institution conflicts with the principles of that organization. The results also suggest that the Cooperative Union's market power (price setters) and the favorable market conditions were important triggers for this deinstitutionalization process. As hybrids exist in the intersection of different logics, they access a broader portfolio of options from where they can strategically combine elements accordingly with their interests and goals. This inevitably leads to higher diversity and increases the chances that new ideas and concepts emerge in the field, shaping the field logics (Greenwood et al. 2011; Kraatz and Block 2008; Scully and Meyerson 1996; Seo and Creed 2002). Previous papers have studied how actors actively engage in institutional change through campaigning and lobbying (see

Battilana and D'Aunno 2009; Tracey, Phillips, and Jarvis 2011). In this paper, I show that market power can also function as a mechanism to shape environments.

This paper focuses on the conditions under which hybrid organizations influence the dynamics of the markets in which they operate. To pursue such investigation, I analyzed the competitive behaviors and interactions of hybrid and non-hybrid organization. These organizations compete in the same institutional setting; however, they instantiate and respond differently to institutional pressures. Since this study is about market interactions of organizations that instantiate and responds differently to the same institutional forces, the results can be, therefore, extended to environments where organizations display different answers to institutional complexity. The contributions highlight that in complex institutional environments where organizations present different responses to institutional pressures, the level of competition might increase more than would be expected in less complex institutional environments where organizations respond similarly to institutional pressures. Also, this paper defends that organizational responses are not only influenced by institutional forces and internal characteristics—such ownership, governance, structure, resources, position on the field and identity (Greenwood et al. 2011)—but also by feedback loops triggered when organizations respond to each other responses. This paper answers the call to study not only the effect of feedback loops on field structures but also the bridges between intra and inter-organizational level of analysis (see Greenwood et al. 2011; Pache and Santos 2010).

This paper also contributes to a central debate on the institutional theory about isomorphic forces. Traditionally, the institutional theory has described the processes by which institutions shape organizations leading to practices homogeneity through isomorphic processes. Organizations comply with logics in the search for legitimacy, support, power, and resources from critical audiences. Therefore, they adapt to external institutional pressures what leads them to respond similarly (DiMaggio and Powell 1983; Friedland and Alford 1991; Greenwood et al. 2011; Meyer and Rowan 1977; Suddaby and Greenwood 2005). While in the short term, different levels of institutional pressure could lead to different practices for some time, in the long term isomorphic forces would result in common structures and practices inside the field. Therefore, emerging fields are often characterized by harsh contestation amongst logics, while mature fields are more likely to display stable priorities amongst logics (Greenwood et al. 2011). However, the results of this paper demonstrate that conflicts amongst logics might persist in mature fields. Further investigation needs to focus on whether the degree of field logics incompatibility influences competitive dynamics of the markets. This paper also answers the call to study institutional complexity in mature fields (Greenwood et al. 2011).

Finally, there are also practical implications for policymakers resulting from these contributions. As hybrid forms of organizing emerge and thrive, regulatory framings also start to appear to regulate such organizations. For example, as social enterprises start to emerge, some regulations also appeared providing them a special status in the law. Because such organizations address social problems and have different characteristics, they tend by law to benefit from some taxes exemption, what may lead to contestation from incumbent forms. For example, traditional organizations from the charity sector have publicly announced their opposition to social enterprises (Murray 2012). The same happens in the case of cooperatives, where commercial organizations also show their opposition to cooperatives because of the taxes reductions. Therefore, a more informed understanding of how the cohabitation of such organizations in the same markets unfolds in competitive terms could help policymakers to understand and interpret the field forces and thus assisting them to advise and implement proper regulations.

Market competitive dynamics does not occur in an institutional vacuum. They are shaped and guided by institutional tensions, both at intra and inter-organizational levels. This paper contributes to institutional theory, bridging institutional and market levels of analysis, and focusing on how the diversity of organizational responses to institutional pressures affect market competitive dynamic.

Chapter 4 Online Crowd Organizations: Towards a Definition

4.1 Introduction

Since the diffusion of crowdsourcing, crowdfunding, and the like, crowds have been attracting a growing attention in the technology and innovation management field. In many regards, the growing importance of crowds is due to their ability to create knowledge and stimulate innovation (Afuah and Tucci 2012; Brabham 2013; 2008; Howe 2006). However, in the crowdsourcing literature, the definition of the term *crowd* is rather ambiguous and often replaced by the term *communities* (Boudreau and Lakhani 2013).²² A deeper look at the literature reveals that crowds and communities are different types of collectives with specific characteristics. Brabham (2013) indeed pointed that crowdsourcing is “not just any instance of an online community” (p. 10). The lack of consensus on what *crowd* means leads to potential misunderstandings regarding crowd’s behavior, structure, and social impact (Wexler 2011). Since the characteristics and dynamics of these collectives profoundly affect the design of the digital platforms that accommodate them, understanding their nature is, thus, determinant for the success of these initiatives. Therefore, there is a need for a systematic understanding of the differences amongst online collectives, and on how they create knowledge. In this paper, we address this discussion, focusing on two central questions: What is a crowd and how is it different from a community? How can firms organize crowds for innovation?

Our investigation starts with a literature review of social psychology and crowdsourcing to understand what are the enduring characteristics of online crowds. Accordingly, we define crowds as a large gathering of heterogeneous and serial individuals (interchangeable and

²² Boudreau and Lakhani (2013) defend that “crowds are energized by intrinsic motivations, such as the desire to learn or to burnish one’s reputation in a community of peers” (p. 6). Specifically, in this case, crowds’ members are anonymous, and mechanisms such as reputation are not employed (Viscusi and Tucci 2015). To “gain” reputation individuals need to recognize each other. Therefore, anonymity is incompatible with reputation mechanisms.

anonymous) with a common goal. Crowds can achieve high or even unlimited growth rates; however, they can also dissipate quickly as soon as the crowd attains the goal (Viscusi and Tucci 2015; Lang and Lang 1968; Canetti 1962). Such characteristics lead to emergent norms that rise from interactive processes without any prior coordination and pre-planning (Le Bon 1896; Canetti 1962; Lang and Lang 1968; Marshall 1998). Building on these differentiating characteristics, we define crowd organizations *as made up of loosely-coupled, serial, and equally aligned agents that achieve their goals through emergent norms, enacting generativity*, the capacity for spontaneous innovation.

In this chapter, we also propose that firms that want to access crowds' knowledge can apply different modes of governance. Such modes range from centralized where a firm "controls" the crowd, to decentralized where the firm has little control over the crowd. The governance mode adopted will directly impact the crowd's capacity for spontaneous innovation. We illustrate this trade-off through a *knowledge generativity frontier*, which is a graphical representation of the maximum output regarding knowledge generativity for each governance mode. Then, we identify three main types of online crowd organizations based on their degree of governance centralization and knowledge generativity, namely *crowd-driven*, *crowd-based*, and *crowded* organizations. From a managerial point of view, this framework enhances our understanding of how firms can strategically access the knowledge of crowds for innovation. Finally, we also discuss the implications of misunderstanding the type of crowd organization that the firm aims to activate, and the impact on explorative/exploitative innovation outputs.

4.2 Theoretical Background

4.2.1 Physical and online crowds

Le Bon (1896), the father of social psychology, defines crowds as a gathering of individuals of whatever nationality, profession, or gender, and whatever conditions that brought them together. Later on, Lang and Lang (1968) describe such collectives as an assembly of people at one place, and more recently, Marshall (1998) as a large gathering of people nearby, with a common concern. In the last two definitions it is implied that the authors associate crowds to physical proximity, however, it is worth to notice that Le Bon (1896), on his first definition already decouple the concept of the crowd from its physical presence. He argues that such collectives may exist without the simultaneous physical presence of individuals; isolated individuals might also acquire, under certain conditions, the status of a crowd. Imagine an unusual event in a public place that attracts a large number of curious lookers that want to

understand what is going on. Their physical convergence in a place, motivated by the unusual incident, constitutes a crowd (Lang and Lang 1968). How is this different from the situation where an online press article or video calls people attention, impelling them to visit the website to read it or watch it? In both circumstances, people were attracted by an event, randomly interacting and talking to each other on the spot, or commenting and replying to each other in an online platform.²³ Physically or virtually such gathering of people attain the dimension of a crowd. Such premises holds not only for more primitive crowds, as the ones described above, but also for more “organized” ones, where individuals intend to achieve some goal through collective behavior.

More recently, with the advent of the Internet, the term crowd is often associated with online environments and crowdsourcing activities. In the crowdsourcing literature, crowds constitute the: “the act of sourcing a task to a ‘crowd,’ rather than to a designated ‘agent,’ such as a contractor, in the form of an open call” (Afuah and Tucci 2012 p. 365). The crowds encompass more or less heterogeneous individuals located in the whole world, a country, a club, across different firms’ facilities, and so on (Afuah and Tucci 2012; Estéllés-Arolas and Ladron-de-Guevara 2012). Regarding crowd rationality, crowdsourcing research aligns with the views of Berk (1974), Couch (1968), and Turner and Killian (1987), characterizing crowds as rational, potentially problem solvers, idea generators, future trendspotters (Wexler 2011), or even “wise” (Surowiecki 2004). However, in the crowdsourcing literature, the term *crowd* is defined in a rather ambiguous manner, without questioning its characteristics and dynamics (Brabham 2013; Wexler 2011). In this paper, we will follow Le Bon (1896) conceptualization of virtual crowds, which we will call online crowds, exploring the characteristics and dynamics of physical crowds, and discussing how such features extends to online crowds.

²³ We are assuming that website design and function can support visitors’ comments and answers.

4.2.2 Online crowds' characteristics

A crowd is a large gathering of heterogeneous individuals with a shared concern (Le Bon 1896; Lang and Lang 1968; Marshall 1988). The interplay of such characteristics leads to particular dynamics that differentiate crowds from other types of collectives as communities (see Viscusi and Tucci 2015). In the following paragraphs, we will expand crowds' characteristics regarding orientation, membership, growth rates, and norms (see Viscusi and Tucci 2015).²⁴

As a large agglomerate of heterogeneous people, crowd members preserve the *seriality* characteristic, which means that they are anonymous and interchangeable, meaning that their order of participation is irrelevant (Sartre 1960; Viscusi and Tucci 2015). Even in the situation where individuals can “see” each other, if they are part of a physical crowd for example, due to the large numbers, individuals are not able to retain information about “who” are the other members of the crowd, not even about a small fraction of the crowd. Therefore, even if crowd members can “see” each other, they will still “feel” anonymous. Online environments preserve anonymity and interchangeability since people are not physically together and Internet *alias* can further protect their identity.²⁵ Therefore, online crowds' members are heterogeneous and serial—interchangeable and anonymous.

Crowd members share a common concern (Marshall, 1988) that range from a particular task to a shared purpose. Take, for example, the phenomenon around Pokémon GO, a location-based augmented reality game, which attracted a crowd to streets to catch virtual pokémons. In this case, the goal of the crowd was individualistic and particular. Contemplate also the example of the pro-democracy protests in Tunisia back in 2011, where protesters used social media to attract the attention of hundreds of thousands of people against the government. The tweets about the protests jumped from 2.300 to 230.000 per day before Mubarak—Egypt's president at that time—stepped down on February 11. Eventually, on January 2011 hundreds of thousands of people came to streets to protest forming a physical crowd, however, before that, the crowd was already growing and interacting online expressing its pro-democratic purposes (Shearlaw 2016). Such goals may range from particular tasks to high-level purposes are what ultimately ties crowd members' to each other. Therefore, online crowds are goal

²⁴ Viscusi and Tucci (2015) describe crowds across the following dimensions: growth rate and its attractiveness to the members; equality among members; density within provisional boundaries; goal orientation; and seriality of the interactions.

²⁵ Alias are profiles that people create to socialize and navigate on the Internet. Internet alias can be stable through time and used to identify a person. They can also be used abusively.

oriented, meaning that as soon as they attain the goal, whether individualistic or collectively, the crowd dissipates (Viscusi and Tucci 2015; Lang and Lang 1968; Canetti 1962).

Unlimited growth rates also characterize crowds. Crowds gather in public either physical or virtual domains. Hypothetically, any individual that share the same goal or purpose can join the crowd. The fact that there are no norms that define who should be a member of the crowd, the barriers to entry are low. Individuals can, therefore, easily join the crowd or withdraw. Such dynamics explain why crowds can easily grow large or dissipate fast. At the limit, individuals that are part of the crowd may never have a clear idea of the size it may attain (Canetti, 1962). Recurring again to the 2011 pro-democracy protests in Tunisia, the crowd growth from 2.300 to 230.000 per day, after the end of the protest when Mubarak resigned on February 11, the tweets dropped drastically (Shearlaw 2016). This example shows how online crowds can achieve high or even unlimited growth rates, and how they also dissipate quickly.

Together such dimensions contribute to the last crowds' attribute, which is emergent norms. Crowd' norms "emerge" from the interactions of a large gathering of people that aims at alleviating or solving a mutual concern under undefined or unstructured conditions—collective behavior (see also Blumer 1951; Lang and Lang 1968; Marx and McAdam 1994). Turner and Killian's (1987) theory proposes that in the absence of suitable social norms, crowds develop non-traditional behavior, which leads to the appearance of new norms through collective behavior without prior coordination and pre-planning. These norms are not strict rules; rather, they constitute a framework that set limits on what is appropriate, specifically what are the goals and the means to achieve them (Turner and Killian 1987, p. 9-11). For example, take a student crowd protesting a rise in university tuition either physically or online. Such crowd does not display a formal organization or established norms to indicate who are the members, what are goals to attain, and what are the means to achieve such goals; there is only a shared purpose of protesting against university tuition increase. Anyone can be eligible as far as one share the same concern and self-select to participate. Such norms—framework that set limits on what are appropriate goals and means—will emerge as the crowd members interact, they cannot be known beforehand (Marx and McAdam 1994). Throughout this paper, we will build on this emergent character of crowds, which means that in crowds, norms arise from collective behavior processes without any prior coordination and pre-planning.

In summary, an online crowd is a large gathering of heterogeneous and serial individuals (interchangeable and anonymous) with a common goal. Such collectives can achieve high or even unlimited growth rates. However, it can dissipate fast as soon as members attain their

goal. Such characteristics lead to emergent norms, which means that norms arise from interactive processes of a vast number of heterogeneous and serial individuals without any prior coordination and pre-planning (Le Bon 1896; Canetti 1962; Lang and Lang 1968; Marshall 1998; Viscusi and Tucci 2015).

4.2.3 Crowds and communities

The terms *crowds* and *communities* have been used interchangeably both in crowdsourcing and open-source communities literature (Brabham 2013). However, community and crowd are not the same, presenting distinct characteristics. In the following paragraphs, we will delineate the differences between these collectives across the dimensions: membership, orientation, growth rates, and norms.

Communities are a collective of individuals that share the mutual acknowledgment that they are undertaking a joint project or action, thus all sharing the same goals (Young 1994). The sense of belonging, density of interpersonal ties, intimacy, and homogeneity characterize communities (see also Adler 2015; Clark 1973; Hillery 1955; Wellman 1979).

In communities, members preserve stable identities, meaning that people can recognize each other. Even in online environments, where individuals can use an alias, such profiles are often stable, meaning that other community members can recognize them. For example, in the online game community *Star Wars Galaxies*, an online multiplayer game, players can recognize each other inside the community, building a reputation around their alias. Players could even chat with each other, encountering the same players over and over again, “fighting wars together,” and indeed building a relationship (in this case they call it avatar) (Kirdahy-scalia 2005). Since people at communities share homogeneous norms, values, beliefs, and codes, (Adler 2015; Young 1994), they tend to be more homogeneous than in crowds, where members only share a goal. In the case of the *Star Wars Galaxies* online game community, the participants are Star Wars fans with in-depth knowledge about this “universe,” being in this sense homogeneous. Also, the goal of community members is not only to achieve an end itself but also nurture the interpersonal ties and intimacy, in this sense the community is value-oriented instead of goal-oriented (Viscusi and Tucci 2015).

Online communities’ growth rates are more limited when compared to crowds. This feature is a natural consequence of the characteristics already above stated. In communities, there are shared norms, values, and beliefs enforced by peer mechanisms of reputation and affiliation, with a subsequent set of sanctions of disapproval and exclusion (Adler 2015). If an individual desires to join a community, he/she needs to share the same values and beliefs. The example

of Linux, an operating system developed by an open source community, illustrates well such characteristics. In the Linux community, voluntary developers share a common programming language and also the belief that software should be freely available to all (see Lee and Cole 2003). All these dimensions increase the barriers to entry in a community what leads to more limited growth rates when compared to crowds.

Communities' norms are also less emergent than the ones of crowds. The latter tend to present more stable and defined norms, regarding goals and means to achieve such goals. Communities' shared values and beliefs, membership homogeneity and stable identities lead to enforcement mechanisms as reputation and affiliation (Adler 2015; Viscusi and Tucci 2015). Consequently, community norms are more stable and defined and the outcomes of members' interactions more predictable compared to crowd' ones.

Crowds and community's present different characteristics and dynamics, this profoundly influences the way such collectives behave and are organized to create knowledge (see Table 4:1).

Dimensions	Online Crowds	Online Community
Membership	Heterogeneous & serial	Homogeneous & stable identities
Orientation	Goal orientation	Value orientation
Growth rates	Medium to unlimited growth	Limited growth rates
Norms	Emergent	More rigid and pre-established

Table 4:1 Online Crowds and Online Communities

4.2.4 Crowds' typology

Although different authors and schools of thought have developed different crowds' typologies, in this paper, we will follow mainly Canetti (1962) as well as the adaptation of his perspective to crowdsourcing by Viscusi and Tucci (2015), focusing on the concepts of *closed* and *open crowds*. We also consider Marshall's (1998) view on *focused crowds*, where members have a goal in common, as opposed to *diffused* ones, which are more dispersed and uncertain. We will also build on social psychology and crowdsourcing literature (Afuah and Tucci 2012; Le Bon 1896; Brabham 2013; Howe 2008; Lang and Lang 1968; Marx and McAdam 1994). In the following paragraphs, we define closed and open crowds regarding their membership, orientation, growth rates, and norms (Canetti 1962; Lang and Lang 1968; Viscusi and Tucci 2015).

Closed crowds. The individuals who make up these collectives have in common a specific goal to achieve (Canetti 1962; Viscusi and Tucci 2015). This goal is specific in the sense that it represents a specific task that the crowd needs to perform. Since members do not share anything else but the common specific task, as soon as the members perform the task, the crowd dissipates (Viscusi and Tucci 2015). Thus, closed crowds have simultaneously an instrumental and individualistic nature (Lang and Lang 1968; Marshall 1998) in the sense that members perform the same specific task, but individually. Since members self-select themselves to participate in crowds accordingly with their alignment with the crowd's goal, the higher the specificity of the task, the lower is the number of self-selected members who self-select themselves to perform the task, and, therefore, the lower is their heterogeneity. In this sense, closed crowds exhibit medium growth rates, experiencing some sense of boundaries. Its size and individualistic nature limit the interactions amongst members, what consequently will constrain norms emergence.

In the crowdsourcing literature, this is the type of crowd associated with “tournament-based-crowdsourcing,” in which each works in isolation to perform a task and in the end, the highest performer wins. In this situation, the crowd needs to be big enough that some individuals, at least one, know how to solve the problem/task (Afuah and Tucci 2012). Consequently, the relevant unit for a closed crowd is the individual and his/her individuality; this type of collective exploits individual differences instead of similarities (Lang and Lang 1968). Also, members preserve their *seriality*, which means that they are interchangeable: their order or participation is irrelevant and anonymous about each other (Sartre 1960; Viscusi and Tucci 2015). However, since their characteristics are salient, if needed, the external agent can access their identity, for example in case they are the winners. Therefore, closed crowd agents are serial, but their individuality is salient.

Open crowds. The individuals that make up an open crowd have in common a goal that is broader and more dynamic. Such goals comprise some sense of high-level moral purpose. These collectives achieve their goals by collectively imposing a direction aligned towards such ends (see Marshall 1998). Since the goals of an open crowd are broader in nature, the number of self-selected members that adhere to it is higher, as well as their heterogeneity. Accordingly, unlimited growth rates and high membership heterogeneity characterized this type of crowds. At the limit, the open crowd may not have a clear idea of the size it may attain (Canetti 1962).

Open crowds constitute a superior state of crowd behavior. First, seriality disinhibits members' behavior, what allows them to express unconventional ideas (Lang and Lang 1968;

Marx and McAdam 1994). Second, as the crowd grows, the interactions of thousands of heterogeneous individuals cannot be predicted in advance. Therefore, norms are highly emergent (Marx and McAdam 1994).

This type of crowd is the limit case of collaborative crowdsourcing (see Afuah and Tucci 2012), where crowds through individuals collaboration achieve a goal. The output might constantly change; still, it constitutes a whole at each point in time. Consequently, individual differences vanish, and members truly preserve their seriality quality (anonymity and interchangeability).

Characteristics	Closed crowd	Open crowd
Membership	Lower heterogeneity Serial, but individualities are salient	Higher heterogeneity Seriality, individualities are irrelevant
Orientation	Specific task	High-level purpose
Growth rates	Medium growth	Unlimited growth
Norms	Lower emergence	Higher emergence

Table 4:2 Online Crowds' Typology

4.3 Online Crowd Organizations

In the above section, we define crowds as a large gathering of heterogeneous and serial individuals (interchangeable and anonymous) with a common goal. We also listed other features such as goal orientation, medium to unlimited growth rates, and emergent norms. Understanding the characteristics of this type of collectives is essential to discuss the mechanisms to govern them. In this section, we will conceptually move from “the crowd”—collective of individuals with specific characteristics and dynamics—, to “the crowd organization,” discussing the governance mechanisms required to access crowd’s knowledge for economic or social goals (see Puranam, Alexy, and Reitzig, 2014). We, therefore, argue that crowd’s specific characteristics and dynamics influence the governance mode applied for knowledge creation. To start with, we will discuss whether crowds are eligible as an organizational form.

When examined from the outside, crowds may not exhibit any sense of order. However, this first impression might be misleading. For example, Marx and McAdam (1994) propose that such collectives show some degree of structure and patterning, even when set up for a short duration. The authors go further, arguing that crowds present some degree and type of organization; the difference is that the norms that ultimately provide a sense of organization emerge on the spot rather than being defined in advance. Similarly, Turner and Killian (1987)

argue that collective behavior allows for “emergent” norms and organizations that often deviate from societies'. Also, Couch (1968) considers crowds as organized social systems, pointing out the specific way that participants produce instances of coordinated behavior. The point that we would like to make here is that the use of such terminology associated with crowds is not accidental and that there is space to explore the “co-evolution” of organizations and crowds. A further look at the literature on organizational forms will develop this argument further.

The organizational forms school of thought, recently revisited by Puranam, Alexy, and Reitzig (2014), points out that an organization is a bounded multi-agent system with a goal, towards which agents contribute. The above-described crowds share in some extent these characteristics. First, online crowds result from a gathering of heterogeneous and serial individuals (Afuah and Tucci 2012; Le Bon 1896) with a common goal; yet, it is irrelevant whether the goal is narrow or broader in nature, or whether members achieved it collaboratively or individually. Second, online crowds' boundaries may grow at lower or higher rates; it is worth noting that however the fact that the boundaries constantly change (Canetti 1962), does not mean that one cannot recognize such borders at each point in time. Finally, online crowds, even in “apparent unstructured” or emergent way (Marx and McAdam 1994; Turner and Killian 1987), are nonetheless able to exert some coordination. Collective behavior and emergent norms that raise as members interact without prior coordination and pre-planning nevertheless allow the crowd to pursue its goals (Marx and McAdam 1994). What we are challenging here is whether the nature of the goals, the stability of the boundaries, and the timing of the norms, are defining factors of what constitutes an organization form or not, or, whether we can we instead conceive organizations with more dynamic and emergent edgings. Assuming that crowds present the characteristics to be eligible as an organization, we will discuss the enduring and differentiating features of crowds.

4.3.1 Online crowd organizations membership

One of the key characteristics that differentiate online crowd organizations from other formal or online types, as communities, is the fact that their agents are heterogeneous and serial (Viscusi and Tucci 2015). Since members are anonymous and interchangeable, meaning that there is no differentiation, stratification, or hierarchy amongst them, crowd's agents display all the same role. Therefore, they are equally aligned. Such characteristics will have profound implications for crowds' governance.

In bureaucratic forms, authority allows task division, allocation, and coordination (Gulati, Puranam, and Tushman 2012). In communities, members are voluntary and autonomous; however, mechanisms such as reputation and affiliation (based on stable identities), and stratified access (based on differentiated roles) function as alternatives to formal authority (see Adler, Kwon, and Heckscher 2008; Gulati, Puranam, and Tushman 2012). For example, in Linux, there are differentiated roles, such as “core” and “periphery” members, where the latter group encompasses two further categories titled “development” and “bug reporting” teams (see Lee and Cole 2003). Community members self-select themselves to perform “peripheral” activities, and if they contribute enough, they might assume a “core” role. Communities’ features such as reputation, affiliation, and stratified roles facilitate task division, allocation, and coordination (Dahlander and Frederiksen 2012; Lee and Cole 2003; Viscusi and Tucci 2015). Without such mechanisms, risks of misbehavior and undesirable contributions, as well as organizational ambiguity and uncertainty are higher.

Crowd agents are autonomous, and they voluntarily self-selected to pursue a goal. The voluntary nature of this relationship leaves external agents or firms without any formal or informal authority over crowds’ members. The literature on digital technologies has already built on the idea of generating knowledge through the coordination of autonomous agents, using the concept of “loosely coupled” agents (Yoo, Henfridsson, and Lyytinen 2010; Yoo 2013; Zittrain 2006). Loose coupling refers to events that are responsive but still preserve their separateness. Weick popularized loosely coupled systems (Glassman 1973; March and Olsen 1975, 1976; Orton and Weick 1990; Weick 1976). Organizations may appear loosely coupled when they are composed of autonomous elements that are often responsive to one another, rather than hierarchically controlled. These features tend to raise ambiguity and uncertainty to a larger degree than in traditional organizations, due to the absence of contracts, controls, and hierarchies. This literature highlights the need for considering loosely coupled systems from a dynamic perspective, focusing on structures “as something that organizations do, rather than merely as something they have” (p.218). This idea resembles the concept of crowds’ emergent norms that arise as individuals interact over time, rather than being something defined beforehand (Marx and McAdam 1994). Taking these issues into account, we argue that loose coupling includes the list of the main properties of online crowd organizations.

4.3.2 Online crowd organizations emergent norms

Collective behavior is a process that evolves from the interaction of a large gathering of people that aims at alleviating or solving a shared concern under undefined or unstructured

conditions (Blumer 1951; Lang and Lang 1968; Marx and McAdam 1994). Collective behavior arises in the absence of pre-established norms, as hundreds of participants interact new norms “emerge” without prior coordination and pre-planning (see Le Bon 1896; Lang and Lang 1968; Marx and McAdam 1994; Turner and Killian 1987).

Collective behavior and consequently emergent norms are more likely to arise in contexts evolving crowds, than in the contexts of bureaucracies or communities. Bureaucracies display systems for effort division, integration, and coordination based on authority, hierarchy, and directives, leaving little space for collective behavior. Additionally, in bureaucracies, individuals have differentiated roles and stable identities—opposing seriality and equality—, which are natural inhibitors of collective behavior (Marx and McAdam 1994). Communities also present more stable and defined norms when compared to crowds. Communities’ shared values and beliefs, membership homogeneity, and stable identities lead to enforcement mechanisms as reputation and affiliation (Adler 2015; Viscusi and Tucci 2015).

4.3.3 Online crowd organizations output

Le Bon (1896) in his conceptualization of organized crowd or psychological crowd explained that when inserted in a context where individuals feel anonymous and protected by the size and power of the crowd, they are triggered to behave in a way that they would never do otherwise. This dynamic explains why individuals, when part of a crowd, perform both extremely destructive and heroic acts (see also Marx and McAdam 1994). Lang and Lang (1968) also defend that covered by the crowd, individuals experience greater subjective freedom or compulsion to express unconventional ideas, deviating from social standards. Also, Marx and McAdam (1994) that the output of thousands of interactions amongst heterogeneous individuals interacting cannot be known in advance. This line of argumentation shows that not only the crowd’s norms “emerge” without prior coordination and pre-planning, but also it is also hard to predict in advance crowds’ output.

The literature on digital technologies already build on the idea of generating knowledge thought the coordination of “loosely coupled” agents, relating that to the concept of *generativity* (Yoo, Henfridsson, and Lyytinen 2010; Yoo 2013; Zittrain 2006). Generativity refers to the “*technology overall capacity to produce unprompted change driven by large, varied, and uncoordinated audiences*” (Zittrain 2006, p. 1980). In this context, we defend that it is hard to detach the capacity of the technology from the capacity of the audience that uses it; both are unequivocally and intrinsically related. Therefore, generativity, which means the emergence of knowledge flows that may evolve in unexpected directions without pre-

planning (Yoo 2013; Zittrain 2006), in other words, the capacity for spontaneous innovation, is therefore also a characteristic of online crowd organizations.

Crowd's members features—loosely coupled, serial and equally aligned—in conjugation with the means—collective behavior, which leads to emergent norms—are natural boosters for generativity. First, seriality eliminates the social and formal pressures to behave accordingly to what is socially accepted. In other words, crowd agents do not feel the pressure to be socially accepted since they are autonomous; thus, they feel more disinhibit to express unconventional ideas (Lang and Lang 1968; Marx and McAdam 1994). Second, equality among members leads to roles harmonization, as opposed to stratified ones and hierarchies, observed respectively in online communities and firms (see Gulati, Puranam, and Tushman 2012). Equality reduces barriers to entry, what allows online crowd organizations to attract higher growth rates and heterogeneity amongst members. These factors together contribute to the increase of quantity and diversity of contributions and therefore reinforce the knowledge generativity capacity of online crowd organizations.

At this point, we can define crowd organization as *made up by loosely-coupled, serial, and equally aligned agents that achieve their goals through emergent norms, enacting generativity (capacity for spontaneous innovation)*.

While in the previous sections, the goal was to understand the characteristics of crowds and the dynamics of online crowd organizations, now the goal is to provide guidelines to create and govern such organizations. In the following sections, we develop online crowd organizations governance and knowledge creation modes.

4.3.4 Online crowd organizations governance mode and generativity

Following Marx and McAdam (1994), we conceive that crowds present different types and degree of organization, we will explore such variance. The governance mode applied to crowd organizations will shape the crowd features regarding orientation, membership, growth rates, and norms, and consequently its outputs regarding of knowledge generativity. In this section, we discuss how different governance modes, that range from centralized and decentralized, affect crowds' knowledge generativity—quantity and diversity of output.

Centralized governance modes. In centralized governance modes, an external agent, which is usually a firm, asks the crowd to perform a task through an open call. In this case, the external agent/firm is in charge of the effort division, integration, and coordination. More specifically, is the external agent that creates the task, which tends to be very specific, coordinates the agents and controls the process (see Afuah and Tucci 2012). It is important to highlight that

the external agent still has any formal or informal authority over crowd agents since they preserve their autonomy, separateness, and loosely-coupled nature (Orton and Weick 1990; Weick 1976). Therefore, only voluntary self-selection mechanisms allow for task allocation.

Online crowd organizations that adopt more centralized governance, where an external agent controls the process and defines the task, tend to present lower knowledge generativity. Centralized modes lead to the creation of closed crowds characterized by lower membership heterogeneity, medium growth rates, and lower norms emergence (See Table 4:2). Such crowds tend to be individualistic in the sense that members perform the same specific task, but individually (Lang and Lang 1968; Marshall 1998). The output of such crowds results from the aggregation of the individual contributions. This governance mode is typically applied to “tournament-based crowdsourcing,” for example (Afuah and Tucci 2012; Brabham 2013). The diversity of such contributions will depend directly on the heterogeneity of the members that the crowd can attract. If the task is too specific, the likelihood to attract a large group of people is lower; therefore lower is also the prospect to attract heterogeneous members. This will impact the quantity and diversity of the output. Also, if we consider that emergent norms and generativity tend to arise in contexts where a large collective of heterogeneous individuals interact to solve a common concern, the elimination of interactions amongst members will inevitably lead to lower norms emergence and, therefore, to lower knowledge generativity. Such governance modes have the pluses of controlling misbehaviors and uncertainty since boundaries and growth rates are more stable and controlled; however, it results in a lower quantity and diversity of contributions, and therefore limited generativity.

Decentralized governance modes. In decentralized governance modes, the individuals that make up the crowd are the ones in charge of effort division, integration, and coordination. In this case, the crowd through collaborative and interactive processes is the one providing goals and the means. The crowd is the one creating the tasks, self-selecting to perform the tasks, and also controlling this process through, peer-control mechanisms. The stimulus is rather internal than external, contrarily to the case of more centralized governance modes. Still, crowd members themselves have no formal or informal authority over each other, due to their loosely coupled nature (Orton and Weick 1990; Weick 1976). Decentralized governance modes are usually associated to “collaboration-based crowdsourcing” (Afuah and Tucci 2012; Brabham 2013) and are likely to originate open crowds (Canetti 1962; Viscusi and Tucci 2015).

Contrarily to centralized governance modes, decentralized ones lead to higher generativity (Eaton et al. 2015; Zittrain 2008). This governance mode creates open crowds, which present

higher heterogeneity of members, unlimited growth rates, and higher norms emergence. Furthermore, decentralized governance modes allow for crowds agents to interact, exchange knowledge, and collaboratively build on each other knowledge. Such characteristics lead to a higher quantity and broad diversity of contributions, and thus higher generativity (Aaltonen and Seiler 2015). In truly decentralized governance modes, the generativity of the crowd is, on the limit, only bounded by the information capacity of the digital platforms where the crowd is based. Open crowds entail the benefits of attracting large aggregations of heterogeneous members, what consequently leads to emergent norms and generativity, however, the risk of misbehavior and organizational uncertainty are higher as the crowd grows.

There is an inherent trade-off between the degree of governance centralization and knowledge generativity. The higher the level of governance centralization, the lower the knowledge generativity of the crowd. More can only be achieved at the expense of governance decentralization. This trade-off leads to what we call the *knowledge generativity frontier*, which is a graphical representation of the maximum possible knowledge generativity output for each governance level (see Figure 4:1). Any point beneath the curve indicates inefficiency; any point beyond the curve indicates impossibility. In the next section, we will exemplify three different organizations along the frontier, providing guidelines to guide organizations to achieve the maximum potential of knowledge generativity for various levels of governance centralization/decentralization.

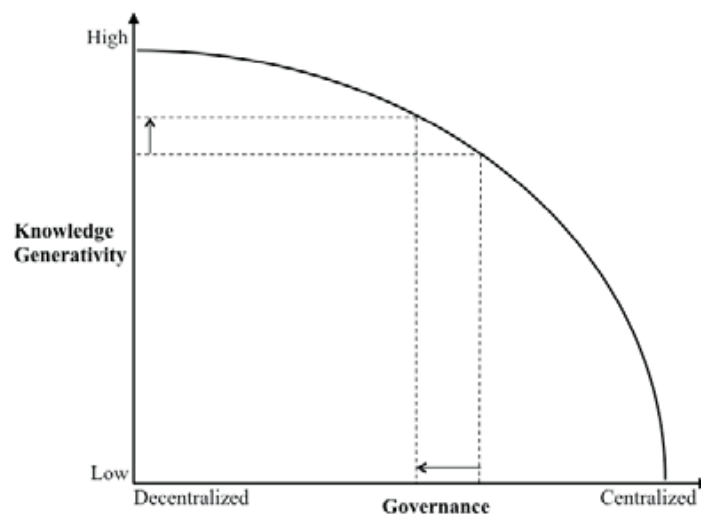


Figure 4:1 Knowledge generativity frontier

4.4 The framework: online crowd organizations typology

To access crowds' knowledge, firms or other interested agents need to align governance modes to the expected level of knowledge generativity. As explained, it is not possible to fully control a crowd through highly centralized governance modes and simultaneously obtain generative knowledge as output. In crowd organizations, there is an inherent trade-off between governance centralization and knowledge generativity. To exemplify that, we have selected three main types of online crowd organizations: one highly centralized called *crowd-driven organizations*, one highly decentralized named *crowded organizations*, and one in between with a medium decentralization titled *crowd-based organizations* (See Figure 4:2). We assume that the governance mode is a continuum that ranges from decentralization to centralization, however for the sake of simplicity we will concentrate on these representative types to provide guidelines and techniques to ensure that external agents of firms that engage aim at governing such organizations maximize their potential.

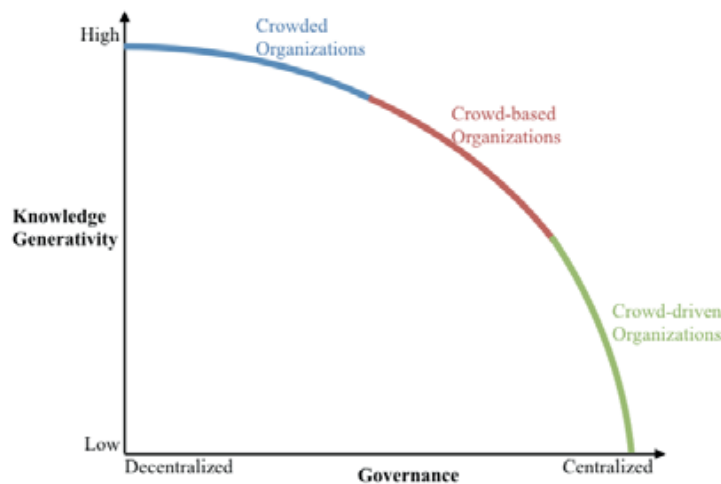


Figure 4:2 Online crowd organizations types

In *crowd-driven organizations*, an external agent/firm asks the crowd to perform a particular task or innovation activity, controlling the effort division, integration, and coordination. In this regard, the external agent/firm opens a call, defining the task to be completed, coordinating the agents, and controlling the process (see Afuah and Tucci 2012). Such governance modes tend to create close crowds, characterized by lower membership heterogeneity, medium growth rates, and lower norms emergence (See Table 4:2). While on one side, the external agent/firm “controls” and guides the crowd in a particular direction by

providing the norms (goals and means); on the other side, crowds' output, under such governance mode, are less generative.

Such crowd organizations are appropriate to solve well-understood problems, or to improve existing products or services. Centralized governance modes are adequate when external agents/firms are looking for innovative solutions to highly defined tasks. The solution of the problem does not require itself the creation of new knowledge, but instead the application of existing knowledge from distant knowledge fields (see Afuah and Tucci 2012). Such organizational form, when complemented with analytics and data science tools, might help the focal agent/firm to map the knowledge existing beyond its boundaries. An example of *crowd-driven organizations* is the platform Innocentive, which is an innovation intermediary used by companies to solve highly defined technical problems via tournament-based crowdsourcing (see Viscusi and Tucci 2015).

In *crowd-based organizations*, an external agent/firm and members of the crowd share effort division, integration, and coordination activities in a semi-decentralized fashion. In this case, the external agent/firm accesses the crowd's knowledge to solve an ill-defined problem, providing vague norms about the goals and the means to achieve such goals. In *crowd-based organizations*, there is a mix of external and peer-control coordination and control mechanisms. Norm's definition (goals and means to achieve such goals) is partially achieved by the external agent, and partially emergent from crowd interactive processes. Such governance modes tend to create crowds that present higher heterogeneity, growth rates, and norms emergence than closed crowds presenting, therefore, higher levels of knowledge generativity. However, while on one side, such crowd organizations allow for higher levels of knowledge generativity than the ones of *crowd-driven organizations*; on the other side, such type of crowd organization is harder to control since the knowledge generated may evolve in directions different from the ones envisioned by the external agent/firm.

This type of organization is more suitable for firms that have an open-ended problem—not very well defined—and that would like to explore the generativity potential of the crowd without losing control over it. Under such governance mode, the crowd contributes both to the problem definition, and also to solutions provision. Examples of such organization could be Wiki-like organizations (e.g., Wikipedia²⁶) where the founding team and the members share contributions' control mechanisms.

²⁶ Researchers often refer to Wikipedia as a “community,” and indeed it may have evolved into something more like a community form, displaying stable identities and stratified access; however, in the beginning, Wikipedia was characterized by equality and seriality.

Crowded organizations constitute the limit case of decentralized governance form, and therefore of knowledge generativity. In such organization, the crowd is in charge of effort division, integration, and coordination. Through collective interactive processes, the crowd provides goals and means. The crowd members create the tasks, self-select to perform such tasks, and also control this process through peer-control mechanisms. Such organizations lead to the creation of open crowds that present high membership heterogeneity, unlimited growth rates, higher norms emergence, and therefore higher knowledge generativity. While on one side, *crowded organizations* show the potential for high knowledge generativity and spontaneous innovation; on the other side, such organizations may evolve towards unpredictable directions that fall outside the goals of the agent that aims at accessing their knowledge. In highly decentralized governance modes, the generativity of the crowd is, on the limit, only bounded by the information capacity of the digital platforms where the crowd is based.

This organization type is useful for exploration of little-understood problems. Firms might use it for searching new consumer trends, emerging disruptive changes, and highly creative new products/services. To fully explore the potential of this crowds not only peer voting mechanisms and gamification tools are needed, to select the best contributions, but also advanced data science tools. The One Billion Minds platform, to some degree, is indeed managed as a *crowded organization*. This platform attracts members who aim at creating or participating in high-impact social projects. The way that the members will be involved or the content of the project emerges from crowd agents' interactive process. The output corresponds to a wide range of ideas, including very creative ones, that under external control mechanisms may never arise (see Viscusi and Tucci 2015).

	“Crowd-driven”	“Crowd-based”	“Crowded”
Online crowd	Closed crowd		Open crowd
Governance mode	Centralized	Semi-decentralized	Decentralized
Knowledge Generativity	Low generativity	Medium generativity	High generativity

Table 4:3 Online crowd organizations typology

Type	When useful + techniques to complement
Crowd-driven (e.g., Innocentive client)	<ul style="list-style-type: none"> ○ Useful for the exploitation of well-understood problems or improvements to known products, services, or issues ○ Useful for innovative solutions for highly defined tasks ○ Invest in analytics and data scientists
Crowd-based (e.g., Wikipedia)	<ul style="list-style-type: none"> ○ Firms that have an open-ended problem—not very well defined—and that would like to explore the creative potential of the crowd without losing control over it ○ The crowd itself helps not only with possible solutions but also contributes to defining the problem/direction itself
“Crowded” (e.g., One Billion Minds)	<ul style="list-style-type: none"> ○ Useful for exploration of little-understood problems ○ Searching for new consumer trends, emerging disruptive changes, and highly creative new products and/or services ○ To complement the exploration orientation, invest in crowd infrastructures such as peer voting and gamification

Table 4:4 Online crowd organizations

4.5 Discussion and conclusions

In this paper, we argue that the crowd phenomenon goes beyond the crowdsourcing form and investigated how to organize crowds. We developed the idea that not all crowds, nor all forms of organizing crowds, are the same. In this sense, we have presented three main types of *online crowd organizations*: *crowd-driven*, *crowd-based*, and *crowded organizations* that exhibit variation regarding governance form and knowledge generativity.

The framework presented in this article has implications for the innovation and open innovation literature. Open innovation is “*a distributed innovation process based on purposively managed knowledge flows across organizational boundaries, using pecuniary and non-pecuniary mechanisms in line with each organization’s business model*” (Chesbrough and Bogers 2014, p.12). Thus, if exploiting crowds is a form of open innovation that brings external purposeful flows of information from outside the organization, what happens when the crowd is at the very heart of the organization (*crowded organizations*)? If the literature on open innovation defines the knowledge flows as purposeful, what is the potential of generative knowledge flows from *crowded organizations*? Is this leading to innovation, or simply to nonsensical uncoordinated ideas or inventions? The study of the limit case of *online crowd organizations*, named here as *crowded organizations*, may bring new insights on how to manage crowds, and maximize their benefits.

Moreover, we raise the question: can *crowded organizations* be manageable and controlled at all, at least through the lenses of managerial and organizational theories, as we know them?

These arguments are aligned with and extend state-of-the-art contributions considering the role of task decomposition and knowledge as well as problem-solving distributions shifting the locus of innovation outside the limits of the firms to, e.g., open communities (Lakhani et al. 2013). As pointed out by Benner and Tushman (2015), when managers are concerned with (1) high modularization of core tasks for a product and (2) the low cost of communication, they should supplement organizational models based on “cost minimization, local search, hierarchy, power, control of contingencies, and extrinsic motivation, with the logic of openness, sharing, choice, distant search, intrinsic motivation, and communities” (p. 507). However, communities may require different managerial approaches and skills for their creation, maintenance, and involvement compared with what we have called *online crowd organizations*: first, because of the goal orientation of the former; second, because the effects of *generativity* (the capacity for spontaneous crowd innovation) associated with the digitalization of products and services. The differences may become more significant for investment decisions for innovation goals targeted toward open models.

We can classify these goals as balancing exploration and exploitation as discussed by March (1991). Considering the impact on the exploitation of fast learning associated with a high degree of socialization of individuals to an organizational code and membership and the role of variability and turnover on exploration, one might argue that communities, *crowd-driven*, *crowd-based*, and *crowded organizations* each have a specific and idiosyncratic orientation to innovation goals. Due to the role of membership and adherence by individuals to an organizational code, often aligned with one of the firms nurturing them (e.g., Apple and its developer community), communities are, therefore, appropriate for exploitation of innovation with the consequent risk that rapid socialization and fast learning of the organizational code may reduce exploration, thus leading to consistent but redundant knowledge and a possible lock-in to current practices and ideas. In contrast, *crowd-driven organizations* do not require individuals in the crowd to adhere strictly to the organizational code, thus resulting in slower learning and socialization. Furthermore, crowds’ features encompass a high degree of variability related to the constant turnover of individuals participating in idea competitions or task-based activities. Due to the external control by the agent/firm, the exploration outcome is dependent on the level of socialization of the organizational code internal to the agent/firm itself, thus potentially being another form of exploitation.

Finally, *crowded organizations* potentially present the characteristics (slow learning, variability, and turnover) of a full exploration orientation. However, in this case, there may be the opposite problem of not having adequate exploitation capacity. If the contributions of the crowd exceed the ability of the firm to evaluate the outcomes (e.g., the BP oil spill, as

discussed by Alexy, Criscuolo, and Salter (2012)), the perception the organization might have could be an “out of control” crowd: “*There’s [sic] so many ideas you become numb to them*” as a member of the US Coast Guard mentioned, speaking about the suggestions from BP’s crowd (Alexy, Criscuolo, and Salter 2012).

In all of the above cases, the risk for management is related to the cost of the misunderstanding the type of *crowd-organization* the firm actually is or aims to activate, with a consequent overvaluation or underestimation of the subject of investment: for example, a *crowd-driven organization* willing to focus more on exploration should invest in analytics (McAfee and Brynjolfsson 2012), data scientists (Davenport and Patil 2012) and information orientation (Marchand, Kettinger, and Rollins 2000) of employees and management, when internally lacking these capabilities (otherwise the outcomes of the investment is rather toward exploitation). Thus, managers may want to consider what we call *crowd tuning* in order to get the right “frequency” of the crowdedness of *online crowd organizations*; this also implies an understanding of what remains of the organization when the crowd is disconnected or not active in what remains of a *crowd-based* and *crowded organization* or else an autonomous entity as in the case of *crowd-driven organizations* (see Table 4:1).

The phenomenon under analysis is itself in constant change, and far from standardized. Agents and organizations are still experimenting and the landscape of crowd-organization still developing. Indeed, we believe that in the following years, other “crowd forms” will emerge, and some will disappear, and we may need some years until we reach stability. For this reason, we are aware that we may be incurring a risk of not being exhaustive in the dimensions proposed above. However, this should not prevent scholars from trying to understand crowds and similar emergent phenomena. Our goal is to inspire discussion and further research on the topic. Such attempts may lead not only to advance our understanding of crowd-specific phenomena but also to rethink organizational theories, as we know them.

Chapter 5 Conclusion

The contemporary organizational landscape comprises newer and complex organizations that challenge existing organizational theories (Greenwood and Miller 2010; Walsh, Meyer, and Schoonhoven 2006). Amongst these new forms, there are collective forms of organizing, which through crowds and communities undertake production or innovation activities (see Chiles, Meyer, and Hench 2004). This dissertation focuses on this organizational population, advancing our understanding of the way they create knowledge and compete.

This thesis set the ground to distinguish crowds and communities systematically and unequivocally. Essentially, it suggests that different types of collectives present different characteristics and dynamics, which will consequently affect organizational forms and knowledge creation modes. This argument goes further, suggesting that crowd organizations due to their emergent norms are indeed the only form able to generate spontaneous innovation when compared to community-based or bureaucratic organizations.

Regarding communities of production, this thesis focus on the way they compete and influence the competitive dynamics of the markets in which they operate. The results reveal that collective organizations that engage in production activities tend to experience tensions at the market strategy level due to their dual nature. However, they can still be fierce competitors, developing mechanisms to mimic purely commercially oriented organizations. Additionally, communities for production tend to display a distinct behavior towards the community that forms it (consumers or suppliers), what might increase market competition. Such organizations are also more likely to change “the market rules,” when established rules clash with the interests of the collective.

This dissertation opens new avenues for future research on collective forms of organizing. Future research could focus on the social, economic, and cultural conditions that lead to the emergence, establishment, and decline of collective organizations. Studies on the interface between human behavior and collective settings, and on how collective organizations behave are also needed to advance our knowledge in this nascent “field”—organized collective behavior. In the past, collective behavior lied within the boundaries of sociology; however,

when collectives have the means to engage in production and innovation activities, competing with formal organizations, they are, thus, on the radar of organizational theory.

This dissertation answers to the call to study new organizational forms, different from the ones of bureaucracies (Miller, Greenwood, and Prakash, 2009; Puranam et al., 2014), exploring the organizational diversity of contemporary societies. My goal is to inspire further research on the topic and to spark discussion towards an organizational theory more inclusive and transversal across both traditional and new forms of organizing.

References

- Aaltonen, Aleksi, and Stephan Seiler. 2015. "Cumulative Growth in User-Generated Content Production: Evidence from Wikipedia." *Management Science*.
- Aaltonen, Aleksi Ville, and Cristina Alaimo. 2015. "The Generativity of the Social Web: A Multi-Case Enquiry into Generative Patterns of Social Media Platforms."
- Adler, Paul S. 2015. "Community and Innovation: From Tönnies to Marx." *Organization Studies* 36(4): 445–71.
- Adler, Paul S., Seok-Woo Kwon, and Charles Heckscher. 2008. "Professional Work: The Emergence of Collaborative Community." *Organization Science* 19(2): 359–76.
- Afuah, Allan, and Christopher Tucci. 2012. "Crowdsourcing as a Solution to Distant Search." *Academy of Management Review* 37(3): 355–75.
- Alexy, Oliver, Paola Criscuolo, and Ammon Salter. 2012. "Managing Unsolicited Ideas for R&D." *California Management Review* 54(3): 116–39.
- Arthur, Brian. 1989. "Competing Technologies, Increasing Returns, and Lock-in by Historical Events." *The Economic Journal* 99(394): 116–31.
- Ashforth, B. E., and P. H. Reingen. 2014. "Functions of Dysfunction: Managing the Dynamics of an Organizational Duality in a Natural Food Cooperative." *Administrative Science Quarterly* 59(3): 474–516.
- Auerbach, Alan J. 1991. "Retrospective Capital Gains Taxation." *The American Economic Review* 81(1): 167–78.
- Balch, Oliver. 2015. "Energy Co-Ops: Why the UK has Nothing on Germany and Denmark." *The Guardian*. <https://www.theguardian.com/public-leaders-network/2015/oct/02/energy-cooperatives-uk-germany-denmark-community>.
- Baldwin, C., and E. von Hippel. 2011. "Modeling a Paradigm Shift: From Producer Innovation to User and Open Collaborative Innovation." *Organization Science* 22(6): 1399–1417.
- Barney, J. 1986. "Strategic Factor Markets: Expectations, Luck, and Business Strategy." *Management Science* 32(10): 1231–41.
- Basdeo, Dax, Ken Smith, and Curtis M. Grimm. 2006. "The Impact of Market Actions on Firm Reputation." *Strategic Management Journal* 27(12): 1205–19.
- Battilana, Julie, and Thomas D'Aunno. 2009. "Institutional Work and the Paradox of Embedded Agency." In *Institutional Work: Actors and Agency in Institutional Studies of Organizations*, 31–58.
- Battilana, Julie, and Silvia Dorado. 2010. "Building Sustainable Hybrid Organizations: The Case of Commercial Microfinance Organizations." *Academy of Management Journal* 53(6): 1419–40.
- Battilana, Julie, and Matthew Lee. 2014. "Advancing Research on Hybrid Organizing – Insights from the Study of Social Enterprises." *The Academy of Management Annals* 8(1): 397–441.
- Battilana, Julie, Matthew Lee, John Walker, and Cheryl Dorsey. 2012. "In Search of the

Hybrid Ideal.”

- Battilana, Julie, Metin Sengul, Anne Claire Pache, and Jacob Model. 2015. “Harnessing Productive Tensions in Hybrid Organizations: The Case of Work Integration Social Enterprises.” *Academy of Management Journal* 58(6): 1658–85.
- Benner, Mary, and Michael L. Tushman. 2015. “Reflections on the 2013 Decade Award—‘Exploitation, Exploration, and Process Management: The Productivity Dilemma Revisited’ Ten Years Later.” *Academy of Management Review* 40(4): 497–514.
- Berk, Richard A. 1974. “A Gaming Approach to Crowd Behavior.” *American Sociological Review* 39(3): 355–73.
- Besharov, Marya L., and Wendy K. Smith. 2014. “Multiple Institutional Logics in Organizations: Explaining Their Varied Nature and Implications.” *Academy of Management Review* 39(3): 364–81.
- Binder, Amy. 2007. “For Love and Money: Organizations’ Creative Responses to Multiple Environmental Logics.” *Theory and Society* 36(6): 547–71.
- Blumer, H. 1951. “Collective Behavior.” In *New Outline of the Principles of Sociology*, ed. A. M. Lee. New York: Barnes and Noble, 166–222.
- Le Bon, Gustave. 1896. *The Crowd: A Study of a Popular Mind*. 2001st ed. Kitchener: Batoche Books.
- Boudreau, Kevin J., and Karim Lakhani. 2013. “Using the Crowd as an Innovation Partner.” *Harvard business review* 91(4).
- Boudreau, K., and K. Lakhani. 2009. “How to Manage Outside Innovation.” *MIT Sloan Management Review* 50(4): 69–75.
- Brabham, D. C. 2008. “Crowdsourcing as a Model for Problem Solving—An Introduction and Cases.” *Convergence* 14(1): 75–90.
- . 2013. *Crowdsourcing*. MIT Press.
- Bruton, Garry D. et al. 2015. “State-Owned Enterprises Around the World as Hybrid Organizations.” *The Academy of Management Perspectives* 29(1): 92–114.
- Canetti, Elias. 1962. *Crowds and Power*. New York: Continuum.
- Capron, Laurence, and Olivier Chatain. 2008. “Competitors’ Resource-Oriented Strategies: Acting on Competitors’ Resources through Interventions in Factor Markets and Political Markets.” *Academy of Management Proceedings* 33(1): 97–121.
- Chaffee, Ellen Earle. 1985. “Three Models of Strategy.” *The Academy of Management Review* 10(1): 89–98.
- Chen, Katherine K., and Siobhan O’Mahony. 2007. “The Selective Synthesis of Competing Logics.” *Working paper*: 0–67.
- Chen, M. J., and I. C. MacMillan. 1992. “Nonresponse and Delayed Response To Competitive Moves: The Roles of Competitor Dependence and Action Irreversibility.” *Academy of Management Journal* 35(3): 539–70.
- Chen, M. J., and Danny Miller. 1994. “Competitive Attack, Retaliation and Performance: An Expectancyvalence Framework.” *Strategic Management Journal* 15(15): 85–102.
- Chen, Ming-Jer. 1996. “Competitor Analysis and Interfirm Rivalry: Toward a Theoretical

- Integration.” *Academy of Management Review* 21(1): 100–134.
- Chen, Ming-Jer, and Donald C. Hambrick. 1995. “Speed, Stealth, and Selective Attack: How Small Firms Differ from Large Firms in Competitive Behavior.” *Academy of Management Journal* 38(2): 453–82.
- Chen, Ming-Jer, Ken G. Smith, and Curtis Grimm. 1992. “Action Characteristics as Predictors of Competitive Responses.” *Management Science* 38(3): 439–55.
- Chesbrough, Henry, and Marcel Bogers. 2014. “Explicating Open Innovation: Clarifying an Emerging Paradigm for Understanding Innovation Keywords.” In *New Frontiers in Open Innovation*, eds. Henry Chesbrough, Wim Vanhaverbeke, and Joel West. Oxford: Oxford University Press, 3–28.
- Chiles, Todd H., Alan D. Meyer, and Thomas J. Hench. 2004. “Organizational Emergence: The Origin and Transformation of Branson, Missouri’s Musical Theaters.” *Organization Science* 15(5): 499–519.
- Clark, David B. 1973. “The Concept of Community: A Re-Examination.” *The Sociological Review* 21(3): 397–416.
- Commission, European. 2017. “Cooperatives.” *Why Cooperatives are Important*. https://ec.europa.eu/growth/sectors/social-economy/cooperatives_en (July 11, 2017).
- Community Power. “Community Power for People’s Ownership of Renewable Energy.” 2017. <http://www.communitypower.eu/en/germany.html> (May 8, 2017).
- Cook, Michael, and Fabio Chaddad. 2004. “Redesigning Cooperative Boundaries: The Emergence of New Models.” *American Journal of Agricultural Economics* 86(5): 1249–53.
- Cornforth, Chris. 2004. “The Governance of Cooperatives and Mutual Associations: A Paradox Perspective.” *Annals of Public and Cooperative Economics* 75(1): 11–32.
- Couch, C. J. 1968. “Collective Behavior: An Examination of Some Stereotypes.” *Social Problems* 15: 310–22.
- D’Aunno, T., R. Sutton, and R H Price. 1991. “Isomorphism and External Support in Conflicting Institutional Environments: A Study of Drug Abuse Treatment Units.” *Academy of Management Journal* 34(3): 636–61.
- Daft, Richard, and Arie Y. Lewin. 1993. “Where are the Theories for the ‘New’ Organizational Forms? An Editorial Essay.” *Organization Science* 4(4): i–iv.
- Dahlander, L., and L. Frederiksen. 2012. “The Core and Cosmopolitans: A Relational View of Innovation in User Communities.” *Organization Science* 23(4): 988–1007.
- Davenport, Thomas, and D. Patil. 2012. “Data Scientist: The Sexiest Job of the 21st Century.” *Harvard Business Review* (October).
- Davis, Gerald, and Henrich Greve. 1997. “Corporate Elite Networks and Governance Changes in the 1980s.” *American Journal of Sociology* 103(1): 1–37.
- Delmas, Magali, and Michael Toffel. 2008. “Organizational Responses to Environmental Demands: Opening the Black Box.” *Strategic Management Journal* 29(10): 1027–55.
- DiMaggio, Paul, and Walter Powell. 1983. “The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields.” *American Sociological Review* 48(2).

- Dunn, Mary B., and Candace Jones. 2010. "Institutional Logics and Institutional Pluralism : The Contestation of Care and Science Logics in Medical Education, 1967-2005." *Administrative Science Quarterly* 55.
- Eaton, Ben, Silvia Elaluf-Calderwood, Carsten Sørensen, and Youngjin Yoo. 2015. "Distributed Tuning of Boundary Resources: The Case of Apple's iOS Service System." *MIS Quarterly* 39(1): 217–43.
- Ebrahim, Alnoor, Julie Battilana, and Johanna Mair. 2014. "The Governance of Social Enterprises: Mission Drift and Accountability Challenges in Hybrid Organizations." *Research in Organizational Behavior* 34: 81–100.
- Eisenhardt, Kathleen. 1989. "Building Theories From Case Study Research." *Academy of Management Review* 14(4): 532–50.
- Estéllés-Arolas, E., and F. Ladron-de-Guevara. 2012. "Towards an Integrated Crowdsourcing Definition." *Journal of Information Science* 38(2): 189–200.
- Ferrier, W. J., K. G. Smith, and C. M. Grimm. 1999. "The Role of Competitive Action in Market Share Erosion and Industry Dethronement: A Study of Industry Leaders and Challengers." *Academy of Management Journal* 42(4): 372–88.
- Friedland, R., and R. Alford. 1991. "Bringing Society Back in: Symbols, Practices and Institutional Contradictions" In *The New Institutionalization in Organizational Analysis*. W. W. Powell & P. J. DiMaggio (Eds) Chicago: University of Chicago Press.
- Gerring, John. 2007. *Case Study Research: Principles and Practices*. Cambridge: Cambridge University Press.
- Glassman, Robert B. 1973. "Persistence and Loose Coupling in Living Systems." *Behavioral Science* 18(2): 83–98.
- Glynn, Mary Ann. 2000. "When Cymbals Become Symbols: Conflict over Organizational Identity within a Symphony Orchestra." *Organization Science* 11(3): 285–98.
- Goodrick, Elizabeth, and Gerald R. Salancik. 1996. "Organizational Discretion in Responding to Practices: Institutional Hospitals and Cesarean Births." *Administrative Science Quarterly* 41(1): 1–28.
- Greenwood, Royston, Mia Raynard, Farah Kodeih, Evelyn R. Micelotta and Michael Lounsbury. 2011. "Institutional Complexity and Organizational Responses." *The Academy of Management Annals* 5(1): 317–71.
- Greenwood, Royston, Amalia Magán Díaz, Stan Xiao Li, and José Céspedes Lorente. 2010. "The Multiplicity of Institutional Logics and the Heterogeneity of Organizational Responses." *Organization Science* 21(2): 521–39.
- Greenwood, Royston, and C. R. Hinings. 1996. "Radical Organizational Understanding The Old And Change: Bringing Together The New Institutionalism." *Academy of Management Review* 21(4): 1022–54.
- Greenwood, Royston, and Danny Miller. 2010. "Tackling Design Anew: Getting back to the Heart of Organizational Theory." *Academy of Management Perspectives* 24(4): 78–88.
- Gulati, Ranjay, Phanish Puranam, and Michael Tushman. 2012. "Meta-Organizational Design: Rethinking Design in Inter-Organizational and Community Contexts." *Strategic Management Journal* 33(6): 571–86.
- Hambrick, Donald C ., and Sydney Finkelstein. 1995. "The Effects of Ownership Structure on

- Conditions at the Top: The Case of CEO Pay Raises.” *Strategic Management Journal* 16(3): 175–93.
- Hansmann, H. 1999. “Cooperative Firms in Theory and Practice.” *Finnish Journal of Business Economics*: 387–403.
- Haveman, Heather A., and Hayagreeva Rao. 2006. “Hybrid Forms and the Evolution of Thrifts.” *American Behavioral Scientist* 49(7): 974–86.
- Heimer, Carol A. 1999. "Competing Institutions: Law, Medicine, and Family in Neonatal Intensive Care." *Law and Society Review* 17-66.
- Henkel, Joachim, and Eric Von Hippel. 2004. “Welfare Implications of User Innovation.” *The Journal of Technology Transfer* 30(1–2): 73–87.
- Hienert, Christoph, Christopher Lettl, and Peter Keinz. 2014. “Synergies among Producer Firms, Lead Users, and User Communities: The Case of the LEGO Producer-User Ecosystem.” *Journal of Product Innovation Management* 31(4): 848–66.
- Hillery, George A. 1955. “Definitions of Community: Areas of Agreement.” *Rural Sociology* 20(1): 111–23.
- Hoffman, Andrew J. 2001. “Linking Organizational and Field-Level Analyses.” *Organization & Environment* 14(2): 133–56.
- Howe, Jeff. 2006. “The Rise of Crowdsourcing.” *Wired Magazine* (14.06).
- . 2008. *Crowdsourcing: Why the Power of the Crowd Is Driving the Future of Business*. New York: Crown Business.
- Ingram, Paul, and Tal Simon. 2000. “State Formation, Ideological Competition, and the Ecology of Israeli Workers’ Cooperatives, 1920-1992.” *Administrative Science Quarterly* 45(1): 25–53.
- Jay, J. 2013. “Navigating Paradox as a Mechanism of Change and Innovation in Hybrid Organizations.” *Academy of Management Journal* 56(1): 137–59.
- Jeppesen, Lars Bo, and Lars Frederiksen. 2006. “Why do Users Contribute to Firm-Hosted User Communities? The Case of Computer-Controlled Music Instruments.” *Organization Science* 17(July 2006): 45–63.
- Karantininis, Kostas. 2007. “The Network Form of the Cooperative Organization.” In *Vertical Markets and Cooperative Hierarchies: The Role of Cooperatives in the Agri-Food Industry*, eds. Kostas Karantininis and Jerker Nilsson. Dordrecht: Springer.
- Kirdahy-Scalia, Jesse. 2005. “Star Wars Galaxies and the Division of Labor.” Boston College.
- Kostova, Tatiana, and Kendall Roth. 2002. “Adoption of an Organizational Practice by Subsidiaries of Multinational Corporations: Institutional and Relational Effects.” *Academy of Management Journal* 45(1): 215–33.
- Kraatz, Matthew, and Emily Block. 2008. “Organizational Implications of Institutional Pluralism.” In *The SAGE Handbook of Organizational Institutionalism*, eds. Royston Greenwood, Christine Oliver, Kerstin Sahlin-Andersson, and Roy Suddaby. , 243–75.
- Lakhani, Karim, Lifshitz Assaf, Hila, and Michael Tushman. 2013. “Open Innovation and Organizational Boundaries: the Impact of Task Decomposition and Knowledge Distribution on the Locus of Innovation.” In *Handbook of Economic Organization*:

- Integrating Economic and Organization Theory*, ed. Anna Grandori. Edward Elgar Publishing, 355–82.
- Lang, Kurt, and Gladys Lang. 1968. "Collective Behavior." In *International Encyclopedia of the Social Sciences*, ed. D. L. Sills. New York: MacMillan & Free Press, 556–65.
- Lee, Gwendolyn K., and Robert E. Cole. 2003. "From a Firm-Based to a Community-Based Model of Knowledge Creation: The Case of the Linux Kernel Development." *Organization Science* 14(6): 633–49.
- Lettl, Christopher, Cornelius Herstatt, and Hans Georg Gemuenden. 2006. "Users' Contributions to Radical Innovation: Evidence from Four Cases in the Eld of Medical Equipment Technology." *Management* 36(3): 251–72.
- Lounsbury, M. 2007. "A Tale of Two Cities: Competing Logics and Practice Variation in the Professionalizing of Mutual Funds." *Academy of Management Journal* 50(2): 289–307.
- March, J. G., and J. P. Olsen. 1975. "Choice Situations in Loosely Coupled Worlds." : Unpublished manuscript.
- . 1976. *Ambiguity and Choice in Organizations*. Universitetsforlaget.
- March, James G. 1991. "Exploration and Exploitation in Organizational Learning." *Organization Science* 2(1): 71–87.
- Marchand, D. A., W. J. Kettinger, and J. D. Rollins. 2000. "Information Orientation: People, Technology and the Bottom Line." *MIT Sloan Management Review* 41: 69–80.
- Marquis, Christopher, and András Tilcsik. 2013. "Imprinting: Toward a Multilevel Theory." *The Academy of Management Annals* 7(1): 195–245.
- Marshall, Gordon. 1998. "Crowds." In *Oxford Dictionary of Sociology*, eds. John Scott and Gordon Marshall. Oxford: Oxford University Press, 147–48.
- Marx, Gary T., and Douglas McAdam. 1994. *Collective Behavior and Social Movements: Process and Structure*. Prentice Hall.
- McAfee, Andrew, and Erik Brynjolfsson. 2012. "Big Data: The Management Revolution. (Cover Story)." *Harvard Business Review* 90(10): 60–68.
- Ménard, Claude. 2007. "Cooperatives : Hierarchies Or Hybrids?" In *Vertical Markets and Cooperative Hierarchies: The Role of Cooperatives in the Agri-Food Industry*, The Netherlands: Springer.
- Meyer, John W., and Brian Rowan. 1977. "Institutionalized Organizations: Formal Structure as Myth and Ceremony." *American Journal of Sociology* 83(2): 340.
- Miles, M., and A. Huberman. 1994. *Qualitative Data Analysis*. Sage Publications.
- Miller, Danny, and Ming-Jer Chen. 1994. "Sources and Consequences of Competitive Inertia: A Study of the U.S. Airline Industry." *Administrative Science Quarterly* 39(1): 1–23.
- Moizer, Jonathan, and Paul Tracey. 2010. "Strategy Making in Social Enterprise : The Role of Resource Allocation and Its Effects on Organizational Sustainability." *Systems Research and Behavioral Science* 266: 252–66.
- Murray, Gillian. 2012. "Should Your Charity Become a Social Enterprise?" *The Guardian*. <https://www.theguardian.com/voluntary-sector-network/2012/oct/15/charity-social-enterprise>.

- Ndofor, Hermann Achidi, David G Sirmon, and Xiaoming He. 2011. "Firm Resources, Competitive Actions, and Performance: Investigating a Mediated Model With Evidence from the In-Vitro Diagnostics Industry." *Strategic Management Journal* 657: 640–57.
- Normak, Peter. 1996. "A Role for Cooperatives in the Market Economy." *Annals of Public and Cooperative Economics* 67(3): 429–39.
- Ocasio, William. 1997. "Towards an Attention-Based View of the Firm." *Strategic Management Journal* 18: 187–206.
- Oliver, Christine. 1991. "Strategic Responses to Institutional Processes." *Academy of Management Review* 16(1): 145–79.
- Orton, J Douglas, and Karl E Weick. 1990. "Loosely Coupled Systems: A Reconceptualization." *The Academy of Management Review* 15(2): 203–23.
- Pache, A., and Filipe Santos. 2010. "When Worlds Collide: The Internal Dynamics of Organizational Responses to Conflicting Institutional Demands." *Academy of Management Review* 35(3): 455–76.
- Pache, Anne-Claire, and Filipe Santos. 2013. "Inside the Hybrid Organization: Selective Coupling as a Response to Competing Institutional Logics." *Academy of Management Annals* 56(4): 972–1001.
- Padgett, John, and Walter Powell. 2012. *The Emergence of Organizations and Markets*. Princeton University Press.
- Parliament, Claudia, Zvi Lerman, and Joan R. Fulton. 1990. "Performance of Cooperatives and Investor-Owned Firms in the Dairy Industry." *Journal of Agricultural Cooperation*.
- Pereira, Joana. 2017. *Hybridity Influence on Market Strategies and Competitive Dynamics: The Azorean Case*.
- Porter, Michael E. 1980. *Competitive Strategy: Techniques for Analyzing Industries and Companies*. New York: Simon and Schuster. <http://www.vnseameo.org/ndbmai/CS.pdf>.
- . 1991. "Towards a Dynamic Theory of Strategy." *Strategic Management Journal* 12: 95–117.
- Powell, Walter W., and Kurt W. Sandholtz. 2012. "Amphibious Entrepreneurs and the Emergence of Organizational Forms." *Strategic Entrepreneurship Journal* 6(2): 94–115.
- Pratt, Michael G., and Peter Foreman. 2000. "Classifying Managerial Responses to Multiple Organizational Identities." *The Academy of Management Review* 25(1): 18–42.
- Preece, J. 2000. *Online Communities: Designing Usability, Supporting Sociability*. Chichester: Wiley.
- Puranam, P., O. Alexy, and M. Reitzig. 2014. "What's 'New' About New Forms of Organizing." *Academy of Management Review* 39(2): 162–80.
- Reay, T., and C. R. Hinings. 2009. "Managing the Rivalry of Competing Institutional Logics." *Organization Studies* 30(6): 629–52.
- Reay, Trish, and C. R. Bob Hinings. 2005. "Organization Studies Health Care in Alberta." *Organization Studies* 26.
- Rindova, V., Walter Ferrier, and Robert Wiltbank. 2010. "Value from Gestalt: How Sequences of Competitive Actions Create Advantage for Firms in ANscent Markets." *Strategic Management Journal* 31: 1474–97.

- Sartre, Jean-Paul. 1960. *Critique de La Raison Dialectique*. France: Éditions Gallimard.
- Scherer, F. M., and David Ross. 1990. *Industrial Market Structure and Economic Performance*. University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship.
- Schipani, Andres. 2012. "Microfinance: Bolivia Pioneer Starts to Hit the Mainstream." *Financial Times*. <https://www.ft.com/content/121235a0-1300-11e2-bca6-00144feabdc0>.
- Schneiberg, M., Marissa King, and Thomas Smith. 2008. "Social Movements and Organizational Form: Cooperative Alternatives to Corporations in the American Insurance, Dairy, and Grain Industries." *American Sociological Review* 73(4): 635–67.
- Scott, W. Richard. 1994. "Conceptualizing Organizational Fields: Linking Organizations and Societal Systems'." In *Systemrationalitat Und Partialinteresse*, ed. 203–221. H. Derlien, U. Gerhardt, and F. Scharpf (eds). Baden-Baden: Nomos Verlagsgesellschaft., 203–221.
- . 2001. "Institutions and Organizations." In Thousand Oaks, CA: Sage.
- Scully, M., and D. Meyerson. 1996. *Before Isomorphism: The Dynamics of Legitimation in the Early Days of Corporate Ethics Programs*.
- Seo, M. G., and W. E. D. Creed. 2002. "Institutional Contradictions, Praxis, and Institutional Change: A Dialectical Perspective." *Academy of Management Review* 27(2): 222–47.
- Shearlaw, Meave. 2016. "Egypt Five Years on: Was It Ever a 'Social Media Revolution'?" *The Guardian*.
- Simons, Tal, and Paul Ingram. 1997. "Organization and Ideology: Kibbutzim and Hired Labor, 1951-1965." *Administrative Science Quarterly* 42(4): 784–813.
- Slavova, Mira, and Stan Karanasios. 2014. "Legitimacy of Agriculture Extension Services : Understanding Decoupled Activities in Rural Ghana." In *Paper Presented at the European Group on Organization Studies, 30th EGOS Colloquium, Rotterdam, The Netherlands.*.
- Smith, Ken G., Curtis M. Grimm, Martin J. Gannon, and Ming-Jer Chen. 1991. "Organizational Information Processing, Competitive Responses, and Performance in the U.S. Domestic Airline Industry." *Academy of Management Journal* 34(1): 60–85.
- Smith, KG, and Walter Ferrier. 2001. "Competitive Dynamics Research: Critique and Future Directions." *Handbook of Strategic Management* (July 2015): 1–76.
- Spradley, J. 1979. *The Ethnographic Interview*. Holt, Rinehart and Winston. New York.
- Strauss, A., and J. Corbin. 1990. "Basics of Qualitative Research: Grounded Theory Procedures and Techniques." Newbury Park, CA: Sage."
- Suddaby, Roy, and Royston Greenwood. 2005. "Rhetorical Strategies of Legitimacy." *Administrative Science Quarterly* 50(1): 35–67.
- Surowiecki, James. 2004. *The Wisdom of Crowds*. New York: Anchor Books.
- Tardini, Stefano, and Lorenzo Cantoni. 2005. "A Semiotic Approach to Online Communities: Belonging, Interest and Identity in Websites' and Videogames' Communities." In *IADIS International Conference E-Society*, 371–78.
- Thornton, P. H. 2004. *Markets from Culture*. Stanford CA.: Books, Stanford Business.

- Thornton, Patricia H. 2002. "The Rise of the Corporation in a Craft Industry: Conflict and Conformity in Institutional Logics." *The Academy of Management Journal* 45(1): 81–101.
- Thornton, Patricia H., and William Ocasio. 1999. "Institutional Logics and the Historical Contingency of Power in Organizations: Executive Succession in the Higher Education Publishing Industry, 1958 – 1990." *American Journal of Sociology* 105(3): 801–43.
- Tracey, Paul, Nelson Phillips, and Owen Jarvis. 2011. "Bridging Institutional Entrepreneurship and the Creation of New Organizational Forms: A Multilevel Model."
- Tucci, C., and G. Viscusi. 2015. *Three Is a Crowd?* Lausanne, Switzerland.
- Turner, R.H., and L. M. Killian. 1987. *Collective Behavior*. Third edit. NJ: Prentice-Hall, Englewood Cliffs.
- Viscusi, Gianluigi, and Christopher Tucci. 2015. *Distinguishing "Crowded" Organizations from Groups and Communities: Is Three a Crowd?*
- Walsh, James P., Alan D. Meyer, and Claudia Bird Schoonhoven. 2006. "A Future for Organization Theory: Living in and Living with Changing Organizations." *Organization Science* 17(5): 657–71.
- Weick, Karl E. 1976. "Educational Organizations as Loosely Coupled Systems." *Administrative Science Quarterly* 21(1): 1–19.
- Wellman, Barry. 1979. "The Community Question: The Intimate Networks of East Yorkers." *American Journal of Sociology* 84(5): 1201–31.
- West, Joel, and Karim R Lakhani. 2008. "Getting Clear About Communities in Open Innovation." *Industry and Innovation* 15(2): 223–31.
- Wexler, Mark N. 2011. "Reconfiguring the Sociology of the Crowd: Exploring Crowdsourcing." *International Journal of Sociology and Social Policy* 31(1/2): 6–20.
- World Bank. 2007. *World Development Report 2008: Agriculture for Development*. Washington.
- Yin, Robert K. 2009. "Collecting Case Study Evidence." In *Case Study Research: Design and Methods*, 98–219.
- Yoo, Youngjin. 2013. "The Tables Have Turned: How Can the Information Systems Field Contribute to Technology and Innovation Management Research?." *Journal of the Association for Information Systems* 14: 227–36.
- Yoo, Youngjin, Ola Henfridsson, and Kalle Lyytinen. 2010. "The New Organizing Logic of Digital Innovation: An Agenda for Information Systems Research." *Information Systems Research* 21(4): 724–35.
- Young, Iris Marion. 1994. "Gender as Seriality: Thinking about Women as a Social Collective." *Signs: Journal of Women in Culture and Society* 19(3): 713–38.
- Zilber, Tammar B. 2002. "Institutionalization as an Interplay Between Actions, Meanings, and Actors: The Case of a Rape Crisis Center in Israel." 45(1): 234–55.
- Zittrain, Jonathan L. 2006. "The Generative Internet." *Harvard Law Review* 119: 1974–2040.
- . 2008. *The Future of the Internet - And How to Stop It*. Yale University Press & Penguin UK.

Curriculum Vitae

Joana Rodrigues Pereira

E-mail: rodriguespereira.joana@gmail.com

Phone: (+41) 789466988 / (+351) 918528258

EDUCATION

- 2017 **Ph.D., ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE, COLLEGE OF MANAGEMENT OF TECHNOLOGY—SWITZERLAND**
Ph.D. student since 2013 at the chair of Corporate Strategy & Innovation.
- 2011 **MSc, CATOLICA LISBON SCHOOL OF BUSINESS & ECONOMICS (CLSBE)—PORTUGAL**
Master of Science in Business Administration, Major in Marketing and Minor in Strategy with an average grade of 16 out of 20 (GPA=3.8).
- 2010 **EXCHANGE SEMESTER, GOA INSTITUTE OF MANAGEMENT—INDIA**
Exchange semester in Goa, India with an average grade of 16 out of 20.
- 2009 **BS, CATOLICA LISBON SCHOOL OF BUSINESS & ECONOMICS—PORTUGAL**
Bachelor of Science in Management and Business Administration with an average grade of 16 out of 20 (GPA=3.7).
- 2008 **EXCHANGE SEMESTER, WU VIENNA UNIVERSITY OF ECONOMICS AND BUSINESS—AUSTRIA**
Erasmus semester in Vienna, Austria with an average grade of 17 out of 20.

PUBLICATIONS AND WORKING PAPERS

“Online Crowd Organizations: Towards a Definition.” (With Gianluigi Viscusi and Christopher Tucci.) Working paper, 2017. In preparation for submission to *Organization Science*.

“Competing under Institutional Complexity: a Multi-case Study Design.” Working paper, 2017.

“Organizational Hybridity Influence on Market Strategies and Competitive Behavior.” Working paper, 2017. In preparation for submission to *Strategic Management Journal*.

“External Design for Reputation, Perspective and Exposure.” (With Celine Abecassis-Moedas.) 2016. *Creativity and Innovation Management*, 25(3), 396-407.

“Producer Cooperatives: a Transaction Cost Economic Approach.” 2016. In F. Taisch, A. Jungmeister, and H. Gernet (Eds). *Cooperative Identity and Growth*. Conference Proceedings of ICCS 2016 in Lucerne. St. Gallen: Verlar Raiffeisen Schweiz, 528-536.

For more information: https://www.researchgate.net/profile/Joana_Pereira31

ACADEMIC PRESENTATIONS

- 2017 **1ST IESE-LUISS CONFERENCE ON RESPONSIBILITY, SUSTAINABILITY AND SOCIAL ENTREPRENEURSHIP—ROME, ITALY**
Presentation of the paper “Organizational Hybridity Influence on Competitive Strategies and Behavior: the Azorean Case.”
- 2017 **CONSORTIUM FOR COOPERATION & COMPETITION 24TH ANNUAL CONFERENCE FOR DOCTORAL STUDENT RESEARCH (CCC)—PHILADELPHIA, USA**
Presentation of the paper “Organizational Hybridity Influence on Competitive Strategies and Behavior: the Azorean Case.”
- 2016 **2016 ANNUAL MEETING OF THE ACADEMY OF MANAGEMENT—ANAHEIM, USA**
PNP Division – Presentation of the paper “Producer cooperatives influence on competitive dynamics - the Azorean case.”
OCIS Division – Participation in the PDW with the paper “What’s the frequency Kenneth Defining crowd organization.”
- 2016 **14TH INTERNATIONAL OPEN AND USER INNOVATION CONFERENCE—BOSTON, USA**
Presentation of the paper “What’s the frequency Kenneth Defining crowd organization.”
- 2016 **EURAM 2016—PARIS, FRANCE**
Participation in the Doctoral Colloquium with the paper paper “Producer cooperatives influence on competitive dynamics - the Azorean case.”
- 2016 **INTERNATIONAL CO-OPERATIVE ALLIANCE CONFERENCE 2016—ALMERIA, SPAIN**
Presentation of the paper paper “Producer cooperatives influence on competitive dynamics - the Azorean case.”
- 2016 **XVIII INTERNATIONAL CONFERENCE ON COOPERATIVE STUDIES 2016—LUCERNE, SWITZERLAND**
Presentation of the paper “Producer Cooperatives: A Transaction Cost Economic Approach.”
- 2015 **2ND ANNUAL WORLD OPEN INNOVATION CONFERENCE—SANTA CLARA, USA**
Presentation of the paper “What’s the frequency Kenneth Defining crowd organization.”
- 2015 **INTERNATIONAL CO-OPERATIVE ALLIANCE CONFERENCE 2015—PARIS, FRANCE**
Presentation of the paper “The Cooperative model in the globalized market: the case of Azorean Agriculture Cooperatives.”
- 2015 **STRATEGIC MANAGEMENT SOCIETY SPECIAL CONFERENCE—SANTIAGO, CHILE**
Presentation of the paper “Hybrid Typologies and Innovation Outcomes.”
- 2014 **ICA 2014—PULA, CROATIA**
Presentation of the paper “Producer Cooperatives: a Transactional Cost Economic Approach.”
- 2012 **2012 INTERNATIONAL DESIGN MANAGEMENT RESEARCH CONFERENCE—BOSTON, USA**
Presentation of the paper “Incremental vs. Radical innovation as a determinant of design position.”

CORE EXPERIENCES

- 2017 **ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE, CDM—SWITZERLAND**
Teaching assistant for the master courses in Innovation Management (2015/2016 Spring Semester); Corporate Strategy (2015/2016 Fall Semester); and Technology & Innovation Management (2013/2014 and 2014/2015 Fall semesters).
- 2017 **MINDFLOW, DESENVOLVIMENTO PESSOAL E ORGANIZACIONAL—PORTUGAL**
Co-founder and advisor of a Portuguese startup in the area of corporate training through mobile Apps.
- 2013 **CATOLICA LISBON SCHOOL OF BUSINESS & ECONOMICS—PORTUGAL**
Teaching Assistant for the Bachelor courses in Strategy (2011/2012 and 2012/2013 Fall semesters) and Marketing (2012/2013 Spring Semester). Ranked respectively 7th and 3rd out of 40 lecturers based on students' evaluation.
Research Assistant. Collaboration in the project: *Entrepreneurial Motivations and their Impact on Ventures Organizational Design in Creative Industries*, accepted by Academy of Management Conference 2012.
- 2012 **INSTITUTO PIAGET – ESCOLA SUPERIOR DE SAUDE PIAGET—PORTUGAL**
Visiting lecturer of Quantitative Research Methods for a Post-graduation on Special Education (Fall Semester).
- 2011 **ALTER VIA – EXECUTIVE SEARCH & CONSULTING—PORTUGAL**
Consultant with the following responsibilities: performance of studies in the area of talent management in Portugal, and professional training assistance.
- 2008 **PT COMUNICACOES—PORTUGAL**
Summer internship in the Business and Consulting department. Collaboration in a project that aimed at evaluating alternative support equipment to understand its impact on efficiency and service quality of the field force.

LANGUAGE AND SOFTWARE SKILLS

Languages Portuguese (native); English (fluent); French (conversational).
Software skills N-VIVO (advanced); SPSS (advanced).

AWARDS AND ACTIVITIES

- 2013-2017 Reviewer for AOM (OMT and TIM divisions), SMS, and EURAM;
- 2016-2017 Organizer of the internal Ph.D. seminars series at EPFL-CDM, namely “How I met your paper”;
- 2010 National Final of the *TRUST by Danone 2010* contest;
- 2010 CAP – Pedagogical Aptitude Certificate for Training and Teaching (90 hours);
- 2009 Prize “*Sustentabilidade e Desenvolvimento*” attributed to the best student of CLSBE 2006 student batch;
- 2008 2^o place in the *Imocom Tourism Innovation Awards 2008* contest.

